



Lippisches Landesmuseum Detmold

Kitchen Dreams

German kitchens since 1900



Bettina Rinke
Joachim Kleinmanns

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with an article by Anne Däuper



Catalogues of the Lippisches
Landesmuseum Detmold
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Kitchen wall clock, from around
1960, private property

Modular kitchen with colourful Formica surfaces by Bähr + Priester, Herford,
Picture from a brochure of the fifties, by Heinz Bohnenkamp

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of the Lippisches Landesmuseum Detmold (Germany)
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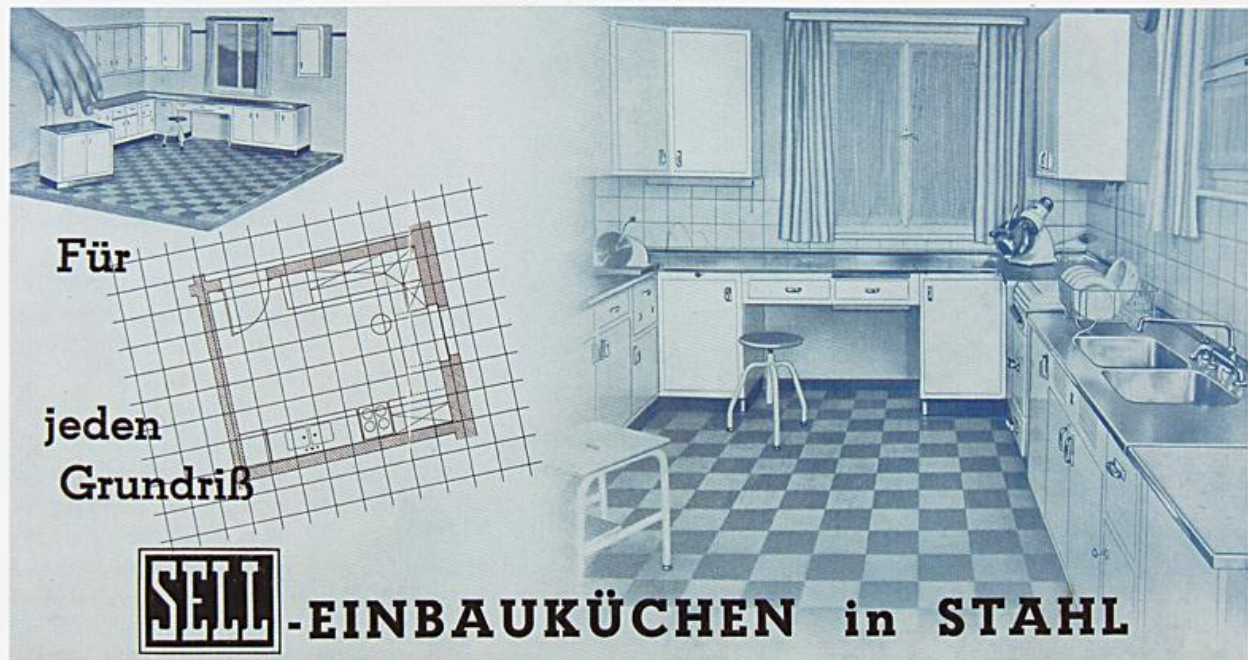
Annette Hibbeler, Lippisches Landesmuseum Detmold

Cover illustration: based on a photo from a brochure printed in the fifties
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Fitted kitchen made of steel by Sell, brochure 1952, private property



Kitchen stories

The 20th century was characterized by the demand to rationalize housekeeping. From the twenties until today, fitted kitchens have been considered the answer to the problem. Since the late forties, the Swedish research institute for home and household has promoted the sales of fitted kitchens. The film "Kitchen Stories", Norway 2003, directed by Bent Hamer, is a parody on how in the fifties, the institute tried to research the cooking habits of Norwegian bachelors. Observers were placed on high stools in bachelors' kitchens to watch them cooking.



Scene shot from "Kitchen Stories", a satirical film about kitchen research in the fifties, Norway 2003



Measuring beaker, around 1910, private property

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Electric cooker, Küppersbusch,
around 1960,
Lippisches Landesmuseum Detmold



Gabor Keller installs a
Frankfurt Kitchen for the
Lippisches
Landesmuseum

Editorial

Take as ingredients kitchen furniture, appliances and accessories from the collection of the Lippisches Landesmuseum, add loans from private people and partner museums, spice it with expertise on cultural history, let it simmer over low heat for nine months, and you have an exhibition on the history of German kitchens since 1900. The recipe for this exhibition was written by the curators of the exhibition, Bettina Rinke (Detmold) and Joachim Kleinmanns (Karlsruhe), who were strongly supported in the preparation by the museum staff. Many cooks did not spoil the broth. Annette Hibbeler designed the catalogue, the poster and the exhibition texts. Thomas Giesen, Gabor Keller and Wolfgang Nolte were responsible for transport, restoration and repair, the architecture of the exhibition, and its assembly. Jürgen Ihle and Andrea Wolleschensky took the photos and edited the illustrations for printing. Heike Lennier managed the finances and handled the loans. Sabine Sundermann was in charge of the museum's pedagogical programme, and Monika Goedecke was in charge of public relations.

Now it is up to you, dear visitors of the exhibition, to come to table and taste what we have cooked – we wish you a hearty appetite.

The 20th century brought about dramatic changes in almost all areas of everyday life. The changes also affected kitchens and cooking. Just like the present era, the twenties were dominated by economy and reforms. For mass housing projects, the standardized "Frankfurt Kitchen" by the Austrian architect Margarethe Schütte-Lihotzky became a model of rationalized kitchens – but it is not the only one. After World War II, the modular fitted kitchen, the "dream kitchen", dominated German housing across all social classes. Today, two out of three German fitted kitchens are produced in the German region of East Westphalia (Ostwestfalen). This is why the cross-regional exhibition is also of regional interest.

Bettina Rinke and Joachim Kleinmanns together quickly came up with a viable concept for content and finances. Again, their work was highly professional. The idea of making the exhibition was fostered by the exhibition project *Mahlzeit – Kultur des Essens und Geniessens* (Bon appétit – the culture of eating and enjoying) curated by the Museumsinitiative in Ostwestfalen-Lippe e. V. This was an opportunity to exhibit the collection of historical kitchen furniture and appliances that had been stored in the archives of the Lippisches Landesmuseum. The collection came into being in 1989 as part of the project "Furniture and interior architecture" by the Faculty of Interior Design at the University of Applied Sciences of Lippe-Höxter in 1989. Many lenders, museums, companies and private people supported the exhibition with interesting exhibits, for which we would like to thank them very much. All loans and gifts are acknowledged on the following page and in the exhibition. The loans and gifts, and the financial support from major manufacturers of kitchen furniture and appliances emphasize the objectives and the value of this special exhibition. The exhibition project could not have been realized without the commitment of these sponsors. Other companies supported us by placing advertisements in the exhibition catalogue. We would like to thank them all. We hope that the exhibition will encourage others to appreciate and support the Lippisches Landesmuseum Detmold as a landmark collection of the history of furniture in the German region of Ostwestfalen-Lippe.

We hope that after visiting the exhibition, our visitors will enjoy their meals all the more if they are seasoned with a "pinch" of reflection on the cultural history of kitchens. We combined the exhibition with other interesting programs, for example, cooking lessons. This makes us confident that they will welcome many interested and well-satisfied visitors over the coming months.

Rainer Springhorn
Director
Lippisches Landesmuseum

In German, the term "Küche" has two meanings: The room where people cook, and the product and art of cooking.

The kitchen is the room where food is prepared, the place where we cook and garnish, the place where we eat, where the family comes together seeking warmth from the hearth, sits together, works and rests.

However, the German term "Küche" means more than that. It also means the product of food preparation: warm or cold dishes, the cooking of the upper middle classes as well as nouvelle cuisine, Italian food, Chinese food, and many more...

The kitchen and cooking, and their development over the 20th century, make the subject of the exhibition "Kitchen Dreams – German Kitchens since 1900". The exhibition focuses on kitchen furniture and equipment from different decades. You will also find recipes for delicious dishes, and not only in this catalogue.

Cooking kitchen, 19th century, with kitchen staff,
Puzzle by B. Dondorf/Frankfurt, around 1860,
Coloured lithography, Dieter Mensenkamp



The function of kitchens – work-in or live-in kitchen?

20th century kitchen design is basically distinguished by two very different tendencies: The mixing of functions, and the separation of functions. Sometimes, the one tendency, and sometimes the other, was in the limelight. Sometimes kitchens had many functions, sometimes their functions were reduced to a minimum.

The most important functions are:

- Fitted kitchen, exhibited at the Cologne Furniture Fair, in 1952
- Dressing and preparation on a worktop or counter and sink
- Cooking and baking with separate or combined appliances
- Storing appliances and storing food in cupboards and shelves. Some of these functions might be located elsewhere. Tableware and cutlery were frequently kept in a special pantry or in a cabinet in the dining room. Food staples were stored in an adjacent larder, in different cellars (eg, vegetable cellar, potato cellar, wine vault), in iceboxes or electric refrigerators or freezers
- Dressing of the dishes on the worktop or counter, in upper class homes in a separate room between kitchen and dining room
- Dining and living. There may have been a separate dining room if the kitchen was a cooking kitchen.

Today, we have both types: work-in kitchens and live-in kitchens.

Fitted kitchen shown on the Cologne Furniture Fair, 1952





Anders Montan,
Hall of a farmhouse in the German
region of Lippe, Around 1900
(Oil on linen 39.5 x 47.5 cm),
In the background left kitchen area
with open hearth,
Lippisches Landesmuseum Detmold

There are kitchen rooms that are clearly separate from other rooms. Then there are open kitchen rooms, that seem to transition smoothly into other functional areas. A tendency to have kitchens that open to dining areas is growing, but separate kitchens still seem the standard today. A considerable majority of Germans considers separate kitchens most important. This has not always been the fashion. Separate kitchens came into existence only during the 18th and 19th century. Until then, separate kitchen areas had been the privilege of the highest echelons of church and nobility. The idea of a separate room came from the Romans, as did the term "kitchen". In townhouses and on farms, the term "kitchen" was first used in the Middle Ages (in German, many medieval sources use the term "Kuchen"), but this term did not name a separate room, rather a functional area within the house around the hearth, which was not strictly separate. Well into the 19th century in Lippe, as in all of Northern Germany, the open hearth – source of warmth and light as well as a cooking facility – was situated at the end of the hall. Earlier, such halls had covered the entire ground section of the houses. Smoke used to blow all over the house, and out off the "owls' hole" in the roof.

The development of chimneys in the wall made it possible to get rid of the smoke in a controlled way. The hearth in the townhouse after the 15th century, and in the farmhouse after the 18th century, was

moved to the place directly below the wall chimney, to the rear wall of the hall. At the same time, hearths were built higher than before, on a plinth at knee height or even higher. No doubt, this was to bring it closer to the overhanging mantel above the fire in order to make sure as much smoke as possible found its way into the chimney. Open fires produced too much smoke and soot. This led to the invention of the oven, and made the development of the "Stube" possible, a small separate living room that could be heated without smoke. This

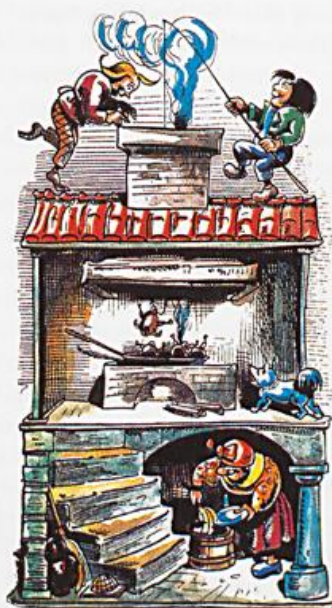


Formerly open hearth with an iron stove and mantled oven placed in the chimney casing,
Detmold, Auguststrasse 11, um 1900

differentiation of the floor plan led to the separation of kitchens from halls. Kitchens then became separate rooms, defined by stone walls.

Prerequisite was the banning of the fire into a closed stove, and

Kitchen room – development up to 1900



Wilhelm Busch, Max und Moritz.
Widow Bolte's kitchen, with raised
fireplace and chimney casing, 1858

evacuation of smoke through the chimney, because open fires were unsuitable for small rooms.

In late 18th century Berlin, former military barracks were converted into urban rental barracks. These buildings, euphemistically called "family homes", had long dark internal hallways, along the sides of which were the live-in kitchens of the different families – five by seven steps in size. There were no living rooms or bedrooms – all of life took place in these kitchens. In summer, these rooms were very hot, as people had to cook in them. In winter, when they could hardly be aired because of the bitter cold, they were very stuffy. In these kitchens, people cooked, slept,

lived, and did outwork. Frequently, a bed was rented out to a "sleeper". In the 19th century, the rental barracks developed into what became the urban workers' tenements. In workers' flats, kitchens were usually also living rooms. On Saturdays, people took their weekly bath in the kitchen. These standards were very different to those of the suburban, upper class villas.

The middle and upper classes still understood kitchens as house-keeping rooms in the widest meaning of the word. In small houses, kitchens were simply a room for cooking plus a small larder. In big mansions; kitchens might occupy an entire wing or floor of the buildings and needed separate entrances. Late in the 19th century, kitchens in town houses were often in the basement. Noise and especially smells from kitchens were unwanted, following the fashion of the aristocracy's palaces and country houses. Kitchens were located as far away from living and representative rooms as possible. Housewives were seldom in the kitchens – kitchens were the place for the servants. Dishes were prepared, cooked and garnished, cooking appliances were cleaned, tableware and cutlery were washed and polished, all in the kitchens. In these houses, the kitchen was also the staff dining room. Only very big households had a separate servants' dining room. Even in working-class flats, it became customary to store some food staples in separate cellars. In the cities, where everything was available daily and fresh in the shops, only minimum stock-

piling of food was required. In upper class households, even the pantries were separated from the kitchen, and furnished with cabinets for tableware, silver and tablecloths. In medium sized households, pantries often had sinks for doing the dishes. The cooking pots and pans were washed in a separate scullery to avoid smells. The laundry room was always separate from the kitchen, even in small houses

1858 Kitchen of outworkers in a Berlin tenement, 1910,
With tiled hearth, gas lighting and faucet with sink





Stone hearth with turnspit and big kettle,
Kötterhaus from Detmold-Brokhausen,
1577,
In the Lippisches Landesmuseum

Over millennia, an open fire on the ground – a campfire outdoors or a hearth in the home – had been the only way for people to cook food and produce heat. In 16th century farmhouses, the open kitchen area was at one end of the hall. The hearth was slightly raised and the necessary appliances (turnspit with kettle on an adjustable kettle hook, blowing tube, pans, tripod, coffee roaster and waffle iron) plus the salt box and a seat were close at hand. Hams and sausages were hung in



Hearth of the Meierhof in Döringsfeld,
Chalk drawing,
Early 20th century,
Lippisches Landesmuseum Detmold

the smoke. Other food staples were kept not in the kitchens, but in the cool cellars. Baking and fruit drying took place outside in separate baking houses. At both sides of the hearths, there were *Luchten*, special areas where the hall was widened to the outer wall. They gave light to the fireplace areas. On the one side, there was the eating-place with a big table and a dresser for tableware, called the *Kannenstock*. On the opposite side, close to the well just outside the door, there was the

washing place with a table, water jug, basin and drying rack.

Kitchens had permanent fittings – the fireplace with the turnspit and in the 19th century, also the masonry hearth, and the sink. They also had furniture: most important a kitchen table and a wall shelf, or shelves, along the wall where people kept tableware – earthenware or pewter dishes and plates. There were also hooks to hang up pots and pans. Recesses accommodated tin spoons. The *Kannenstock* was known in Lippe from 1600. The *Kannenstock* or dresser consisted of a base with two to three doors used as a cupboard, and an upper section of shelves with the same function as the wall shelf for tableware. Every kitchen also had a water bench for the buckets in which water had to be fetched from the well several times a day.



The first kitchen cabinet was called a *Kannenstock*, a special piece of furniture to take cutlery and tableware. This one was made in 1703.
Lippisches Landesmuseum Detmold

Kitchen furniture – development up to 1900

The open fire was not only a hazard. It was also relatively uneconomic as it consumed a lot of wood, which was in increasingly short supply. The energy crisis of the early 18th century led to a trend away from open fireplaces and towards covered, energy-saving fire in a closed, masonry hearth, with a cladding of cast-iron plates.

In 1735, French architect François Cuvilliers built the Castrol stove. The cooking top of the stove was a plate with holes in it, through which the fire heated the pots standing on the plate. Around 1800, a church functionary, *Geistlicher Rat* Danzer of Bavaria improved on this stove. The pots no longer stood over the opening, but were hung into the opening, to better exploit the heat. The Earl of Rumford, an English physicist, increased the effectiveness by leading the hot air from one fireplace to several pots through horizontal channels.

Depending on the size of the pot, the openings in the stovetop could be increased or reduced by taking out or putting in additional stovetop rings. The fire was made on a grid using wood or hard coal. Ash dropped into drawers for easy emptying. At the front, there were several openings for poking the fire and removing the ashes. The openings were closed with cast-iron flaps. Smoke was evacuated from the stove and into the chimney through a metal stovepipe. The kitchen had become

a warm, smoke-free room. Having the fire closed up in the stove also made it possible to separate small kitchens from the rest of the home.

Such economical stoves, or "cooking machines" manufactured by iron foundries became widely known in the second half of the 19th

sixties, did they finally make way for electric stoves. An electric stove had already been launched in 1893 at the Chicago World Exhibition. However, it took another thirty years before the technology of electric heating plates was ready for everyday use. Gas cookers were developed in the second half of the

19th century, but even today they are still less popular than electric cookers. This is despite their huge advantages: more efficient exploitation of energy, and quick-acting temperature adjustment. Gas cookers were invented in England in 1830. In Germany however, they became widely available only in the second half of the 19th century, when the infrastructure of urban gas utilities was being developed. In the twenties, gas cookers were widely used in housing projects, as they made the provision and storage of wood or coal and the disposal of the ashes redundant.



Cooking machine with Art Nouveau decoration, around 1900, Lippisches Landesmuseum Detmold

century. The cooking machine could be transported, it could be set up anywhere, needing only a stovepipe to connect it to the chimney. It was a much safer design, suitable for installation in small rented flats in the urban centres. From 1860, these stoves became immensely popular at all social levels, and remained dominant until after World War II. Only then, through the fifties and

Upper-class kitchens of the *Gründerzeit* (the early industrial period in Germany) were working places and recreation rooms for servants and had their own separate entrances. The Villa Muthesius in Oerlinghausen, built in 1913/14 to the plans of Frankfurt architect Hermann Kopf, is an example for the Lippe region. The kitchen is on the ground floor, with

Meals and menus in an upper-class household

Hot second breakfast

Broth in cups
Fried eggs with spicy sauce
Fried young chicken with salad
Bread and butter and cheese

A more refined luncheon

Herb soup
Ham in burgundy, garnished with vegetables
Lobster tails in dill sauce
Venison fillet
Salad – fruit jellies
Fresh asparagus
Strawberries with frozen whipped cream
Cheese sticks
Fruit

A simple dinner

Chicken with rice
Cold cuts
Butter and cheese

(Cookery book by Elise Hannemann, Berlin 1904)



Housewife and servant in the kitchen, Around 1904

About 1900, every woman's ambition was to have a household where servants did the kitchen work. The housewife planned the menus and the shopping. The cook prepared the meal, which was served by the maid. However, this was possible only in well-off, upper-class households. Cookbooks intended for these families had very elaborate recipes requiring many helping hands. More and more frequently, however, cookbooks were targeted at smaller households with working wives. Cookbooks dealt with all aspects of kitchen work, including the science of cooking, and practical work with measures and weights, ingredients, appliances and recipes. The books contained chapters on preserving and storage, explained how to make a Swedish cooking box, or how to make soap from scraps of fat. These cooking books were universal household helpers.

a separate entrance, and not connected to the adjacent living hall. Attached to it is a little larder, and a narrow pantry lies between kitchen and dining room.

Housewives spent little time in the kitchen. Even middle class households often employed "maids of all work".

The housewife had "only" a managing function. Guests were presented with a picture of perfect organization. The housewives' ambition was to implement the latest findings of hygiene and nutrition research in their households.

Kitchen cabinet with wallboard, late 19th century.

Articles of everyday use were kept on open wallboards.

Lippisches Landesmuseum, Detmold



The white kitchen – new hygiene concepts around 1900

The working wife on the other hand had to cope with her housework before and after work, and during the (short) weekend. If she was lucky she had daughters to help. For her, housework was a necessary evil rather than efficiency on show. Industrialization had led not only to the separation of living and working, but also to increased outsourcing of typical household activities such as baking,



Kitchen cabinet designed by Hermann Kopf
From the Villa Muthesius in Oerlinghausen, 1914

butchering and tailoring to external service providers. Kitchen work was reduced to the cooking of food.

Another, more far-reaching feature of the early 20th century was the "one-kitchen building", propagated by the socialist and suffragette Lily Braun. Her underlying intention was to help more women to go out to work. For this purpose, in her book *Frauenarbeit und Hauswirtschaft* (Woman's Work and House-keeping) published in 1901, she recommended construction of one-

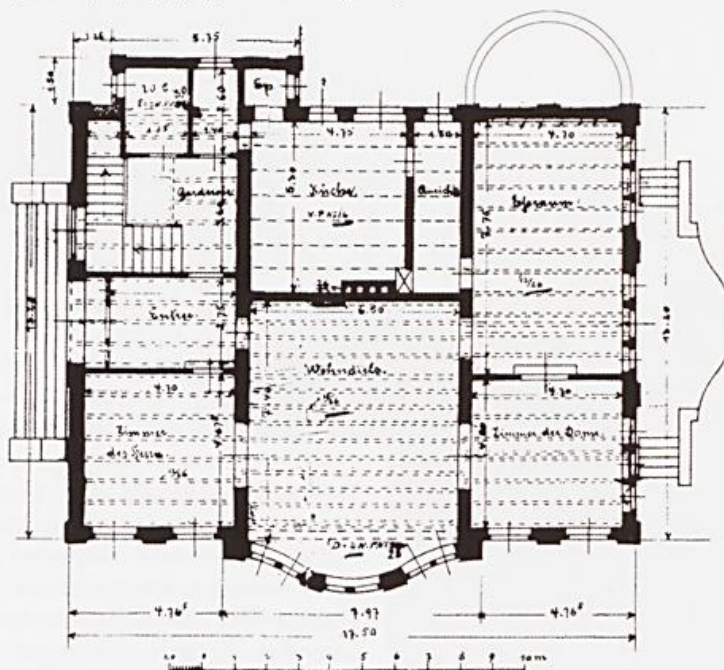
kitchen buildings, each with roughly 60 flats, none of them with a kitchen. A central kitchen was to free housewives from the chore of cooking. A standard meal would be cooked every day in the central kitchen for all families. Such a house was built for example between 1909 and 1912 by the company Einküchenhaus-gesellschaft in Wilhelmshöher Strasse 18–20 in Berlin. The central kitchen was located in the basement. Meals were to be distributed to the flats via nine food elevators. These one-kitchen buildings, built mainly for the upper middle classes, were luxuriously

furnished. Conservatives feared that one-kitchen buildings would lead to the dissolution of the one-family home. Very few of them were built.

In the industrial regions, concern with improving social living conditions led to the building of workers' homes. The houses in the settlement Krupp-Siedlung Alfredshof in Essen (1893–1918) were fitted with live-in kitchens. Its equipment, with cooking machine, sideboard and dining table, won a prize in a competition sponsored by Krupp to promote social housing for workers.

The Villa Muthesius home of a factory owner in Oerlinghausen, Design by Hermann Kopf, 1913/14.

The kitchen (top centre) with separate entrance and larder, separated from the dining room (top right) by the narrow pantry.





Kitchen in the home of a Krupp worker in Alfredshof, the workers' housing area in Essen, Exhibited at a trade fair in Düsseldorf in 1902

In those days, kitchens were furnished for the preparation and cooking of food. Cooking utensils were stored in cabinets and on open shelves. Upper class households frequently also had separate pantries located between kitchen

and dining room, which reduced noise and smells from the kitchen. Rural and upper class households often kept large stocks of provisions which were stored in cellars and larders, with only small quantities kept in the kitchen. Working class households kept almost no stocks of food. In upper-class households, work such as washing dishes and cleaning

appliances, often took place in separate sculleries for hygienic reasons. Working class households did not have the luxury of separate sculleries. They had a sink in the kitchen. Water often still had to be fetched from an outdoor tap.

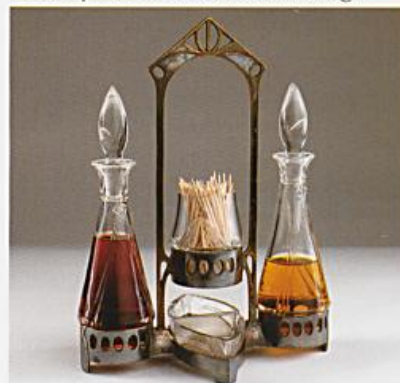


Josef Hoffmann: fitted kitchen in the Palais Stoclet, Brussels, 1906–11, Custom joinery work

The lower middle and working classes were forced to expand the function of their kitchens from solely working to living kitchens, because they lacked space and a second source of heat. Kitchens

were furnished for families to live in, with eating tables and frequently also with sofas. With space very limited, kitchens also had to accommodate beds. By day, outwork was done in many working class kitchens.

The kitchens were furnished with separate cabinets and appliances aligned along the walls. The positioning did not always correspond to workflows. A high



Ménage, around 1900, private property

dresser, some shelves or boards, a holder for towels and tea cloths with a decorative towel cover, the cooking machine, a wood box, a washing table or sink with a water bench or water faucet. Normally, a table for preparation and eating of the meals stood in the centre. Upper-class households had separate dining rooms, their kitchens were the servants' dining rooms.

According to the hygienic concepts of the time, the colour white dominated the kitchen. Not only the painted kitchen furniture, but walls, tiles and the cooking

machine were also white. Even today, big kitchen appliances like cookers, refrigerators and washing machines are called white goods.

One example of an upper-class kitchen of the early 20th century is the house of Peter Behrens on the Mathildenhöhe in Darmstadt, which was completed in 1901. The house, including all the kitchen fittings, was unfortunately totally destroyed in World War II. In this house, the kitchen was in the basement. It was L-shaped, and a big dresser, a working and a washing table, shelves and cupboards stood along two walls. The chairs and all other furniture were made of white-painted wood. The brick stove on the opposite wall was covered with white tiles, and had a gas oven on top.

The Palais Stoclet in Brussels, designed by Josef Hoffmann in 1905, was completed ten years later than the Behrens house. Historic photos of the Palais already show an individually fitted kitchen. The wall opposite the windows is covered with fitted cabinets, some of which have glass doors. A U-shaped worktop counter runs along the window wall.

In the middle of the room, there is a big, sturdy worktable. The floor is covered with black and white tiles in a checkerboard pattern. Hanging lamps in different places make it possible to work standing in front of or behind the working table.

The pine furniture was either custom made by a joiner, or mass produced in a factory, depending on the buyers' social standing. The most important new material was linoleum, not as a floor covering (kitchen floors were mainly tiled or covered with stone flags), but on countertops, tables and cabinets.



Copper pots, around 1900, private property

Cooking was usually done on a cooking machine. Urban households also had gas cookers. Public gas utilities had existed since the middle of the 19th century. Public water utilities had been set up in the same period and this made it possible to install water pipes in the laundries, kitchen, bathrooms, toilets, bedrooms and gardens of

upper-class houses. Working class homes often only had one faucet with an outlet for waste water, for all tenants on the stairway.

Food was stored hygienically in airy fly-proof cabinets. In 1900, upper-class households began to buy the first iceboxes: insulated cabinets with iceboxes for natural or manufactured ice at the top or in the middle, and a container to catch the melting water at the bottom. Such iceboxes were widely used well into the fifties. About 1910, the first electric compressor refrigerators were launched on the market. They kept food cool independent of ice, but had similar dimensions to the iceboxes. At first, they were very expensive, and hence to be found only in commercial operations such as restaurants, and in upper-class households.

A fresh dish

4–5 potatoes
 ¼ pound of mutton
 Half an onion
 Parsley
 2 bay leaves
 3–4 cloves
 1 piece of onion
 1 teaspoon salt
 ½ l beef broth

Peel and slice the raw potatoes. Cover the bottom of an aluminium casserole with half of the potatoes. Lay the mutton, very thinly sliced, or 1–2 cutlet pieces on top, with salt and finely chopped onion. Stick bay leaves and cloves into the piece of onion and put it on top of the meat. Cover with sliced potato. Pour in broth, or hot water with dissolved stock cube, to cover the meat. Cover the casserole, bring the contents slowly to the boil, and simmer gently for 10–15 minutes. From time to time, shake the casserole without taking off the lid. Then put the casserole into the cooking box, and let it there for 2–3 hrs. If liked, season with a little caraway seed on the potatoes.

(Hofmann-Egli, 1926)

The "modern woman" of the twenties was a working woman. Cookbooks with quick recipes and the first ready-made dishes were made especially for her. Tinned soups were recommended for emergencies, so were tins of meat or fish for times when housewives had no time to shop. However, the women were advised "not to use preserves too often, only as a help in dire situations. Fresh vegetables, fresh fruit and fresh meat not only taste better and have more nutritional value, but also cost less, especially in the country."

(Hofmann-Egli, 1926, p. 14)

Die Küche der berufstätigen Frau
 (The Working Woman's Kitchen)
 A cookbook by Lydia Hofmann-Egli,
 1926



Reform and rationalization were keywords in the twenties. Urban development and housing construction were characterized by the separation of functions. Employing servants was deemed to be inconsistent with democratic principles. American women's rights activist Catherine Beecher had already expressed this idea in the mid-19th century. Weakened by inflation, the middle classes could no longer afford to employ servants. Former servants earned more in the factories, and after the cancellation of regulations governing house servants, they had more rights than before. Daughters were often not available to help with housekeeping, because they were working for professional qualifications. Instead of delegating work to servants, housewives had to finish their tasks more efficiently, using electric appliances, and optimizing their own work. Rational furnishings were part of this trend. Mobile kitchen furniture was to make way for the customized fully fitted kitchen. The architects' planning covered everything from "the saucepan to the façade" (Marie-Elisabeth Lüders, 1928).

In working class housing, the serious scarcity of flats in the cities together with social changes, led to many efforts to improve the situation. Once inflation was brought under control, several big cities initiated large-scale housing construction programs.

Rationalization – new ergonomic concepts since 1920

In Frankfurt am Main alone, more than 30.000 flats were built. Rationalization was the keyword of the era, and it was applied equally to construction, furniture production and housekeeping. Before World War I, working class housing



Olga Kollitsch: *Tippen und doch mein eigener Koch* (Working as a Typist – but still my Own Cook), around 1928

projects focused on homes for one or two families, with large gardens where they could grow their own food. Afterwards, tenement blocks with many flats on a small space with rational ground plans were favoured.

The compact layout of the flats could not be furnished with furniture from the stores. It became necessary to design suitable, simple furniture that could be mass produced: cabinets, beds, but especially kitchens. The social housing programs of the twenties, included pure cooking kitchens –

the concept came from industrialization and the aim was rationalization. The floor area should be reduced to a minimum, work processes should be reduced to as few steps as possible. In rental housing, small cooking kitchens have remained dominant until today. In detached one-family houses, pure cooking kitchens came into fashion during the fifties. Since the seventies, there has been a trend to replace them with live-in kitchens, but lower-cost terraced housing still favours small cooking kitchens.

Housekeeping came to the notice of economists, who tried to rationalize it just like industrial labour.

Housekeeping was perceived to be an essential factor in the national economy. The conservative middle-class view was that keeping house required women's full energies, and that women's place was in the home and not out pursuing a career. In fact, women carried double workloads. Socialists, with Lily Braun in the lead, hoped to reduce this double workload with the "one-kitchen buildings", (see page 17). Entire sections of housework were to be outsourced. Conservatives asserted that this would lead to dissolution of the family. By the mid-twenties, these controversies finally developed into a unanimous demand to rationalize housekeeping.

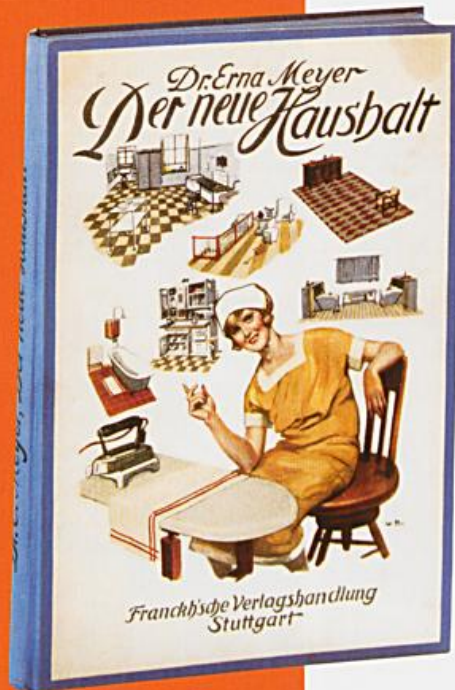
As early as 1841, Catherine E. Beecher dedicated her book *A Treatise in Domestic Economy* to the rationalization of housekeeping. Her models were the fitted galley kitchens on board ships. She

proposed to install worktops and cabinets or shelves along the walls, and limited the kitchen to three functional areas: storing, food preparation, and cleaning. In 1912, Christine Frederick (*The New Housekeeping. Efficiency Studies in Home Management*) transferred Frederick W. Taylor's principles of scientific motion study from industry to the home. She broke work processes down into separate steps, related each step to appliances and movements, and achieved theoretical savings in movements and effort. Some of the savings, however, were the result of downsizing the kitchen area to approx. 3 x 4 m. Frederick recommended the use of machines to save energy and time.

In 1921, Irene Witte translated the book to German as *Die rationelle Haushaltsführung. Betriebswissenschaftliche Studien*.

Architects took up the new ideas. In 1924, architect Bruno Taut declared that simple, purpose-built furniture would reduce work, and would be more aesthetic. In 1926, the German economist, Erna Meyer wrote a bestseller *Der neue Haushalt* (The New Household). In just a few years, the book was reprinted 40 times. She advocated purpose-built furniture, with space-saving, variable components. In 1927, she realized her concept in the *Stuttgarter Werkbundaussstellung* with models of the "Stuttgart Kitchen" and the "Small Stuttgart Kitchen".





Erna Meyer: *Der neue Haushalt* (The New Household) 1926

That same year, the Reichskuratorium für Wirtschaftlichkeit (The National Committee for Economy) set up a separate housekeeping division. Its intention was to encourage housewives to use time, effort and energy more efficiently. Uneconomic housekeeping was declared to be stealing from society. Housekeeping, which had been a private matter, became the subject of industrial standardization and rationalization.

Books such as *Hausarbeit als Gymnastik* (Housekeeping as Gymnastics) or *Tippen und doch mein eigener Koch. In 40 Minuten ohne Vorkenntnisse ein gutes Essen* (Working as a Typist but still my Own Cook. Good meals in 40 minutes – no experience required).

Adult education colleges offered similar classes. Erna Meyer even suggested housewives practise using their left hands as efficiently as their right.

The underlying intention of this rationalization was not to give housewives more leisure, but to develop housewives' "higher values": paid work, personal development, homemaking, caring for husband and children, social work. Typical of this approach was an article

Erziehung der Hausfrau (Education of the Housewife) published in 1930 in the *Handbuch der Pädagogik*.

Throughout the twenties, kitchens were designed on three basic models:

The multi-functional live-in kitchen of working class households was thought to be space- and effort-saving, but unfortunately also unhygienic. The upper classes favoured cooking kitchens with separate dining-rooms and living-rooms as the most hygienic solution. The disadvantage was long distances that had to be covered, but this was a disadvantage "only" for their servants. In the working class home of the twenties, the pure cooking kitchen was a novelty. The kitchen-cum-dining room was an intermediate model, combining elements of the live-in kitchen with the cooking kitchen. As living rooms offered a second dining place, dining kitchens were rejected as an uneconomic waste of space. Some architects favoured the tiniest cooking kitchens with separate living-and-dining-rooms, others preferred the live-in kitchens or living rooms with integrated cooking nooks. The best-known solutions are presented on the following pages.

Cooking kitchens

The "housing machine kitchen", built by Anton Brenner in Vienna in 1924, was only 3.91 sqm. Commercially available furniture would not have fitted into this extremely small floor space. Space-saving furniture had to be produced. It was designed to fit from wall-to-wall. Such fitted cabinets with continuous worktops had been known since the early 20th century. Now, they were standardized and typified for mass housing construction. Brenner's kitchen was furnished with two rows of fitted furniture, dividing the kitchen into functional areas: preparation on the continuous worktop against the window wall, cooking and washing on the opposite side with gas cooker, evacuator and cooking box, double sink and outlet for waste water. Preparation of meals required just a few steps, frequently only turns of the body. However, there were hardly any wall or high cabinets, so the housewife had to bend down frequently. The worktop along the wall, which replaced the free-standing, space-consuming table in the middle of the kitchen, was a novelty.

In the new working class housing projects of the twenties in Frankfurt am Main, doing without a dining place in the kitchen saved approx. 6–7 sqm. "Our live-in kitchens are planned so that the complete cooking and scullery area could be separated from the living area, so that the residents are no longer annoyed by smells and vapours, and not disgusted by food leftovers,

plates, dishes, dishcloths and the like." (Ernst May: *Wohnungspolitik in Wien und Frankfurt*. 1926).

The kitchen floor space measured 1.87 x 3.44 m (6.53 sqm), much more than in Vienna, but it was very small for free furniture placing. In 1926, the architect of the housing project, Ernst May, recruited the Viennese architect Margarethe Lihotzky to come to Frankfurt to design a space-saving, functional fitted kitchen. The kitchen was realized that same year in three types (for a middleclass household without servants, for a household with one, or a household with two servants). This fitted kitchen could be fitted, with only small variations, into all flats of the Neues Frankfurt housing project.

Through many alterations to details, production costs were reduced to approx. 240 Deutschmark (without cooker). Lihotzky saved material costs by making cabinets without rear walls. Adjacent cabinets shared the sidewalls, and a continuous worktop. Notwithstanding these savings, the working class people for whom it was intended, could not have afforded to buy this fitted kitchen (which cost 1.5 monthly wages of a skilled worker). Therefore, the city of Frankfurt pre-financed the costs, and had the tenants pay 2 Reichsmark a month to redeem the loan. Of the 30,000 new flats, only 10,000 however were fitted with a "Frankfurt Kitchen".

The Frankfurt Kitchen was built in different versions. The most popular one had a closed cabinet for pots and crockery along the long wall,



A typical Frankfurt Kitchen designed by Margarete Lihotzky, photographed in 1990

and an under cabinet with 18 newly designed aluminium pouring boxes to store dry staples, which previously had been kept in paper bags. These pouring boxes were recommended for rationalization of the cooking, as the contents could be poured directly into the pot instead of using a spoon or other utensils. The cover of the under cabinet served as a dresser, under which there were also two drawers and two pull-out boards. Then followed two basins with a draining board, above which hung wall cabinets with glass-covered sliding doors for glasses and tableware. A drying rack for plates was intended to eliminate drying by hand. Below the window, along the narrow side, opposite the kitchen door, there was a beechwood worktop for food preparation (linoleum had turned out not to be resistant against cuts and acids), with a white, enamel-covered waste channel along the edge. Below the worktop, there was



Aluminium pouring boxes from the Frankfurt Kitchen, Haarer/Frankfurt am Main, Lippisches Landesmuseum Detmold

a pull-out ironing board. This extended the function of the kitchen to that of a housekeeping room.

To work on the lower worktop the housewife sat on a swivel stool. An undercabinet, placed sideways and vented from the outside, stored



Frankfurt Kitchen, detached single-family house Römerstadt housing development, 1927, Lippisches Landesmuseum Detmold

provisions. An icebox or refrigerator was not included. Opposite to the sink, a sliding door opened into the dining room. Next came a cooking box (with an enamel-plated top for hot saucepans, or to be used as a dresser), and a gas or electric cooker with extraction hood. In the cooking box, a stew that had been quickly boiled up in the morning

could cook slowly until the working housewife came back home at night. Two drawers close to the cooker held flour and sugar or salt. Between the cooker and the door, there was a radiator, over which hung an open shelf. Walls were painted, or sometimes tiled with pale yellow tiles. There is evidence that cabinets were painted not only in the familiar blue, but also in cream, orange, yellow and green. Lihotzky chose Solnhofener stone to cover the floors. All undercabinets stood on concrete plinths 10 cm high, with a 4 cm rebate and a groove that made cleaning easier. Waste was dropped through a flap into the brick waste-and-broom cabinet to the right of the kitchen door. This cabinet was emptied from the hallway to keep the kitchen free of dust. A hanging lamp could be moved along a rail to illuminate every place in the kitchen without shadows. The graphic designer Hans Leistikow designed the operating instruction for the kitchen. It hung on the wall over the stove in every kitchen. To increase popular acceptance, presentations and media events, as well as a special exhibition in 1927 were organized.

The Frankfurt Kitchen on display in the Lippisches Landesmuseum came from a detached house in the Römerstadt housing development, Im Heidenfeld. Along the left, long wall, it had a coal cooker, an electric cooker, the set of pouring boxes and a countertop on two undercabinets. There were wall cabinets with glass sliding doors and, above these, another row of cabinets with flaps

that opened upwards. The space under the window along the face side was free. Along the right, long wall, there was the door to the hall, followed by an undercabinet and the double basin with draining rack. As delivered, the furniture was painted off-white and the walls were covered with yellow tiles.

A fully rationalized kitchen such as the Frankfurt Kitchen remained unaffordable for most people well into the sixties. The few women who could afford one often found it a nightmare. They felt alone and isolated in the small kitchens. The woman at the cooker was no longer at the hub of the family, she was trapped in her small workplace.

Cooking and living were separated as if they were both industrial processes. Many women had no inclination to keep house according to the dictates of "experts", who seldom had actual practical cooking experience. In particular, women refused to sit down to do their work. In 1930, the sociologist Ludwig Neundörfer complained that "people are not working as intended, but differently. Children really should not be with the mother while she is cooking (...) and many people just will not give up eating in the kitchen."

In his housing project Onkel Toms Hütte in Berlin-Zehlendorf 1926–1931, Bruno Taut took a different approach. His kitchen also measured only 7 meters square, but it was almost square, so there was space for several people to be in it at once. The kitchen had a small

table and some of the furniture was mobile.

The housekeeping expert Erna Meyer had proposed using modular furniture which could be combined instead of costly and rigid fitted furniture. The "Stuttgart Kitchen" of

Berlin. It is not known whether these concepts ever went into mass production.



Small version of the Stuttgart Kitchen in Recommendations for Working Class Households by Erna Meyer, *Werkbundaustellung* 1927

the Stuttgarter Frauenkommission, supported by Erna Meyer and Hilde Zimmermann, was presented on the *Werkbundaustellung* titled *Die neue Wohnung* (The New Home) in 1927 in Stuttgart. Two years later, the R I and R II kitchens designed by an association of architects called Der Ring, supported by Erna Meyer and Hilde Grünbaum-Sachs, were shown at the exhibition *Die neue Küche* (The new kitchen) in

Kitchen nooks

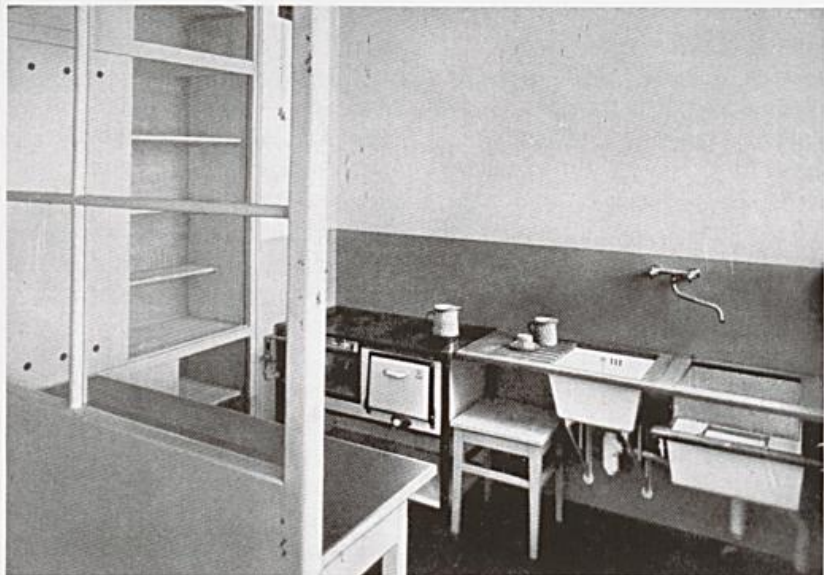
In 1927 Gustav Wolf, architect of the Westfälische Heimstätte housing association, pointed out the dilemma in an article entitled *Wohnküche – oder Kochküche und Wohnraum?* (Live-in kitchen – or cooking kitchen with separate living room?) in the *Westfälisches Wohnungsblatt*. He favoured the kitchen nook and had been designing nooks into his housing projects since 1918. His nook, open towards the living room, had a ground space of roughly 2 x 3 m. There is evidence that fitted furniture, consisting of high, under and wall cabinets, as well as worktops with kitchen sinks had been used since 1927. In comments on his designs, Wolf referred to Christiane Frederick, Otto Brenner, kitchens of railway dining wagons and kitchens by Margarete Lihotzky (Däuper, 2004). Wolf, however, explicitly rejected fixed fitted

kitchens of the Frankfurt Kitchen type.

A special feature of his kitchen design was standard cabinets, which could be combined with each other. Similar cabinets had been proposed by Erna Meyer at about the same time. Always of the same width, they were available in different heights and depths, could have wooden or glass doors, and offered a choice of two drawer sizes, or a cooking box. This flexibility made it possible to install them along walls of different widths and to install continuous worktops on undercabinets all the same height. "This combination takes account of the most individual wishes and opinions of the housewife. The very best method will be for the housewife to choose from available standards, and put the selection together as appropriate." (Wolf, 1927, quoted by Däuper, 2004). Here rather than in the



Gustav Wolf, "kitchen nook" in the Westfälische Heimstätte, Herten 1927



Hanna Löw, Munich Kitchen in the Post housing project in Arnulfstrasse, 1928

Frankfurt Kitchen, we can see the starting point for today's fitted kitchens.

Development of the Post housing project in Arnulfstrasse in Munich began in 1928, according to plans by Robert Vorhoelzer and Walther Schmidt. For the project, Hanna Löw had designed a Munich Kitchen based on the recommendations of Erna Meyer. The cooking nook, measuring only 6 sqm like the Frankfurt Kitchen, had seamlessly fitted wall-to-wall furniture. It was separated from the dining area by a wall of wood and glass with an opening. As this opening did not reach up to the ceiling, there was an "odour trap". The working table below the glass divide to the living room allowed eye-contact with the family. The worktop with sink, faucet and cooker faced the opposite direction. Erna Meyer rated the Munich Kitchen as highly rational, as a "true workplace for the housewife". The glass wall and the opening to the living room had been planned as improvements compared with the Frankfurt Kitchen. Later however, tenants preferred to cover the glass with curtains and closed off the opening with doors.

In 1927, Mies van der Rohe used a cooking cabinet designed by the Schweizer Werkbund in his Weissenhofsiedlung housing project. In 1928, the architect Lissitzky designed a kitchen nook with the dimensions of a clothes cupboard: roughly two meters wide and separated from the living room by a folding door. It was furnished with two electric cooking plates, a sink, cabinets for provisions and pots. Except for the absence of a refrigerator, it closely resembled today's kitchen-in-a-cupboard.

Live-in kitchens

So-called "reform furniture" was developed for live-in kitchens in the twenties. In 1923, Poggenpohl, influenced by the Deutscher Werkbund and Bauhaus, launched a kitchen cabinet called "Ideal". This was a piece of furniture with a

This places them close to the modular kitchens of the fifties, on a smaller scale. Modules included tall cabinets for pots and brooms, semi-tall drawer units or tableware cabinets with glass doors. The pouring boxes for dry provisions were made of pressed glass for better monitoring of fill levels. The



Reform Kitchen cabinet from Möbelwerke August Siekmann furniture factory, Löhne, 1929

middle cabinet, and add-on side cabinets with one door each. This principle developed into the Reform Kitchen, which offered various combinations of cabinets with different functions. It remained in Poggenpohl's product range until the fifties. The Reform Kitchen did not have a continuous countertop. Straight lines, lack of ornaments, and white lacquer tops were the hallmarks of these kitchens.

Around 1927, the Eschebachsche Werke in Dresden for example offered Reform Kitchen cabinets that could be flexibly combined from a range of different modules.

cooking table was intended to fit the tiniest flats. It looked rather like a writing desk, with cabinets on the left and right, and drawers in the middle. When the cover was raised against the wall, concealed wash-basins on the left and right came into view (to be emptied into a bucket), as well as electric cooking plates, and the worktop with drainage channel. The cabinet under the cooking plates provided storage space for pots.

Dish washing table with two concealed enamel bowls that fitted under the tabletop, around 1928, Verein Zentrallager Minden-Lübbecke e.V., Minden

A kitchen table cost about 120 marks. In 1929, Hausrat GmbH in Frankfurt, the company that also produced the Frankfurt Kitchen, offered very buffet cupboards in different widths with doors and drawers coated with washable pale grey paint. The upper part could also be an open plate rack design. Together with a table and bench, this unit cost 450 marks, almost twice the price of the Frankfurt Kitchen.



Kitchen appliances

There were different approaches to the rationalization of housekeeping: not only through kitchen design and equipment and "re-education" of the housewife, but also through more use of technology. The electrification of cities and village was pushed forward rapidly in the twenties. Energy suppliers, looking for consumers who would be less susceptible to economic fluctuations, discovered private households as prospective clients for their non-



Ice cabinet, around 1920, with a top flap for loading ice blocks and, at the bottom, a container with discharge tap to catch the melting water
Lippisches Landesmuseum Detmold

storable product: power. But the victory of the electric household really began only after World War II with the *Wirtschaftswunder*

– the big economic boom – in Germany. Electric cookers were aggressively advertised, but slow to make headway against gas and coal. The reason was that electric power as a non-economic form of energy (in using electricity to generate heat, energy efficiency is only around 33%) was relatively expensive. In the twenties, power utilities sent promotional buses around Germany with electric household appliances on board. Their objective was to make sure that the power connection would be the sole form of energy in new housing areas. This plan succeeded, especially in the country and the suburbs, leaving people with no other choice than to cook with electricity. The number of electric cookers grew from 5,000 in 1926 to 60,000 at the end of the decade.

In 1926, small electric refrigerators were built for food preservation, with compressors or absorber technology, ie, without a motor, under US-American licenses. The main producers were Eis-Fink and AEG, whose model AEG Santo in 1931 was the first "People's Refrigerator" with one million units sold. The "Spar-Kühler" (economical chiller) launched by Eis-Fink in 1938, cost only 38 marks, but it was not very successful. It was insulated with cork sheets, and loaded with ice blocks. The advantages of refrigerating food were obvious, yet for most housewives fetching the ice and disposing of the melting water were too much trouble.

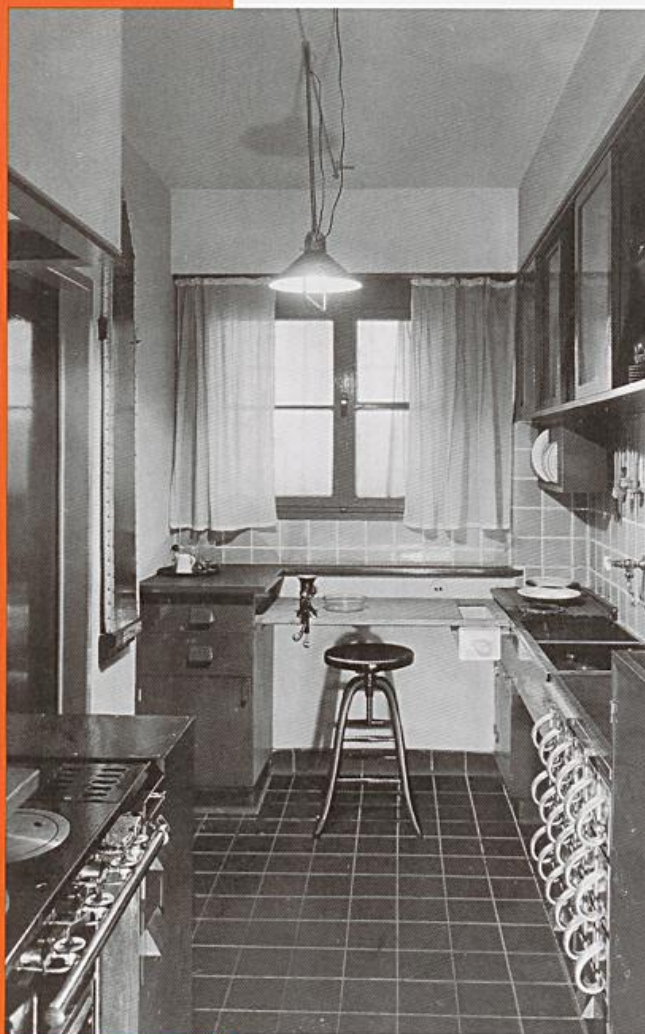
Eigentlich kommen wir
nur...



Ihren neuen
SANTO
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anzusehen,
von dem alle so begeistert sind

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HAUS DER TECHNIK. Fernsprecher D 1 Norden 3933

Advertisement for the People's Refrigerator, the AEG Santo, around 1930



Frankfurt Kitchen designed by
Margarete Lihotzky

The Frankfurt Kitchen, designed by the architect Margarete Schütte-Lihotzky in 1926, is today considered the pioneering kitchen design of the 20th century. For many, it was the "first fitted kitchen" and the "model for all modern working class kitchens". These popular ratings seem as unambiguous as they are comprehensive, yet they are hard to prove. It's important to analyse the keywords in some detail. Is the position of the

Frankfurt Kitchen, which today is so well-known, really outstanding enough to merit being called the "prototype of the modern kitchen"?

The Frankfurt Kitchen leapt to fame soon after it was designed. The kitchen was developed and built in large numbers for the social housing project The New Frankfurt, which was built between 1925 and 1930 by the Frankfurt Civil Engineering Office under the architect Ernst May. The housing project was heavily promoted and some of the glory rubbed off on the kitchen. It aroused strong interest at home and abroad. The other reason why this kitchen attracted particular attention was the lively contemporary debate on rationalization in private households – and especially in the kitchen. The concept developed by Viennese architect Margarete Schütte-Lihotzky was a novelty among contemporary kitchen designs. It broke with traditional class-specific housing habits both as regards the type of room and its furnishing. The Frankfurt Kitchen took principles that used to be reserved for spacious upper class households and applied them to working class households: a kitchen separate from the living area designed only as a cooking kitchen and with built-in furniture.

Prerequisite for the realization of the two principles in social housing projects was to reduce costs as far as possible, by making the kitchen as small as acceptable and using standardized furniture units. Room

The Frankfurt Kitchen – the prototype of the modern kitchen?

and furniture were interdependent. It would have been almost impossible to furnish the tiny kitchens that were built in Frankfurt with normal furniture from the stores. On the other hand, Frankfurt Kitchen furniture was designed only to fit this kitchen layout. Although they were mass produced, furniture units could not be freely combined. The units – cabinets, sink, etc. – were certainly designed to be used in three different kitchen types or room shapes, because the designers planned three kitchen versions, differing in size (for the household with no servant, or with one, or two servants). However, in each of these three different versions, the furniture was fitted in only one layout, strictly defined by the designer. Cost-efficient installation of the furniture required that all movements had to be defined – for all users. The Frankfurt Kitchen can be said to be one standard product available in three versions.

It is not hard to imagine that what one user thought a reasonable kitchen layout and well-designed furniture, was criticized by other users as over-organized and "too much pre-definition (...) and not enough opportunity to follow one's own habits". Tenants frequently complained about the narrowness of the room, which made it impossible for several people to be in the kitchen at the same time. People complained that a kitchen for a household without servants should be big enough for a mother to keep an eye on the children while she was cooking. Leaving open the door

to the living room for this purpose would negate the hygienic benefits of a pure cook-in kitchen.

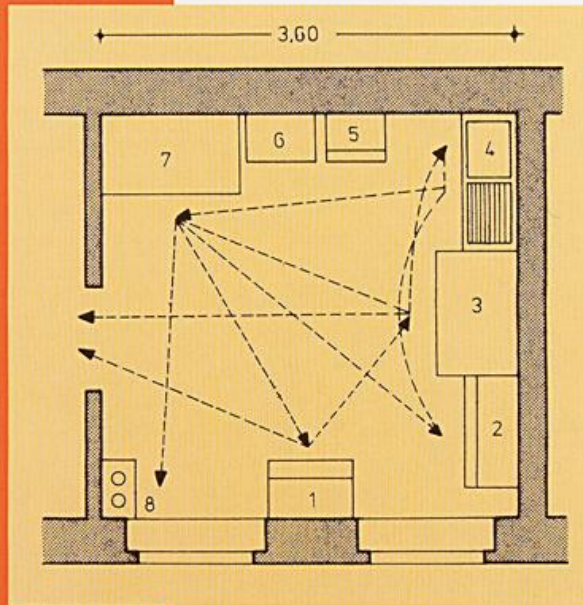
A 1929 study of the Reichsforschungsgesellschaft für Wirtschaftlichkeit im Bau- und Wohnungswesen (National Research Institute for Economic Construction and Housing) concluded that that notwithstanding its minor defects, the Frankfurt Kitchen still earned praise for having been one of the first solutions for modern kitchen design to systematically address the "kitchen problem". Soon, the Frankfurt Kitchen was accepted as an good example of rationalized kitchen furniture: Encyclopaedias such as Wasmuth's *Lexikon der Baukunst* (Encyclopaedia of the Art of Construction), published in 1931, and Neufert's *Bauentwurfslehre* (Building Design Studies) from 1936 mentioned Schütte-Lihotzky's designs and discussed the design and fitting out of efficient kitchens in general with reference to this example.

When it came to the degree of organization of housekeeping and the minimizing of space requirements, the Frankfurt Kitchen took an extreme position. This becomes obvious when it is compared with other contemporary models of fitted kitchen in housing projects, for example, the kitchen designed by Anton Brenner in the Viennese living machine project of 1924, or the kitchens that Gustav Wolf designed for the Westfälische Heimstätte through the mid-twenties, and the kitchens of Bruno Taut

in Berlin-Zehlendorf from 1926. Many designers/architects worked on making work in private households more efficient, trying to cut out work steps and optimize workflows. And the Frankfurt Kitchen was superior to comparable models in terms of minimizing process steps and maximizing ergonomics.

There are only a few documented statements on user acceptance of the Frankfurt Kitchens, and these tend to be highly contradictory. The Reichsforschungsgesellschaft noted in 1929 that not only many containers, but also whole areas of the kitchen, were being used for other than the intended purpose. This finding suggests that there were certain general problems with this kitchen design. A survey among tenants in the year 1982 strongly confirmed these observations. On the other hand, a kitchen advisor from 1950 cited research results according to which the majority of residents were satisfied with their Frankfurt Kitchens.

While the Frankfurt Kitchen as a standard product led to absolutely uniform kitchens, modern fitted kitchen technology with its huge variety of units can satisfy modern demand for functional and aesthetic individuality, and also secure the benefits of standardization. Seen from a technical point of view, today's fitted kitchen is very different from earlier concepts. It consists of detached modules, which can be freely combined to fit kitchens of all shapes and sizes. Only when they are finally installed



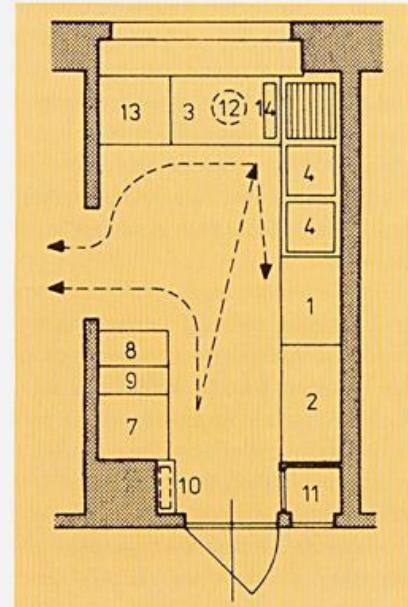
Floor plan of a traditional kitchen (top left) and a Frankfurt Kitchen (right) showing distances the housewife had to walk to perform a specific task

are they joined to a final entity. Only the worktop or counter is actually cut specially to fit the room or kitchen. Standardized modules like base units under the worktop, wall units hung above it, and appliances in almost any width, make it easy to choose furniture to suit any room and any user. In contrast to historic fitted furniture, today's fitted furniture can be disassembled and reinstalled in different rooms. More units can be added if required. This means that today's fitted kitchen cannot truly be called the direct successor of the Frankfurt Kitchen. In its flexibility – which has been perfected over time – it rather corresponds to the modular principle as represented by the Stuttgart Kitchen or the Ring Kitchen of 1928 (see page 25).

Designating the Frankfurt Kitchen as the "model of all modern work-in-kitchens" requires more detailed

investigation of present kitchen preferences. The pure cooking kitchens with the smallest possible floor space were developed in Frankfurt under tight economic constraints. Together with other kitchens, such as Anton Brenner's "living machine" kitchen or the various kitchen models of the Westfälische Heimstätte, the Frankfurt Kitchen certainly marks the beginning of a new development. This type of mono-functional kitchen emphasized ergonomics, functionality and hygiene.

From the beginning of the 1920s onwards it gradually ousted the traditional, multi-functional live-in



kitchen, which had for centuries been the standard in households without servants.

Yet increasing prosperity after World War II and growing emphasis on individual life styles, gradually dissolved the functional separation

between kitchens and living areas. In the sixties, the ideal of the live-in kitchen, a kitchen that had more than just cooking functions and emphasized communication and community became more and more important. Studies showed that people today want high-performance kitchens that are ergonomically furnished, and hygienically separated from the rest of the home. But they also want a multi-functional kitchen, integrated and aesthetically pleasing. In short: a kitchen that combines cooking functions with living functions.

We accept that the floor plan and furniture of the Frankfurt Kitchen were new; it was a novel concept for its day and social environment. But when it comes to identifying the true forerunner of all modern kitchens, it is clear that today's fitted kitchens, and the requirements they must meet, have been only marginally influenced by the Frankfurt Kitchen concept. The only things that present-day kitchens and those of the twenties have in common are the basic requirements for functionality and ergonomics, high standards and cheap, mass production. Novel about the Frankfurt Kitchen was its design as a minimalist, cooking kitchen. But people no longer accept these constraints, and they also dislike the aesthetic and functional tyranny that result from rigid standardization.

Hence the importance of Schütte-Lihotzky's design for the Frankfurt Kitchen does not lie so much in its being a model for present-day kitchens. The benefits and the

novelty lie rather in its ergonomic-functional consistency, its aesthetic concept and the integration of function, space and design. The changed view of kitchen furniture, which resulted in cabinets and table forming a continuous surface, fostered a new aesthetic concept for kitchens. The horizontal zoning resulting from this change, the alignment of identical modules, and the appropriate choice of colours, have had a strong influence on a lot of kitchen design. The Frankfurt Kitchen was characterized by a systematic design plan for the entire room. And its design was part of a concept that encompassed the whole building. It was a response to demands that individual rooms should fit with the overall architectural context. The language of forms applied in the Frankfurt Kitchen meets this demand. Lucid, geometric, mainly rectangular volumes, sharply defined openings and subtle colouring correspond well with the language of forms of functionalistic architecture. Other typical characteristics of the New Building Movement (such as asymmetric composition, emphasis on the horizontal or accentuated lines and projections) had been taken on board by the Frankfurt Kitchen. Margarete Schütte-Lihotzky as a designer reflected the relation between inside and outside, between the individual room and a group of rooms, between design details and the overall design. She developed a concept which expressed the changing lifestyles and a new relationship between interior design and exterior space.

Soups and ingredients for soups

For all soups use just enough liquid for the quantity of soup wanted, as only very little liquid will evaporate with electric cooking. One plate of soup equals $\frac{1}{4}$ l liquid. The cooking times of the recipes below have been calculated for the 1200 W plate and for four people.

(*Das Elektro-Kochbuch* (The Electric Cookbook), edited by the Hamburgische Elektrizitäts-Werke, Stettin 1935)

Cooking on the electric cooker, 1932



The society of the thirties, as in the twenties before, was a collective mass society. Values, however, had changed. The Bauhaus architecture of the Weimar Republic was dismissed as "Bolshevik" by the National Socialists, and replaced by the traditionally oriented "Heimatschutzarchitektur" (native land protection architecture). In housing developments, detached and semi-detached houses enjoyed a renaissance between 1931 and 1940. Big gardens encouraged people to grow their own food. As in the twenties, the working class homes were typified and the components strictly standardized. The pure cooking kitchen was

replaced by the live-in kitchen with family life in the focus.

The National Socialists' demand for a timeless style that would survive over generations brought about a reversion to traditional forms and materials for architecture and furniture design. The wooden "reform kitchen cabinet" became more important. This cabinet had separate divisions for food, tableware, and sometimes also for cleaning agents. It was matched with table and chairs of simple design, a cooking machine, and sometimes with the first electric refrigerators and cookers.

Reform kitchen cabinet, painted white, 1935, with built-in gadgets, Historisches Museum Bielefeld



Reform kitchens – back to standalone units in the thirties



Reform kitchen with Bosch drum-shaped refrigerator, Household Fair 1933

The thirties saw a swing away from the fitted kitchen back to individual standalone units. At the same time, the Frankfurt Kitchen continued to be built. Werner Sell in Dillenburg, according to his own statement, in 1938 designed a flexible modular kitchen, which corresponded to the ideas of Erna Meyer and Gustav Wolf (see page 25). Detached cabinets of different modular dimensions were put under wall-to-wall worktops, sometimes in L- or U-shape. Because of the war, mass production of this kitchen started only in the late forties.

Electric cookers, which had begun their rise to popularity in the thirties, were expensive. Therefore, power utilities who wanted to sell their power offered customers hire purchase arrangements. For instance, an electric full cooker with four plates and oven cost 248.40 marks in 24 monthly instalments.

Most housewives still also had a coal stove, so they did not necessarily cook on the new electric cooker, especially not in winter, when the coal stove also heated the room. Therefore, the utilities sent household consultants into the homes in order to increase power consumption. The biggest drawback of electric cooking, the fact that the cooking plate stays hot for so long after it is switched off, making it hard to regulate use, was sold as a benefit. The consultants persuaded people they could save energy by heating the dishwashing water on the plate while it was still hot. From 1930 to 1939, the number of electric cookers in Germany grew from 60,000 to 800,000 (Haase, 1992).

Only the cities had a piped gas supply, so there were more gas cookers in the cities. In the countryside, some used gas cookers with

bottled gas, especially where there was no public power network before the fifties.

The electric refrigerator, launched in the late twenties, was still unaffordable for most households. In 1933, the drum refrigerator with compressor, made by Bosch, cost 365 Reichsmark. The shape was impractical, and in 1936, with only 5,000 units sold, it was replaced by a square model. One year later, not even one percent of the German households had electric refrigerators.

Coal stove, covered with white enamel, in the thirties, with oven, coal box below, and flaps to stand hot pots on, Historisches Museum Bielefeld



Mock liver sausage

20 g fat
1 onion
50 g yeast
Approx. 1 cup of water
3 tablespoons grated white
breadcrumbs
Salt, Marjoram

Chop the onion and fry gently in fat until golden. Remove from the heat. Mix with yeast, breadcrumbs and water, add a little salt. Cook for three minutes, stirring all the time. Take away from the fire and add marjoram.
(Family recipe, 1944)

With austerity the order of the day, housewives had to improvise. Most food was rationed, or not available at all. Cookbooks with recipes to "make the most" of food, for example a "mock crab soup" based on carrots, or bread with ground oak nuts and potato peelings illustrate how housewives had to make ends meet. After September 1939, food was rationed and available only on food stamps. Food stamps were used in the FRG until 1950, and in the GDR until 1958.



Edwin Fritzsche,
Shelter for a painter, around 1948
(pastels),
Lippisches Landesmuseum
Detmold



Refugee kitchen in the Lüstringen
barracks near Osnabrück, 1951

Cooking box, made from an ammunition
box, Kulturgeschichtliches Museum
Osnabrück



Austerity kitchens – 1945 out of the ruins into a new era

In 1940, Adolf Hitler with his "Social Housing Law" had laid the foundation for the change from detached housing to blocks of flats with two to four storeys.

Development was in the hands of the Deutsche Arbeitsfront, which pushed standardization of components even farther than in the twenties. For kitchen and bath, the "Installation Cell 10+11" was available in four versions. As the war progressed, housing projects were stopped. Hundreds of thousands of flats were destroyed and housing was in desperately short supply, even more so at the end of the War as refugees flooded into the country. Housing was not back to normal until the late fifties. Until then, shelters and emergency housing dominated everyday life. Often families with several children lived in only one or two rooms.

Edwin Fritzsche, a painter from Salzuflen, (1876–1952) in 1947 documented his poor shelter in a cycle of four pastel drawings, which he called *Notunterkunft eines Kunstmalers* (Shelter for a painter). The pictures show the four corners of a room under the roof, with a cooking corner, the painter's sleeping corner, his wife's sleeping corner, and the dressing corner. The cooking corner consisted of one table and an iron oven with two pots and a jug. Laundry hung over the stove to dry.

The photo of a kitchen in the Lüstringen barracks near Osnabrück was taken in 1951, six years after

the war. A curtain separated the kitchen from the sleeping area. The most important means of saving fuel was the cooking box. One or two pots could be placed into the well-insulated box where it would finish cooking over several hours using the residual heat. The cooking box had been known since the end of the 19th century.

In 1948, with the currency reform, production came back to full speed. In Dillenburg, Werner Sell was the first to restart production of modular kitchens.

Kitchen cabinet, 1948, doors and drawers painted off-white, from the Villa Muthesius, Oerlinghausen, Lippisches Landesmuseum Detmold

Neff electric cooker with three cooking plates and baking oven 1949, Lippisches Landesmuseum Detmold

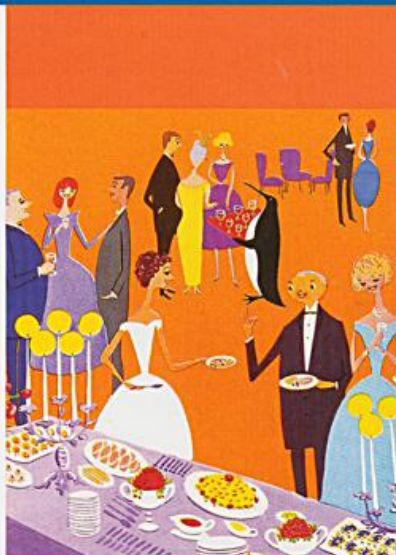


Toast Hawaii

4 slices toast
4 teaspoons butter or margarine
4 slices boiled ham
4 slices tinned pineapple
4 slices Chester cheese
4 red cocktail cherries

Toast the bread from one side only. Spread the untoasted side with butter or margarine. Cover with 1 slice of ham and 1 slice of pineapple. Put under the hot grill for one minute. Put one slice of cheese over the pineapple, and let it melt under the hot grill. Garnish the toasts with the cocktail cherries. Serve at once. (Müller-Urban, 1999)

The German *Wirtschaftswunder*, the post-war economic boom, began in the mid-fifties. Food changed, meals became richer, and generously decorated. Exotic ingredients such as tinned pineapple or Chester cheese were available in the shops. Toast Hawaii became a popular warm snack or party standard. Cooking books had chapters like "Our kitchen on the road" with recipes for camper holidays, or "Foreign cuisine at home" for adventurous eaters.



Fifties party scene, Illustration from a cooking book

Kitchen cabinet, around 1952, Villa Hilker, Detmold, Lippisches Landesmuseum Detmold



The early fifties were characterized by cramped living conditions. For many people in the Federal Republic of Germany (FRG), the *Wirtschaftswunder* remained a meaningless word until the late fifties. But demand for housing and the construction industry boomed. For cost reasons, and because separation of functions was the fashion among architects, the small modular kitchen dominated the new housing. 1951 saw publication of the DIN 18 022 standard. It defined the dimensions of housing. The maximum for kitchens was 8 sqm "on which all furniture and equipment for cooking" were grouped together. Luxury villas often had kitchens twice that size, but there too, kitchens remained mere working rooms. Live-in kitchens survived only in older houses.

Early in the fifties, housekeeping expert Erika Brödner defined the functional structure of the kitchen as follows: one workplace for food preparation, mobile if possible, with

Modular kitchens – new concepts in the fifties

an easy-clean surface and a drawer for waste, close to the appliances and the sink. She listed electric power, gas and coal as fuel for cookers. Very traditional, she preferred coal, as it was resistant to crises "as we frequently experienced during the war". She predicted separate ovens at working height with glass doors. She recommended the double pot or bain-marie, and the pressure cooker. The washing

table for cleaning vegetables, and filling or draining cooking water, should be somewhere central. It could be either free-standing or fitted, with worktops on both sides. Dishes were to be washed from right to the left, so light had to come from the face side or from the left. She admired the American faucet with its waste shredder, which made all other waste bins

introduced standard kitchen cabinet modules, which could be combined to make a complete kitchen. For food that needed cooling, she proposed an electric refrigerator at eye level.

At the Cologne Furniture Fair in 1950, Poggenpohl presented Form 1000, a modular kitchen that could be extended to a fitted kitchen as desired. This kitchen, like the

projects. In 1958, WK promised "700 hours extra leisure a year!" "700 hours less of bending, stretching, dragging and walking!" Behind this kitchen wonder, claimed WK, were the "latest findings of international kitchen research". All parts were available separately, so users could add on to their kitchens as required and as they could afford. The new plastic surfaces for worktops, tables and chairs were

"practical, clean and easy to maintain".

The first kitchen made entirely of plastic was launched in 1959 by kitchen builder Dr. Becher from Bühlertann under the name Lady (later Plastica). The colored version, Colora, followed soon after. The "friendly and subtle pastel shades" were intended to soften the



One of the earliest modular fitted kitchens: Poggenpohl's Form 1000, presented at the Cologne Furniture Fair in 1950

Frankfurt Kitchen, was characterized by its linear arrangement. Base units and wall cabinets in horizontal blocks with continuous worktops determined the look. The manufacturer's slogan claimed that every kitchen, even in old houses, could be fitted like this. This was a big step away from the standardized fitted kitchens for standardized rooms in the Frankfurt housing

impression of a sober cooking lab, and they promised to make the daily chores more agreeable. For the first time, the cabinet doors closed with magnetic snappers. The surpluses of the *Wirtschaftswunder* made it unnecessary to padlock the cabinets, as recommended during hard times to keep hungry children from eating the sugar and other food.

Diese jungen Leute planen schon



Kitchen planning with model furniture by Bähr + Priester, Herford, private property

... nach unseren Anregungen.
Möchten Sie es Ihnen nicht nachtun? Ihr Fachhändler berät Sie gern und zeigt Ihnen Originalmodelle. Vielleicht reichen Sie auch einmal eine Grundrisskizze ein, nach der Vorschläge unverbindlich ausgearbeitet werden.

BÄHR + PRIESTER
Spezialfabriken für Kunststoffküchen
HERFORD UND AHMSEN

Mitglied der Arbeitsgemeinschaft
DIE MODERNE KÜCHE

In 1953, the first scientific studies to promote the sales of fitted kitchens were published. The modern kitchen association, *Arbeitsgemeinschaft Die Moderne Küche* (AMK) e. V. was established in 1956. In the German Democratic Republic (GDR), six special development offices were set up in 1954 to design furniture. Kitchen

furniture was the responsibility of the offices in Dresden-Niedersedlitz and Erfurt. They designed flexible modular furniture and fitted furniture in the tradition of the Frankfurt Kitchen for standardized housing construction.

In the middle of the fifties, with the beginning economic boom, household technology prospered. The first affordable appliance was the refrigerator.

The Bosch refrigerator with rounded edges and a car door handle started its move into German kitchens from 1952. But ten years later only half of all West German households had electric refrigerators.

Fitted, joiner-made, kitchen with doors in different pastel colours, Lippisches Landesmuseum Detmold



Macaroni Cheese

400 g macaroni
1 large tin of peas
200 g cheese cubes
3 slices cooked ham
2 eggs
1/8 l milk
100 g cream
Salt
Pepper
Breadcrumbs
1 tin peeled tomatoes
1 onion



Boil the macaroni in 4 l salted water for 10 minutes. Drain well in a colander. Mix with the drained peas and the chopped ham. Grease an ovenproof dish with butter, fill with the mixture. Add the cheese cubes. Beat the cream with the milk and eggs, season with salt and pepper, pour over the noodles. Sprinkle breadcrumbs on top. Put butter flakes on the top. Bake for 50 to 60 minutes in an oven preheated to 190°C.

In the meantime, finely chop the onion for the sauce. Fry in a little butter until soft. Add the peeled tomatoes. Pass thorough a sieve and season with salt and pepper.

Roland Gööck: *Das große neue Kochbuch* (The Big New Cookbook) Gütersloh 1963



The first kitchen with an integrated door-opener rail SieMatic 6006, 1960

Kitchen in average-sized rental flats, and in generous detached houses in the FRG, were still conceived as pure cooking kitchens, although they were now sometimes bigger than 8 sqm. The increase in size was mainly to accommodate the growing number of appliances; it did nothing to enlarge the small dining areas. Kitchens often had pull-out breakfast bars, but these tended to get in the way while people were working, and were seldom used for eating.

In 1962, the GDR began the housing project P2 with flats of 55 or 63 sqm. P2 was deemed the radical opposite to the plushy aesthetics of the Ulbricht area. The planning collective had designed a type of flat that they claimed would liberate the kitchen from isolation. The model kitchen measured only 5 sqm and was located along internal walls, with no windows. Daylight

was supposed to come through an opening in the "room-dividing show-case-cabinet" and this opening was also supposed to let the housewife participate in family life while she was cooking. People hated the dark, narrow kitchens.

Fitted kitchen for flats in pre-fabricated housing in the GDR
WBS 70, 1973



Fitted kitchens – a must-have in the sixties

The third housing construction program WBS 80 was adopted in 1973. This project had some things in common with P2, but not the windowless kitchens. However, P2 was continued in parallel until 1990.

The designers had calculated not only little room, but also little time for housekeeping. Quick-cooking ingredients such as *Tempolinsen* (parboiled lentils) and the high-speed cooker saved time in food



Kitchen block, 1966, private property

preparation. The housewife should not be kept away from production work for longer than necessary. 15 billion hours housekeeping a year were too much for the socialist Government. The System-Ratio-küche, launched at the Autumn Fair in 1967, was intended to reduce housekeeping time through optimum workflow and more ergonomic work processes.

In the early sixties, West Germany still produced more kitchen buffets than fitted kitchen. But this ratio changed in the course of that decade. Kitchen buffets were replaced either by kitchen blocks or by modular kitchens. In the GDR, the kitchen block was called the Garnitürküche. Modular kitchens more and more often integrated appliances into continuous worktops. In 1962, Neff was the first producer to launch built-in appliances on the market that standardized the look of the kitchen. The hob was integrated into the continuous worktop, and the oven installed at eye-level. A refrigerator was indispensable and if desired front panels were available to match fridges to the cabinet fronts.

Following the Bauhaus tradition, the dominant colour in sixties kitchens was white. In 1960, SieMatic launched the 6006, the first kitchen with a door opening system running around all cabinets. In Western and Eastern Germany, the corpus of the cabinets was now more often made of chipboard rather than plywood. Countertops were made of easy-

Philips electric coffee grinder, streamlined design, around 1960, private property



clean Formica, sold for example under the brand name Resopal®. Bähr und Priester in Herford advertised as the "World's first special factory for Resopal kitchens". Resopal was promoted as easy to clean and hygienic, and "virtually resistant to water, fats, vapours and household chemicals."

Kitchen suppliers offered the following fittings: circular swivel shelves (saucepan carousels) for corner cabinets that made the best of the available room, and gave easy access to pots and pans; pull-out breakfast bars, electric towel dryers in cabinets, retractable kitchen machines and cutting machines. The electric waste shredder, admired a decade before as an American novelty, became available in Germany too.



Doll's house of the sixties with integrated door-opening system, private property

In 1960, 6% of the households in the GDR had electric refrigerators. By 1969, this figure had risen to 60%. In the West, this number had already been achieved in 1962, and 7% already had deep-freezers by that time.

Stuffed peppers

6 green peppers
50 g boiling rice
2 small onions
375 g minced meat (half beef,
half pork)
Salt
Pepper
4 tablespoons olive oil
200 g tomatoes
20 g cornstarch (Dr. Oetker)

Cut away the stems from the peppers, and cut off a lid. Remove kernels and the white dividing walls. Wash the peppers. For the stuffing, boil the rice in $\frac{1}{2}$ l salted water. Let boil for 15 minutes and let it swell. Rinse with cold water. Peel and finely chop 1 small onion. Mix the minced meat with rice and chopped onion. Season with salt and pepper. Stuff the filling into the peppers. Put the lids on. Heat 4 tablespoons olive oil in a pot. Peel 1 onion, chop and fry them. Put in the peppers side-by-side. Wash, chop and add the tomatoes. Add a little water and let it cook for 50 minutes.
(*Das Große Kochbuch*, Dr. Oetker, 3rd, improved edition, Bielefeld 1977)

Siematic 6006, around 1975,
private property



First frozen pizza, 1970, Dr. Oetker

Germans were now taking holidays abroad and getting to like new vegetables which they wanted to eat at home too: green peppers, aubergine and courgettes. Fast food made its appearance in German kitchens. In 1960, the housewife could choose from twelve ready-made dishes, in 1970, from 550.

The residential style in the sixties, in both East and West, was dominated by the "system" concept. All living areas were to be furnished from standardized furniture ranges: shelving systems, office systems, system kitchens. The advertised benefit was that individual modules could be bought or exchanged as required and when people could afford them. That was nothing new – it had been offered before in the fifties. The kitchen was to have a cohesive look, and satisfy aesthetic, constructional and ergonomic requirements. "More than 450 different types meet every kitchen wish – guaranteed," was how SieMatic promoted its 6006 kitchen. The early seventies saw a real breakthrough for fitted kitchens, from 1976 onwards they recorded double-digit growth rates.



System kitchen – the seventies

The GDR, too, launched a standardized modular system called the Intecta kitchen furniture program (1976).

More appliances and increasing rationalization were in conflict with the growing need for comfort and communication, which was pointing towards the live-in kitchen. Kitchen suppliers responded by adding dining areas to their system kitchens. These were much bigger than the "emergency perches" of the sixties. Another way of softening the high-tech look of modern fitted kitchens was to combine them with traditional-looking eating nooks. "Isn't it fascinating how the timeless form, the functional design of SieMatic teams up with the rustic comfort of antique furniture in the dining corner?" SieMatic asked in 1980.

After the mid-seventies, the choice of colours also reflected the desire to create a pleasant mood in the kitchen. Green was favoured as a

SieMatic 6006, around 1975, Perforated board with fittings



"natural" colour. Another characteristic example is the grape-coloured SieMatic 6006. "Live colourfully and you'll live better", was the SieMatic promotion slogan. In the GDR, the Intecta kitchen was offered with an orange plastic coating. The smooth "clinical" surfaces soon gave way to more rustic designs with wooden fronts. The "country house kitchen" had become the ideal of comfortable living.

The revived live-in function required that the appliances be concealed behind attractive front panels. A seventies novelty was to hide the

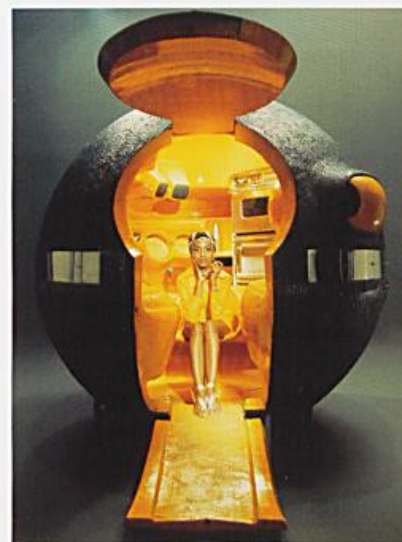


Bulthaup, microwave kitchen Typ 1b, 1970

refrigerator door behind a decor door that matched the units. In 1968, Poggenpohl was the first to offer a solid wood kitchen.

Studies of the kitchen of the future, commissioned by the kitchen industry, presented a very different picture. Bulthaup's Typ 1, a microwave oven kitchen with a bar counter and swivel chairs, looked like nothing so much as a space mission control centre. Luigi Colani's study Experiment 70 looked like a space capsule. The user could have reached every point in this "Cookpit" from her central

swivel chair. Like the Bulthaup Typ1, it never went into production.



Luigi Colani, Experiment 70 spherical kitchen for Poggenpohl, 1970

Notwithstanding rationalization and the increasing number of household appliances, the time required for housekeeping could not be further reduced. The new machines took over some of the chores, but they themselves required cleaning and care. They consumed electric power and took up space. The trend to the big weekly shop also required space to store foodstuffs. In the seventies, this led to improvements to the interior fittings of cabinets.

The pyrolytic self-cleaning function was a great bonus for electric cookers. In 1971, Neff combined the hot-air-principle with pyrolysis. In 1977, Imperial launched the glass ceramic hob. Dishwashers were still relatively rare. In 1973, only 7% of all households had a dishwasher.

Chicken breast fillet with peppers from the wok

400 g chicken breast
1 egg white
1 teaspoon cornstarch
1 red and 1 green pepper
2 tablespoons of rice wine
Salt, pepper, a pinch of sugar



Cut the chicken breast into cubes. Beat the egg white and the starch together. Let it rest for 20 minutes. Cut the peppers into strips. Heat the oil in the wok and fry the meat quickly, let it just turn white. Take the meat out and let it drain. Pour off the oil, leaving only a little in the wok. Fry the pepper strips for one minute, mix with the meat, and fry for one more minute. Pour the rice wine over and season to taste. (Sim Siok Me: *Die echte chinesische Küche* (The True Chinese Cooking, 1980).

This was the decade German cooks discovered woks. Stir-fry was the fashion. In the beginning, the wok had its original round base, and could only be used with gas cookers. Soon flat-bottomed woks arrived on the market.

The eighties saw the first protests against standard kitchen furniture. Otl Aicher advocated a return to the old live-in kitchen. In his opinion, kitchens have to provide for social cooking with friends and family, eating together, and sensual experience. He understood kitchen work not as a daily chore, but as a life-enhancing leisure event. There speaks the passionate hobby cook.

Kitchen users were now confident about ignoring the separation of function dictated by the architects. In 1989, one third of the people surveyed declared they spent more time in the kitchen than in all other rooms during the day. They said they used it for jobs and leisure activities, for which the designers had planned other rooms. Since 1986, this has led to bigger kitchens in new building projects (Silbermann, 1995). It was no longer enough for kitchens to meet the requirements for efficient cooking. Kitchens should be as individual and representative of the owner as the living room. Furniture suppliers were quick to support this trend. In the SieMatic Kitchen Report 1980, we read that the kitchen is an area that "develops from the world's biggest workplace to the most advanced part of the apartment, and hence the centre of living".



GDR ratiomat 85-03 kitchen, VEB Eppendorf ratiomat, 1982

Stefan Wewerka, Küchenbaum (kitchen tree) for Tecta, Lauenförde, 1983



Profession and protest – the eighties

In the GDR, too, the kitchen, wherever permitted by the ground plan, once more became an area for living. Furniture became comfortable and rustic.

Production of kitchen furniture in the GDR was essentially concentrated in two combines: Radeberg and ratiomat Eppendorf. Meeting the production plan took priority over quality control, but production could barely meet demand in the capital, Berlin, and that only temporarily. In 1980, only 11.6% of production achieved the highest quality label Q. In 1986, half of the kitchen deliveries were claimed to be defective (Lauber, 2003). Because a lot of furniture was exported to the FRG, design tended to follow Western design principles.

Apart from the trend to live-in kitchens another trend was becoming apparent: the one-person kitchen. In 1950, the average number of people living in a household was 4.7. By 1978, the number had shrunk to 2.6. In 1988, the number of single-person households was 35%. Commissioned by kitchen supplier Tecta, Stefan Wewerka in 1983 designed the kitchen tree for high-earning singles. Oven, sink, shelves, spice rack and fruit and vegetable containers were mounted on a vertical steel post, adjustable in height and rotating. In 1982, Otl Aicher's book *Ende einer Architekturdoktrin* (The End of an Architectural Doctrine) (1982) advocated and designed a semi-professional kitchen. Two years later, Bulthaup presented the kitchen island, a kitchen worktop

which stood free in the room, accessible from all sides. The GDR furniture combineate Hellerau in 1983 also presented a contemporary cooking island. In its own version, SieMatic emphasized ergonomics and introduced the lower hob. The colour white enjoyed a great renaissance, at least until chrome and stainless steel, previously only used for sinks and cookers, became popular furniture surfaces in the later eighties. The gleaming tops radiated professionalism.



Bulthaup island workplace based on a design by Otl Aicher, from 1984

In the early eighties, the debate about formaldehyde hit the furniture industry. Consequently, Zeyko in 1984 launched the first organic kitchen – without chipboard and plastics.

Aicher advocated upgrading the kitchen to make it possible to cook gourmet menus. He called cookers with only four plates a "torture". The

countertrend was microwave oven cooking, which became more and more fashionable. It speeded up cooking and made it possible to serve individual meals for different family members. Housewives bought industrially made TV dinners. In 1984, 99% of all West German households had electric refrigerators, 50% had freezers. The eighties also saw the victory of dishwashers. By the middle of the century, 30% of the FRG households had dishwashers. Siemens launched the first built-in dish-



Miele dishwasher with cutlery drawer

washer in 1980 to harmonize kitchen looks. At the same time, Miele introduced the cutlery drawer for the dishwasher.

Black pasta in salmon and saffron sauce

350 g black pasta
6 tablespoons olive oil
2 shallots
2 tablespoons butter
1 heaped teaspoon flour
1 jar fish stock (400 ml)
1 small tin saffron
250 g cream
Cayenne pepper
1 pinch cardamom
1 pinch curry powder
300 g salmon fillet
½ bunch dill

Boil the pasta al dente in salt water with 5 tablespoons olive oil. Drain, mix with the remaining oil, and keep warm. Peel and finely chop the shallots. Sauté in butter until soft. Sprinkle on the flour and continue to cook gently. Heat the fish stock, add together with the shallots, stir until smooth. ^ Add saffron and cream. Bring to the boil and season to taste. Rinse the salmon fillet with cold water, cut into thin strips. Put into the sauce, and let it simmer for a few minutes. Arrange the hot pasta on heated plates. Pour the sauce over and decorate with chopped dill.
(Müller-Urban, 1999).

Food scandals (BSE, foot-and-mouth and the debate about genetic engineering) alarmed more and more consumers in the nineties. A growing number of consumers took to buying from organic food stores or directly from the farm.

After the living room, Germans regard the kitchen as the most important room in their homes. This was one of the results of a 1995 sociological study (Silbermann, 1995). This makes it all the more amazing that the population lets architects plan this second important room with floor space scarcely bigger than a rabbit cage. Over half of German kitchens are less than 10 sqm, only 14% are bigger than 15 sqm. Notwithstanding the space constraints, the kitchen is considered the family communication centre, even if cooking tends to be the exception or a hobby. Researchers from the Forsa-Institute found that



Ikea Värde kitchen-in-a-cupboard,
Design by Mikael Warnhammar

73% of women and 67% of men thoroughly enjoy cooking. Many TV cooks and numerous cookery books invite audiences to get together with friends and cook elaborate menus from all over the world. In 1996, Musterhaus-Küchen even offered

the Biolek Kitchen named after a German TV cook. The rare bout of gourmet cooking contrasts with many people's everyday routine of fast food on the go, on the way to work, as snacks or deep frozen convenience food out of the microwave oven at night.

This means kitchen equipment is rarely put to full use to produce food. Most kitchen machines gather dust in kitchen cabinets – unused. The mobile mini kitchen for single households is a response to this trend. One example is the Värde kitchen-in-a-cupboard, a combination of white plastic and light wood. On much reduced space, it unites many kitchen functions and at the same time integrates cooking into the living room. But we have to assume that only a very small percentage of the population will have such kitchens. The broad-based Silbermann kitchen sociology study (1995) does not mention this type of kitchen. However, it provides a lot of information about fitted kitchens, reporting that 50% of all households had a complete fitted kitchen. Another quarter had partly fitted kitchens. The last quarter had freely combinable furniture units. In the new German states on the other hand, over 50% of households had free-standing kitchen furniture. 28% had partly fitted, and only 16% had fully fitted kitchens.

One quarter of the Germans is "opposed to fitted kitchens on principle". They base their rejection on the lack of individuality of fitted kitchens. Finance is not an issue, because it is middle and high

Fast-food and hobby chefs – The nineties

income groups with generally high education levels who more often reject fitted kitchens. For this market, manufacturers offer the free-standing "modular kitchen" as an alternative to rigidly fitted kitchens.

In 1995, country house kitchens enjoyed a renaissance – 54% of all Germans preferred "rustic" kitchens (Silbermann, 1995). By the end of the 90s, sixties-retro-kitchens were the latest trend, for example forty year old SieMatic 6006. After plastic (in the fifties) and wood (in the seventies) aluminium became the most fashionable kitchen material of the nineties. The trend had its peak in 2000 with pure aluminium kitchens.

The new laws and regulations on packaging and waste disposal meant that householders were sorting and storing waste. People now needed space not only for foodstuffs, but also for waste, carefully sorted into glass, packaging, paper, organic waste and household waste.

In 1992, Poggenpohl systematically continued the idea of the organic kitchen and designed the first fully recyclable kitchen. Equally committed to the environment was the first refrigerator free of chlorofluorocarbons (CFCs) launched in 1991 by dkk Scharfenstein.

By 1999, dishwasher sales had risen from 30% to 45% of households (57% in 2003). 99% of homes had a refrigerator, and 51% had a microwave oven (63% in 2003). Poor



Retro look: the forty-year-old SieMatic 6006 has enjoyed a resurgence of popularity in the new millennium.

access to corner space had been improved by carousel cabinets since the fifties.

For deeper corners, Kesseböhmer developed the MagicCorner in 1995. This was a fitting where the metal baskets in the front half swung out when the cupboard door was opened, pulling the other half out of the corner into the door opening.

Drawer system ComfortLine by Hettich International, 2004



Hettich International launched the ComfortLine drawer system, which combines flexible organizer systems with outstanding runner technology.



Miele fitted kitchen with MagicCorner, 1995

Autumn Recipe Cider soup with cream cheese dumplings

½ l cider (or semi-fermented apple must if available)
½ teaspoon of coarsely ground white pepper
½ teaspoon ground cardamom
5 sheets gelatine
4 cl calvados

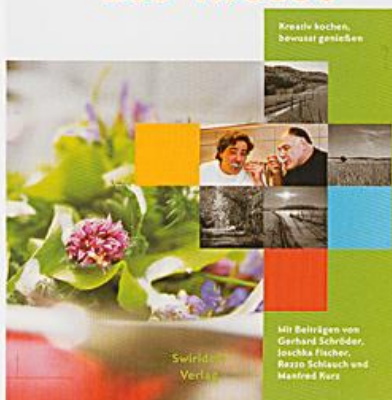
For the cream cheese dumplings:
200g cream cheese (20% fat)
160 g sugar
Juice of one lemon
250 g cream
4 sheets gelatine

Briefly heat the apple must or cider with the spices (do not let it boil). Pour through a very fine sieve. Add the soaked gelatine and dissolve it. Let it cool for several hours in the refrigerator. Mix the cream cheese with the sugar. Stir until dissolved. Heat the soaked gelatine with 2 table-spoons of water. When dissolved, quickly mix it into the cream cheese together with the lemon juice. Finally, blend in the cream. Leave to set for three hours in the refrigerator.

Stir the Calvados into the jellied must or cider soup. Pour into cooled plates. Use a hot teaspoon to cut dumplings out of the cream cheese. Arrange in the soup. (from: Kurz und Schlauch, 2002)

Manfred Kurz / Rezzo Schlauch

Die neue Ess-Klasse



At the beginning of the 21st century, German eating habits have become polarized. The microwave oven has become one of the most important kitchen appliances. Frozen or chilled meals can be quickly heated through. The quick snack, eaten on the go, is replacing the home-made sandwich. At the other end of the spectrum, more and more people buy their food from organic stores. There is a resurgence of interest in regional cooking. "Buy regional, and cook seasonal", that is the new trend for slow food fans and environmentally-aware gourmets.

Kitchen furniture in German households is on average 18.5 years old according to a recent Bosch study – hopelessly outdated in the eyes of kitchen suppliers. A survey among the members of *Arbeitsgemeinschaft Die Moderne Küche e. V.* (Modern Kitchen Association) produced interesting results. Even much newer kitchens, bought ten or fifteen years ago, are no longer state of the art in technology, design, looks or comfort. This notwithstanding an EU study that Germans spent the most money on kitchen furniture – and the least on food – in the EU.

New kitchen trends are blurring the distinction to living areas. The kitchen is the place where more and more time is spent – with family and friends. Detached, independent kitchen modules like cooker and sink in a line, a dining table with chairs, and a tableware cabinet are all combined to make a pleasant living atmosphere. The materials, warm wood tones, also correspond to the requirements of live-in kitchens.

Miele steam cooker DG 4000

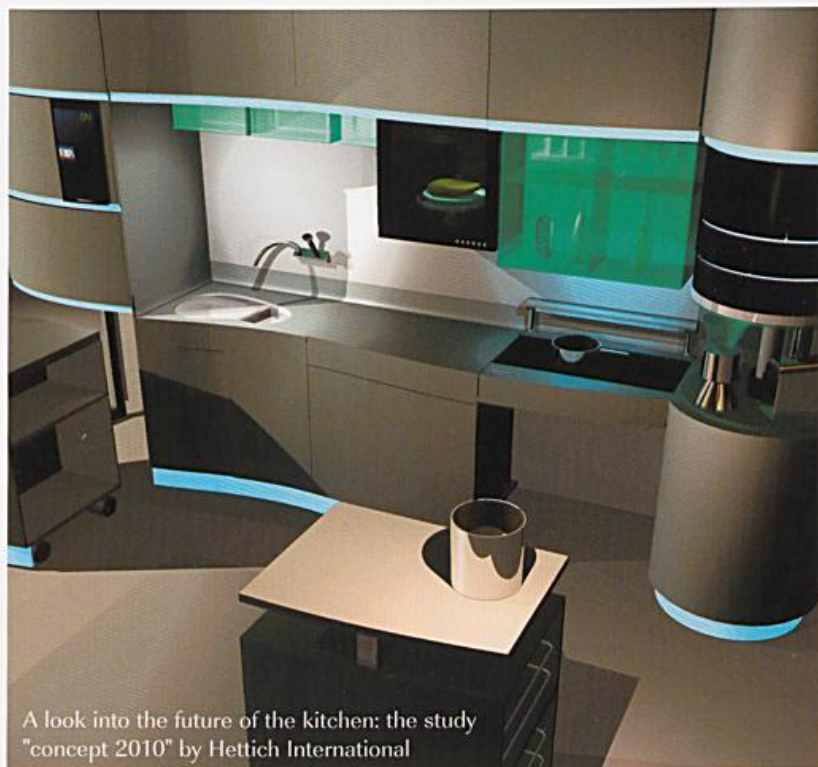


Kitchens of the future – development after 2000

"Goodbye cooking kitchen" wrote cultural expert Michael Andritzky as long ago as 1992 (Oikos, 1992, p. 451 f.). He continued, "The kitchen of the future will be totally different. It will have (...) at least 30 sqm floor space, and it will connect to an adjacent conservatory (...). The plants that grow there will make a pleasant micro climate in the

kitchen fittings, Hettich International, in 1999 presented a very different model study to the public. Characteristic of this block-shaped kitchen are the integrated mobile containers, which can be rolled out of the block to where they are needed. This kitchen is no longer a fitted kitchen, but a flexible functional centre made of individual

units and appliances arranged in a circle, around which kitchen users walk. The upper half of the ball is pushed up, the lower half has the basic functions on its countertop.



A look into the future of the kitchen: the study "concept 2010" by Hettich International

kitchen. They will absorb kitchen smells and restore the connection between the family and nature. In this kitchen, the provision of electric appliances will hardly be relevant. (...) The future lies (...) with the central cooking place of earlier house types, and it is our chance for the future".

The world's biggest supplier of

modules that can also serve as room dividers. This type of kitchen fitting adjusts flexibly to new types of housing, even if only a minority of the population lives in open-plan apartments or lofts.

In 2002, the supplier Gatto Cucine in Milan presented the Sfero dream ball. Unlike Colani's Experiment 70, it is not a kitchen room, but kitchen



Sfero spherical kitchen by Gatto Cucine, 2004

Many "kitchens of tomorrow" have come and gone. Remember Colani's kitchen ball Experiment 70 or the microwave counter Typ 1. Andritzky's kitchen-cum-conservatory may or may not come into being, and may or may not be practical for mass housing construction. What is certain is that the kitchen will remain the hub of the house and meeting point for the family, only if people really use it for cooking.

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Like the quality ingredients for a delicious meal, fittings systems from Hettich help to give kitchens a unique flair. Hettich kitchen fittings combine intelligent performance and outstanding design. They differentiate functional areas, save time and effort, organize storage and optimize workflows.

Intelligent kitchens with drawers and organizer systems from Hettich are the attractive heart of a home, with a strong focus on comfort. For the end-consumer, a kitchen organized on functional lines is an immediately recognizable must-have; for the kitchen trade it is a certain recipe for success.



Recipes for intelligent kitchens

Food storage



Food preparation



Pots and pans

Cleaning agents and waste



Plates and cutlery



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