Modernist interior design as a shared heritage?

The Frankfurt kitchen in Tel Aviv

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Introduction

When thinking about modernist architecture today, one may envision white-walled buildings with sharp edges or iconic design objects and furniture, as recently recalled by the large-scale celebrations for the 100th anniversary of the Bauhaus school. Although the Bauhaus, founded by Walter Gropius (1883–1969) in Weimar in 1919, did revolutionize architectural and aesthetic concepts in a way that still has an impact today, the term Bauhaus is often used too broadly, as it encompasses various forms of architecture and design of the modern era. A look into the interiors that hide behind the iconic surface of modernist architecture offers an opportunity to critically question the radical monumentality that the term now claims for itself.

As modernist architecture is functional in nature, the distinction between interior and exterior spaces is often blurred. This can be observed in the case of Hans Scharoun's house in the Weissenhof Estate in Stuttgart, where the curved form of the inside staircase shapes the external façade.[1] While the functional exterior serves as a stylistic, political, social, and cultural frame for an idea, the interior space realizes a complex site- and time-specific concept that is shaped by the social and cultural contexts inscribed within it, as well as the requirements of practical usage. Through the transfer of modernist architecture to other regions of the world, including through migration and exile, a material and immaterial heritage was created that connects Europe with the rest of the world today. This heritage includes the White City of Tel Aviv, built in Mandatory Palestine, which is now a UNESCO World Heritage Site. To simply label the White City with the Bauhaus stamp would be insufficient.

The present contribution focuses on the interior space of the early modern era and examines its architectural transfer processes, particularly in the context of the Stuttgart Weissenhof Estate and the White City of Tel Aviv through the lens of the Frankfurt kitchen. Furthermore, the study investigates the reciprocal relationships

1 Author's interview with Friedemann Gschwind, former commissioner of the state capital Stuttgart for the Weissenhof Estate, August 5, 2020 (Video call, transcript).

of interior formations in Germany and Eretz-Israel (mandatory Palestine) since the 1920s and their material and cultural implications, beginning by illuminating the intentions of Margarete Schutte-Lihotzky's Frankfurt kitchen design, before sketching the rise of modernism in Tel Aviv to highlight its local, cultural, and material forms of expression. Finally, the study turns to the examination of the so-called Tel Aviv kitchen, a site-specific modernist fitted kitchen model that can still be found in the Liebling House in the White City, as well as an original Frankfurt kitchen imported and installed in 2021 in the same building. The goal is to question the changes in both function and meaning that the transfer of the Frankfurt kitchen implies, and furthermore, to identify indicators for a shared heritage in these transformative processes. The research is based on both German and English secondary research and primary data obtained through expert interviews with Dr. Sharon Golan, the Program Director of the Liebling House – White City Center, with Dr. Friedemann Gschwind, the former commissioner of the city of Stuttgart for the Weissenhof Estate, and with Anna Luise Schubert M. Sc. from the Centre for Documentary Architecture (CDA).

Towards the "heart of architectural composition": Interiors

Although much thought has been given to why architects of modernism, and specifically those of the Bauhaus turned their attention to the interior space as a "natural extension of their role towards the heart of architectural composition" (Benton 1990, p. 103), their efforts have been primarily received and theorized in the realm of furniture design. It is important to remember that the Bauhaus was originally a design school and not a label for an architectural style. This suggests that the objects and architecture of the Bauhaus school followed the early Bauhaus doctrine of "physical obedience"[2] in the same way. They were intentionally inscribed with the way in which spaces and things were intended to be used as part of the design. This raises initial questions about the possibility of transferring that functional approach to other cultural contexts.

2 When considering the interior architecture influenced by the Bauhaus scholars, one comes closer to the initial and quite radical design-oriented approach of the Bauhaus school. It becomes clear that the school wanted to propagate its name and influence in diverse spheres, by designing a Bauhaus garment, a Bauhaus pipe, introducing a Bauhaus greeting, and composing a Bauhaus song (Ray 2001). Interestingly, in this spirit, which showed some signs of war-influenced sentimentality, "the worship of physical obedience" flourished (Ray 2001, p. 74). The school seemed to proceed with similar rigidity in creating identity for its students as it did in creating new identities for its workshop products, by emphasizing both "production (industry) and consumption (advertising) " (Ray 2001, p. 75), or, when thinking about interiors, materiality, functionality, and usage.

After World War I, architects, often due to a lack of infrastructure and money for building, "rediscovered their roots in the crafts, often in the new contexts of Expressionism, de Stijl, or Constructivism" (Benton 1990, p. 103). Tracing the Bauhaus back to its origins, we see that the craft workshops and their products were placed at the center of the early school's approaches, aimed at creating "the impression of a magical spatial extension with modest means" (ibid). The modernist interior is thus closely intertwined with the influence of the Bauhaus school.

An early experiment in implementing avant-garde ideas of modernist architecture, and an initial attempt to rethink its interiors, was the Weissenhof Estate in Stuttgart. Originally built in 1927 as a Werkbund exhibition by 27 mostly Berlin-based architects (among them Le Corbusier, Walter Gropius, Ludwig Mies van der Rohe, Hans Scharoun, and Bruno Taut), the buildings initially served as representative examples of the modernist ideology, rather than practical solutions for the construction of new housing. However, even within this representative exhibition framework, the architects intended to present solutions for the need for cheaper and faster construction of housing in an urban context. The interiors of the settlement, following the radically unadorned demands of their facades, were intended to respond to the needs of a modern lifestyle and therefore featured modular and flexible floor plans, some even equipped with modernist furniture. Mies van der Rohe's apartment block is an example of modern interior design, as none of the 24 flats were identical in floor plan due to the thin flexible walls, that characterized the interior layout. It was one of many important innovations of the Werkbund exhibition, promoting modern flexibility and individuality in interiors, in contrast to the plain white and industrial-looking exterior spaces (Benton 1975). However, architect Hans Schmidt critically described the interiors of the 1927 Weissenhof exhibition as architecturally imprecise. All of the projects clearly stem from the desire to create as large a space within these small houses as possible and as a result we have a series of endless combinations: dining room/living-room/hall, study/living room/stairwell, and so on (in: Benton 1990).

Similarly, he expressed little conviction about the practicality of the architecture presented, which he deemed to be "very beautiful to look at, but completely useless":

> The movable wall is a true hallmark of the exhibition houses, and this too can hardly be considered a sign of progress. On the contrary, it painfully reminds one of the staircases and rooms connected by double doors of the 1890s (in: Benton 1990, p.103).

The interior architecture of the modernist era went beyond just redecorating or introducing a new flexibility, which was deemed useless by Schmidt. Rather, the design of interior spaces was influenced by scientific and economic perspectives as well as issues of materiality. An example of an interior concept that seeks to describe such

complex considerations is the kitchen, which will be examined in more detail in this study:

> What the broader Central European context of kitchens contributes to our understanding of the modern kitchen is not just the repetition of features with which the modern kitchen is usually described: the use of forms of mass production, the attachment to certain national stories, the use of modern materials and the rethinking of the size and use of the workspace. These Central European kitchens also show how the modern aesthetic idea is created and implemented (McGaughey 2017, p. 101).

The kitchen, thus, represents an interior space that is shaped by several aspects: It utilizes new technologies to improve the efficiency and domestic working conditions for working-class women – and cannot be separated from the aspects of gender roles and the social requirements of its time (McGaughey 2017). At the same time, scientific data is used to design a significantly more rationalized and functional space. Kitchen spaces "of the 1920s, their technological innovations, their efficiency, their use of modern materials and their implementation of scientific research" (McGaughey 2017, p. 102) are thus a sophisticated example of modern interior architecture and demonstrate how architectural intentions and methods are interwoven with their time and socio-political reality.

Modernist functionality: The Frankfurt kitchen

One of the kitchen models that was initially installed at the Werkbund exhibition was the Small Stuttgart kitchen, designed by Erna Meyer (1890–1975). Meyer also served as the commissioner for the kitchen section of the Werkbund exhibition. In her essay *Das Küchenproblem auf der Werkbundausstellung* (The kitchen problem at the Werkbund exhibition), she mentions several iconic kitchen designs that were exhibited, such as the Frankfurt kitchen by Margarete Schütte-Lihotzky (1897–2000) and the cabinet-shaped Eschenbach Reform kitchen. She concludes that the central inspiration for all new model designs was "saving energy and time" (Meyer 1927). While the Small Stuttgart kitchen was presented as a modular kitchen model that could be flexibly moved within its architectural parameters, the Frankfurt kitchen went one step further by being fitted into its given architectural space, becoming one with the interior architecture, and thus intervening in the floor plan, which marked a leap in development for the modern, increasingly industrialized interior (Meyer 1927).

Today, the Frankfurt kitchen (1926), a design by Margarete Schütte-Lihotzky, is considered a standard example of the exploration of elaborate modernist interior spaces and space organization beyond furniture and decor. It not only represents

a culturally significant testament to the translation of industrial and rationalized work processes into the private household, a central aspect of modern architecture and everyday culture in the 1920s, but also structures and curates the interior space as well as the cultural and site-specific ritualization processes that shape both the layout and design. While it can be assumed that this kitchen is an adaptable idea that can theoretically and practically be modified to individual needs, the question arises as to whether it is possible to transfer it to another cultural context. This question leads to a reflection on the socio-cultural implications of interior spaces as sites whose inherent structures are heavily influenced by political and cultural, as well as religious contexts. To further develop this question, this contribution focuses on the so-called White City of Tel Aviv, where the concept of the Frankfurt kitchen can be examined in a different cultural, political, climatic, and religious environment, while also reflecting on the strong material and programmatic connections to its European origin.

The meticulously planned model kitchen, including floor plan, designed by Schütte-Lihotzky for Ernst May's public housing program of New Frankfurt in the late 1920s, was not only influenced by American ideas of Taylorism and Fordism, but also by the "time-motion studies of the Reich Research Society for Economy in Building and Housing to create a physical environment that improved the efficiency of the housewife" (McGaughey, 2017, p. 103). The design combined a) scientific management theories, b) contemporary insights on efficiency and work styles, and c) the knowledge of mass production methods and appropriate material sources, to create an interior concept that was intended to be "unswervingly modern from conception to production" (ibid). Schütte-Lihotzky based her design on the writings of American writer Christine Frederick and her book *Household Engineering: Scientific Management* (1919) (Jerram 2006). Frederick proposed an American-inspired "division of the house into a kitchen where work was done and the rest of the house, which served the enjoyment of new conveniences, leisure" (Jerram 2006, p. 545). This model was heavily criticized at the time for "constructing women as productive units that require rational control" (Jerram 2006, p. 549). May and Schütte-Lihotzky, on the other hand, "saw the 'open planes' of aesthetic and productive post-revolutionary order as a countermeasure against social unrest and cultural discomfort and a (quasi-)scientific paradigm as the best way to get there" (Jerram 2006 p. 548).[3]

Both gender and social narratives are closely intertwined within kitchen design. The Bauhaus school and movement in the early modern period, for instance, were initially "feminized". The school responded to the trauma of a lost war, which also

3 McGaughey furthermore highlights a strand of recent criticism of the Frankfurt kitchen that criticizes the design as "elitist or anti-worker as well as anti-feminist", based on a persistent narrative describing a neutralizing quality of modernity that has the power to erase social and gender differences (2017, p. 103).

symbolized a seemingly failing patriarchy, with its new design and art, often in physical and theatrical form (Ray 2001). However, Walter Gropius, a former soldier, described "the war and the associated release of creativity" as "exclusively male experiences" (Ray 2001, p. 79). This resulted in a new identity model for the modernist designer that included "quasi-military rituals and a physical iconography that symbolically promised gender equality, but politically, socially, and economically reinforced the superiority of men over women" (ibid). The early "multiple, non-patriarchal identities" (which the Bauhaus so clearly showed as the foundation of the creative process) (ibid) were soon negated by "the ongoing harmful imbalances between genders and races[4] within the architect profession" (ibid). Schütte-Lihotzky's kitchen, which was designed by a woman who hadn't studied at the Bauhaus, was not just furniture or surface but fit into the framework of the modern apartment, which was structured by the predominantly male profession of architecture.

Schütte-Lihotzky was one of the first practicing female architects in Austria, and understood architecture not as an external form, but as shaped by social and economic factors. Her kitchen symbolized the new standard of avant-garde, rationalized thinking that permeated modernist residential architecture (Keim 2000). However, it must be remembered that a deep-seated gender bias prevailed in the design and architecture of her time, and particularly in the context of the Bauhaus school, is closely related to patriarchal, national statehood. Therefore:

> [The] Central European [...] built kitchens symbolize aspects of economy and politics that are at the center of global modernist studies of colonialism and empire-building. So when we include this [...] architecture in our consideration of the modern narrative of the kitchen, we challenge the nation-state oriented science that currently shapes our understanding (McGaughey 2017, p. 105).[5]

Over time, various concepts shaped the structure of the interior space, and an examination of it must take into account both social and technological advancements. In the case of the kitchen, which in the last 70 years had to respond to new needs and demands with technical aids such as dishwashers and other electrical appliances, the spatial concept has changed significantly. Here, the development has led from a pure work-space to an open space that emphasizes social interaction and the integration of automated and individualized processes, shaping a strong emphasis on uniform practicality and modularity.

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4 The term "race" is written in cursive by the author to emphasize its status as a socially constructed category.

5 McGaughey (2017) points out that even Schütte-Lihotzky herself acknowledged pan-European influences in thinking about changes in kitchen spaces. However, this contribution refrains from referring to her design as "international", as McGaughey does, choosing instead to refer to concepts of Western influence.

The Frankfurt kitchen is binary in its meaning. On the one hand, it is a specific design object, i.e. a specific built-in kitchen of a specific designer and time. The kitchen was designed for the context of social housing construction in the settlement of New Frankfurt, but which, more importantly, remains flexible in its layout and can be inserted into environments with similar modernist intentions, such as the Weissenhof Estate. On the other hand, the kitchen embodies the idea of an industrial approach to interior architecture that follows Fordist methods, both in its materiality and in the spatial organization of work processes.

Modernist architecture in Israel: The White City in Tel Aviv

Before considering the interior and kitchen space in Tel Aviv and a transfer of the above outlined Western-modernist ideas, it is important to remember the historical, social, and material changes that occurred between Europe and the British mandate of Palestine. Tel Aviv houses, with around 4000 buildings, the world's largest contiguous collection of architecture often falsely referred to as Bauhaus architecture, which was built by mostly young European architects who fled to mandatory Palestine after the Nazi takeover (Enghusen 2018). While the Weissenhof Estate was an experiment aimed at presenting ideas for the construction and organization of social housing, the actual need for housing in Tel Aviv turned architectural modernism into a massive building enterprise (see: Golan in this volume). Due to its outstanding significance for the diverse architecture and urban planning trends of modernity, the White City was declared a UNESCO World Heritage Site in 2003. It is now considered the largest contiguous architectural ensemble built in the early pan-modernist, so-called International Style[6] (Golan 2019).

The architectural origins of the White City can be traced back to the Geddes Plan. In 1925, the British, who had been administering the region of Tel Aviv since 1922 under mandate, commissioned Scottish city planner Patrick Geddes to implement new urban planning ideas in the mandate territory of Palestine. Geddes developed a plan featuring many small plots of land and standalone buildings, which he worked on until 1929. His plan was a political, social, and cultural instrument intended to create a new "ideal" Jewish living space and was central to the ideology of the Zionist movement. Between 1932 and 1938, particularly following the Nazis' rise to power in 1933, approximately 200,000 European Jews fled to Palestine, which was often referred to as Palestine Eretz-Israel by the Jewish immigrants. Within a few years, by 1938, Tel Aviv's population had tripled to around 150,000, rendering many of Ged-

6 A term introduced in 1932 by the architectural theorist Henry-Russell Hitchcock and the architect Philip C. Johnson (1932).

des' original designs obsolete.[7] Therefore, it is important to understand the White City not as a product of the dialectical use of Bauhaus and pan-modernist elements, but as an urban structure that took into account multiple ideologies, styles, cultural influences, and needs, and that had to be built quickly and efficiently. Both an economic crisis in the late 1920s and the *Fifth Aliyah* (1929–1939) led to an increase in construction activity and the adoption of modernist styles, including the International Style. In this way, Tel Aviv developed its own "glocal" architectural-modernist expression. This was shaped by European influences (Sonder 2015) on the one hand, and adapted to the given climatic and cultural conditions on the other hand. Its creators were driven by the desire to create a new architectural environment that would set a clear contrast to the building traditions of their countries of origin and the local building style of the Levant. The International Style represented a contemporary design approach with a functional, unadorned design that increasingly characterized modern European architecture from the 1920s, and soon spread worldwide, often in stark contrast to nationalist and traditionalist movements (Golan 2019).

Many architects of the later state of Israel who fled from Europe in the 1930s were influenced by the Bauhaus movement. Shlomo Bernstein, Arieh Sharon, Shmuel Mestechkin, and Richard Kauffmann were influenced by their teachers Walter Gropius and Erich Mendelsohn, while Ze'ev Rechter was primarily influenced by Le Corbusier (Sharon 1976; Golan 2021).[8] These young architects were inspired by the modern spirit and wanted to realize it architecturally in the newly established State. The new architectural style was intended to bridge the cultural differences among all Jews immigrants. The doctrine of modernism was to be that of the new country. While modernism seemed to be an appropriate response to these efforts in Tel Aviv, in Germany the modernist, so-called *Neues Bauen* movement was defamed by some voices as "too Jewish" or "oriental", and even described as an "Arab village" (Golan 2019). The White City not only embodies architectural functionality and a new modern state, but also the Zionist idea. Jewish Zionism sought a new formal cultural expression in the 1940s, as architecturally, the immigrants did not want to adapt to Arab architecture (Golan 2021). At the same time, building in a traditional western style was no longer desired, as the settlers had just fled from Europe and sought a new beginning. The young architects in Tel Aviv wanted to express the vision of a new, modern, human within the framework of a modern society and a modern state. The modernist architecture in Tel Aviv can therefore be understood as a physical manifestation of Zionism (ibid). The so-called *Haavara Agreement* (Hebrew

7 Author's interview with Sharon Golan, Program Director of the Liebling House – White City Center, Tel Aviv, February 22, 2021 (telephone conversation, transcript). Henceforth cited as Golan 2021.

8 For a compendium on all seven Bauhaus-related architects involved with the White City, and insights on the specific Bauhaus influences, see: Sharon (1976).

for Transfer), which German Zionists and the Jewish Agency for Palestine concluded with the Nazis in 1933, moreover caused the migration of numerous German goods, machinery and building materials to Palestine Eretz-Israel, to establish the White City and thus above all a Zionist infrastructure (Golan 2019).[9]

Biedermeier furniture and cultural identities: Diasporic rooms

Modernist architecture can be read as a radical emancipation from ornamentation that represents a new stage of development in the history of Western architecture. In mandatory Palestine, the new architectures, with their modern, "foreign", construction methods, as also expressed in the Kibbutz, overlapped with local architectural formations. Not only the spatial, but also the social realities were affected by the imported architectural style.

Academic research in the last 20 years, trying to trace connections between Zionism and modernism, has largely argued that modernist architecture was neutral enough to deal with the multicultural complexity on site (Nitzan-Shiftan 1996). It became a kind of "container architecture" that incorporated and framed the diversity of the immigrated Jewish culture and also contributed to an architecture that corresponded with the Zionist blank check ideology (Golan 2021). In addition, there were practical and economic reasons for choosing modernist buildings, as it allowed for the construction of a modern state within a short time. The construction relied on industrial materials that were cheap to produce and quick to build and could often be procured through the Haavara Agreement. Overall, it was more economical than the eclectic style. However, compared to modernist architecture in Germany or the West in general, the buildings in Tel Aviv showed a highly individual adaptation to the specific cultural and climatic needs of the location. The local style of Tel Aviv was never a mere copy of European architectural traditions; rather, within the functional doctrine of modernism, it produced unique forms of expression that also took into account the needs of an emerging nation (ibid).

However, these ideas were not initially transported into the interiors. When considering the rapid spread of modernism in the mandate territory of Palestine, it should be noted that the majority of people took their personal cultural living and housing forms, their sense of "feeling at home", into the new houses and wanted to preserve them there. As a result, for more than 20 years there was a discrepancy between the modernist facades and the interiors. The settlers of the 1930s imported their belongings and thus furnished diasporic spaces, filled with Biedermeier furniture and German floral porcelain (ibid), in stark contrast to the surrounding architecture. In some cases, the modernist structures had to respond to the pre-mod-

9 For the Havaara Agreement, see: Miner (2016); Schubert (2018); Golan in this volume.

ern needs of their inhabitants. In response to oversized Biedermeier furniture, the spaces were paradoxically designed to accommodate certain furniture rather than remaining flexible, as the ideology of early Western modernism prescribed.[10]

Furthermore, it should be noted that the settlers had to be able to afford both the move and the properties in mandatory Palestine. Therefore, the interior-related decisions in the White City followed the taste and possessions of the upper class; often they were traditionally handcrafted pieces made of fine materials. Some settlers did import Bauhaus furniture and modern design, but this was not the aesthetic standard that dominated the interiors of the time, as Schubert claims, but rather an avant-garde phenomenon.[11] The Jewish diaspora wanted to preserve and maintain their culture, continued to read German newspapers and spoke German, and often felt foreign in their new environment. Therefore, the interiors of their houses were places where they could express their cultural identity; the Biedermeier style was more familiar to them than modernism (ibid).

Additionally, it is worth noting that the infrastructure for design or furniture products did not yet exist in the emerging city of Tel Aviv – neither in terms of culture nor of economy. The dialectical reality of the architecture, oscillating between a modern exterior and imported pre-modern interiors, created a heterogeneous heritage that is still visible and palpable today. It took a long time for settlers to feel at home and to accept modernism as part of their own culture; in addition, local carpenters did not start producing high-quality modern furniture until the 1950s, when it gradually replaced the imported furniture (ibid).

Social and cultural impacts: Kitchens as relational interior spaces

Returning to the kitchen as a specific interior space: was it possible under the conditions presented above to transfer a modernist kitchen into the local, specific, cultural environment of the settlers? While many European architects attempted to design flexible spaces for a variety of uses and worked with industrial materials and serial production methods, in Tel Aviv there was not an infrastructure to rely on, and the local production of building materials was not nearly fast enough. As a result of the

10 An example of this is the Liebling House, which was built in 1936 by Dov Karmi as a typical residential house in the heart of the White City and initially inhabited by doctors from Germany who moved in with their Goethe and Schiller library, traditional dishes, and Biedermeier furniture. Since their bed from the same period was quite large, the windows of the house were placed significantly higher than in a typical modernist layout, to accommodate the bed underneath (Golan 2021).

11 Autor's interview with Anna Luise Schubert, staff member at the Centre for Documentary Architecture (CDA), Berlin, March 2, 2021 (telephone conversation, transcript). Henceforth cited as Schubert 2021.

Haavara Agreement, some buildings, such as the Liebling House, have kitchens that closely resemble the design and materiality of Frankfurt kitchens (Romahn 2021). While the original Frankfurt kitchen model was designed in response to the growing housing shortage as a part of German mass housing construction, building activity in Tel Aviv was primarily characterized by bespoke work and bourgeois housing ideals. The common characteristics of modern kitchens in Germany and Tel Aviv can be attributed to functional reasons, not to similar political and economic conditions. Therefore, it is important not to interpret style references as simple transfers or translations (Schubert 2021).

Modern kitchens in Tel Aviv featured two sinks that reflected Jewish everyday life and rituals, and incorporated individually shaped balconies that served as a second skin of architecture, responding to local climatic conditions. The balconies also provided storage space for laundry and lockable, but air-permeable cabinets for produce such as onions. Airflow penetrating the floor plan was a fundamental structural element of the city's modernist development. In accordance with the climatic conditions of the Levant, water basins for humidifying the air were placed at stairway entrances, and the air was further distributed through numerous well-placed windows that let in natural light during the day and illuminated the street at night, serving as temperature regulators (Golan 2021).

However, the local modernist architecture was not only shaped by climatic conditions. Architects working in mandatory Palestine also aimed to find a site-specific cultural identity for architecture, in the name of consolidating Israeli culture (Dvir 2009). In this sense, it was also necessary to satisfy social needs. Generally, local modernism was socially oriented, with a focus on the relationship between buildings and the street: houses were in constant dialogue with their surroundings, promoting social interactions between their inhabitants and passersby. The balconies served as important communication platforms between neighbors and mainly fulfilled a relational function as an extension of the living room (Golan 2019).

While the Frankfurt kitchen in Germany was criticized for segregating women from the communal space as labor force, this criticism stands in stark contrast to the social and cultural ideals and relational architectural approach in mandatory Palestine. The interior architecture of the British mandate period and specifically the modernist idea of the fitted kitchen were primarily transferred by material factors into a different cultural context. They were exposed to specific social and relational needs while also taking into consideration climatic and religious contexts in Tel Aviv.[12]

12 Sigal Davidi (2018) held a series of lectures about the kitchen in the past and present, investigating the development of kitchens in Tel Aviv specifically in the context of gender. Furthermore, Davidi researched the female implications of Israeli modernism at large, see: Davidi (2020).

Musealization and functional change: The Frankfurt kitchen in Tel Aviv

Despite the fact that most Frankfurt kitchens, as well as those with strong similarities to the Frankfurt kitchen in the Weissenhof Estate (Vaupel 2017), have been destroyed over time through renovation work (Stuttgart Society for Art and Monument Conservation 2004), the documentation of their original installation and design allows for the examination of past, present, and future realities of interior architecture. Some of the remaining Frankfurt kitchens have been removed from their original locations and housed in large museums such as the *Museum of Modern Art* (MoMA) in New York, the *Victoria and Albert Museum* (V&A) in London, or the *Museum of Applied Arts* (MAK) in Vienna (McGaughey 2017). They thus exist far removed from their original functional context. However, is the reconstruction of such a kitchen in a different setting dependent on whether the kitchen is actively used as a functional unit and part of the interior architecture?

The nearly 4,000 houses of the White City can be viewed as a massive conglomerate of a shared cultural heritage. To truly grasp the significance of the White City, it is important to understand not only the facades but also the interiors as part of this heritage. In comparison to the Weissenhof Estate, differences in the treatment of this heritage can be observed. While the Le Corbusier House in the Weissenhof Estate has been converted into a museum in order to reconstruct the original intent of the architect, including restored interiors and furniture, other buildings in the settlement are still occupied by private owners. These must adhere to explicit preservation regulations and face high maintenance costs since the first restoration efforts in the 1980s aimed to restore the original designs (Reichwald 2008). Generally, there is a desire to maintain the settlement in its original function and aesthetic, as it is located outside of the city center and presents itself as a closed unit (Gebeßler 2008). In the case of the Le Corbusier House, it becomes clear that a complete restoration and preservation of the original modernist interior is not only a costly but also a time-consuming undertaking that is not compatible with contemporary usage (Mohn 2008).[13]

In contrast, the city of Tel Aviv adopts a different approach – its architectural monuments constantly change with their usage. Here as well, the history of the World Heritage is presented in a historical building, the Liebling House – White City Center. Since 2019, it has functioned as a cultural center and museum space, where the history of the White City is conveyed and explored. In 2021, the center

13 The *New Frankfurt settlement* similarly restored an apartment from the 1920s with a Frankfurt kitchen that is now used as a museum. In addition, since 2020 the city of Frankfurt operates a warehouse that is dedicated exclusively to the collection and restoration of remnants of Frankfurt kitchens; with the focus on Frankfurt kitchens that have been collected over the years by the *Stuttgart Association for Art and Heritage Preservation* (Frankfurt and Culture 2021).

received a complete original Frankfurt kitchen as a gift, due to a city partnership that exists with Frankfurt since 1980. The city of Frankfurt selected a kitchen whose age matched the year of construction of the Liebling House (1936) and fully restored it, including its original pale blue color (designed to deter flies from landing on the surface, as they mistook it for the sky and therefore thought it not solid), before it was shipped to Tel Aviv (Frankfurt and Culture 2021).

When considering the binary meaning of the Frankfurt kitchen, as described earlier, that is, first, to be a specific design object intended for the context of social housing in the settlement of New Frankfurt, with a reasonably flexible floor plan, and second, to represent an idea that refers to an industrial approach both in its materiality and its spatial organization of work processes, the question of evaluating the transfer of a Frankfurt kitchen to Tel Aviv arises. "Transfer" also means re-location, and in the case of the Frankfurt kitchen, such a transfer goes beyond the mere installation of the kitchen in Tel Aviv and examination of its old and new functionality. It evokes questions about the idea of a shared heritage and the historical significance of the gift.

In the case of the original built-in kitchen in the Liebling House, which has structural similarities to the Frankfurt kitchen and which will be referred to here as the Tel Aviv kitchen, it could be argued that it primarily transferred an idea to the Tel Aviv architectural context. Some structural elements such as cabinets and small compartments were copied, but it is mainly the idea of a kitchen adaptable to the architectural context that was transferred. The analysis has shown that the Frankfurt kitchen is not only an example of modern kitchens per se, but that sophisticated considerations for the organization of kitchen work in general were part of interior design in the 1920s and 30s. The Frankfurt kitchen represented a fully equipped kitchen model, on which the so-called Tel Aviv kitchen in the Liebling House was based, while being designed functionally for the climatic, social, and religious conditions of Tel Aviv. In this case, the implementation concerned the idea of a contextually adaptable Frankfurt kitchen. In Tel Aviv, there are only traces of analogies to the Frankfurt kitchen, as its industrial approach was reflected in the materiality of the modern kitchens in Tel Aviv, but it was not functional for the bourgeois settlers in terms of the spatial organization of work processes, which in the case of the Frankfurt kitchen were oriented towards the working class. The socio-cultural and religious context of Tel Aviv required the shared use of the kitchen space – a requirement that was far removed from German social housing. In addition, the climatic conditions also required changes.

Even though the Tel Aviv kitchen underwent a certain process of musealization due to its accommodation in the Liebling House and its transformation into a White City Center, its site-specific adaptation to the context of usability in the Levant is still visible. On the other hand, if we turn to the original Frankfurt kitchen transferred to the Liebling House in 2021, a different picture emerges: the kitchen remains a

specific design object intended for the context of social housing in the settlement of New Frankfurt, representing the ideas of a specific designer at a certain point in time. In Tel Aviv, the Frankfurt kitchen was installed distinctly as a museum space in the Liebling House – White City Center, as a design object for documentation and educational purposes, and as an illustration of cultural-political German-Israeli cooperation. It illustrates the shared heritage of Europe and mandatory Palestine as a representative museum piece. Unlike the Tel Aviv kitchen, the lately-imported Frankfurt kitchen is not characterized by site-specific adaptation processes, which is why the idea of its functional and site-specific adaptability remains purely illustrative.

In summary, it can be stated that the Liebling House today features, on the one hand, a modernist kitchen that is oriented towards the central quality of the Frankfurt kitchen – its adaptability – and has undergone a transformation to adapt to regional circumstances. This so-called Tel Aviv kitchen embodies a culturally and site-specifically differentiated, yet originally shared material and architectural heritage. On the other hand, the recently transferred Frankfurt kitchen represents a museum-like representation of this shared architectural heritage; it is therefore primarily a sign of a retrospective cultural-political understanding of shared cultural heritage and German-Israeli cooperation.

Conclusion: Interior architecture as a witness of shared heritage?

The investigation has shown that the interior architecture of modernism was shaped by distinct site-specific conditions that blended with complementary time-specific social and cultural ideas. In these transfer processes, indicators of a shared cultural heritage can be found, which must, however, be traced back to heritage's original context in order to understand its character. The heritage of modernist interior architecture thus also encompasses complex historical-political aspects. The interiors that hide behind the iconic, white-washed facades offer a unique opportunity to reflect on the cultural positioning of their inhabitants, their diverse environments, and their political, religious, class- and gender-specific implications. The investigation of the communicative interior space of the kitchen shows the continuing connection of architectural design, cultural identity, and political considerations. In this sense, the kitchen represents an exemplary room whose modifications can be read as traces of cultural transfer:

> Spaces are negotiated and disputed constructs (such as 'home'), but they are also material 'facts' that can enforce – and not just suggest – certain reactions. They can act as an index for another research variable such as class, gender, sociabil-

> ity, or work, but in their material form, they can also claim to be a socially (and historically) structuring element in their own right (Jerram 2006, p. 539).

Modernist interior design should not only be treated according to museum standards of conservation, but should also be understood as offering an opportunity to learn from the dynamics of its appropriation and transformation and to examine the common heritage in a targeted manner. Even if this contribution was focused on the architectural heritage and in particular on that of the Weissenhof Estate and the White City, the results can be generalized in a certain way. Common heritage arises where dynamics are at work, often triggered by complex site- and time-specific migration processes, which require a new reception and interpretation of cultural habits and achievements. The UNESCO World Heritage label awarded to both the Le Corbusier House in Stuttgart's Weissenhof Estate and the White City of Tel Aviv indicates such an understanding. At the same time, the concept of common or shared cultural heritage draws attention to the fact that it can only serve as a heuristic for broad reference lines, while on closer inspection the complex cultural variations remain visible. In this context, the Frankfurt and Tel Aviv kitchens in Israel merely represent a telling example of an appropriation and transfer process that, on closer inspection, reveals its value in the context of a common European-Jewish heritage.

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