

THE MINIMUM DWELLING

HOUSING FOR ALL

Volume II

RULES

Enoncé théorique
Master - Architecture
Ecole Polytechnique Fédérale de Lausanne



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THE MINIMUM DWELLING

HOUSING FOR ALL

RULES

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FROM VOLUME I

This volume is the second of this thesis. Its position is key, as it echoes the context and research pursued in *Volume I*, and serves as a basis for *Volume III*. It is conceived as a lens through which to explore the *Catalog*, the third volume of this thesis. Its purpose is to elucidate the steps taken in constructing a compilation of plans, extracted from the work of the CIAM II (International Congresses of Modern Architecture). This essay is consequently shaped as a *Catalog Rules*, intending to provide the reader with a clear understanding of the logic that forms the foundation of this thesis' *Catalog*, the criteria with which the plans should be examined, and ultimately, the possible constraints for their interpretation. These criteria were determined specifically with a close regard to the work of German architect Gropius, whose sociological studies within the context of the CIAM II found the basis of this thesis. For this reason, one might only get a sense of the intention behind this 'personal exhibition' of plans through a meticulous examination of its guidelines.

HOW TO BUILD A CATALOG

MATERIAL

The plans extracted from the CIAM II exhibition, 'Die Wohnung für das Existenzminimum', were originally separated in four main groups, based on the nature of the buildings from which the plans were taken: single-, two- or several family houses. A final part has been dedicated to 'special schemes', either examples from extra-European grounds or models extracted from unspecified locations, such as the ship's cabin (fig.206, Schiffskabine), and the Hotel room (fig.207, Hotel)¹. However, a special focus has been put in the organization of the exhibition as a mean to display plans 'in their purest forms' in which these latter only were to be exhibited with an equal attention on their design, so that the visitor could attempt to grasp such a dense material in a simplified manner². Only "sections or situation plans have been added"³ when they were missing to the general comprehension of one project. The homogenized design of the material tends to place the projects on a common ground for analysis and eventual comparison. The great diversity of the selected projects' locations equally calls for the homogenization of the layouts. Indeed, the CIAM II exhibition gathers housing plans from almost twenty-six European cities⁴. The projects were realized by architects from more than fifteen different countries⁵, which provides an understanding of how they had been designed under the influence of various political, cultural and economic backgrounds. As a matter of fact, despite its wide range of influences and natures, a particular attention was brought to standardize the exhibition's perusal at the time. To further this intention originally expressed by the members of the congress, the following catalog will analyze typologies despite their natures - single, two, several family houses -. This will aim in proceeding a neutral treatment of the selected housing plans despite their relationship to the built and integration within their wider contexts and urban forms.

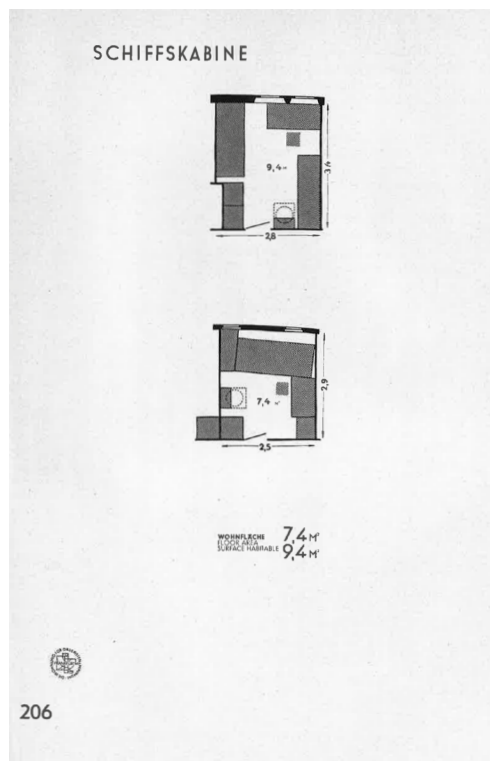
¹ CIAM. *Die Wohnung für das Existenzminimum*, Frankfurt am Main, 1930.

² Kaufmann. 'Die Internationale Ausstellung 'Die Wohnung für das Existenzminimum'', Das Neue Frankfurt, 1929. p.214

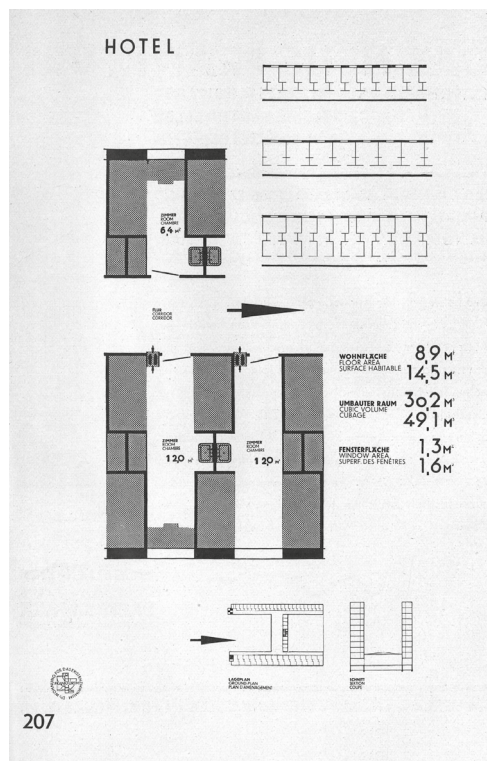
³ Ibid

⁴ Mumford. *The CIAM Discourse on Urbanism (1928-1960)*, 2000. p.34

⁵ CIAM. *Die Wohnung für das Existenzminimum*, Frankfurt am Main, 1930.



Schiffskabine, fig. 206 of the exhibition



Hotel, fig. 207 of the exhibition

ORDER

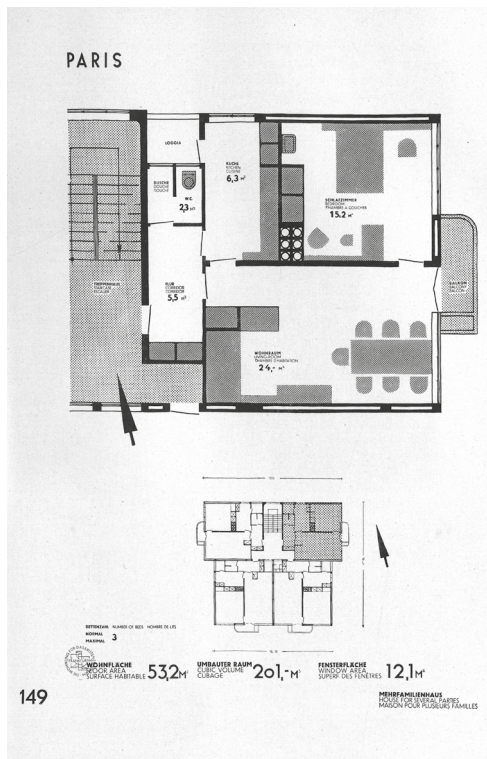
Moreover, the exhibition proposes a linear classification of the plans according to their floor area in square meters. The dimensional classification of the housing plans prevails over supplementary criteria joined as an understanding of their spatial qualities, such as cubic volume, window area and both normal and maximum number of beds⁶. This classification undertakes to clarify the progression of the exhibition in strictly dimensional terms; opening up with one of Budapest's minimal housing of 14.7 sqm, the last exhibited material (excluding special schemes) is a project by Alexander Klein in Berlin⁷, a 'minimal housing' plan of 91.2 sqm. However, as already discussed throughout this paper, the qualities of the minimal dwelling's concept do not only rely on 'a mere reduction'⁸ of inhabited spaces. In fact, the indicated floor area of one space or apartment does not necessarily describe the intrinsic dynamics of its plan. A simple comparison could be established between fig.149 and fig.150 of the exhibition to clarify this statement. Fig.149 (Paris) of the exhibition has a similar floor area than fig.150 (Madrid), however the latter one is meant to accommodate a total of 7 beds, which is more than the double of Paris' 3-beds apartment⁹. As a result, one could argue that the structure describing the exhibition's logical order is not intended to become a tool of comparison, nor an analytical criterion of spatial qualities of 'minimal dwellings'. The system proposed by the architects is hence purely descriptive, offering a logical order for the exhibition to take place. Though not an analytical tool for this catalog, the floor area of the selected apartments will also be used as a purely structural classification, starting out with the most reduced spaces and concluding on the most 'generous' one.

⁶ Kaufmann. 'Die Internationale Ausstellung 'Die Wohnung für das Existenzminimum'', Das Neue Frankfurt, 1929. p.214

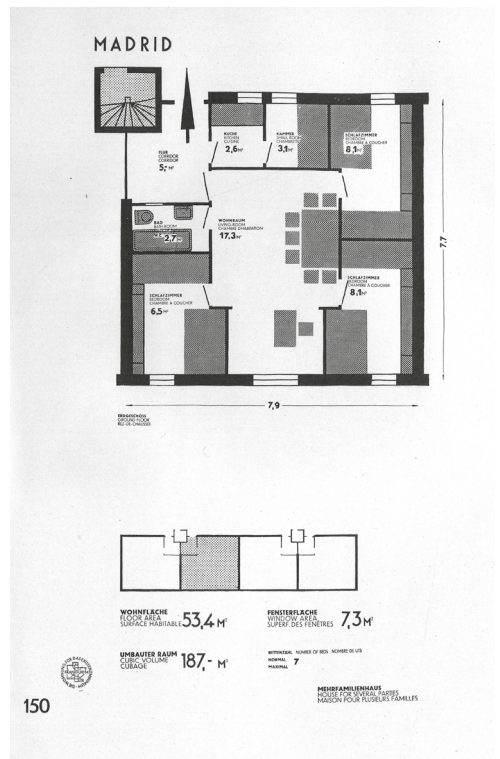
⁷ Gewerbemuseum Basel. 'Die Wohnung für das Existenzminimum'. 8-29 Dezember 1929.

⁸ Gropius. *Scope of Total Architecture*. p.98

⁹ CIAM. *Die Wohnung für das Existenzminimum*, Frankfurt am Main, 1930.



Apartment in Paris, fig. 149 of the exhibition



Apartment in Madrid, fig. 207 of the exhibition

HOW TO FURNISH A CATALOG

JUSTIFICATION

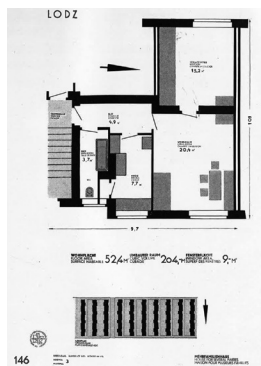
Each of the exhibited plans are characterized by their internal layout of furniture. According to E.Kaufmann, these drawings describe the 'intended furniture positions'¹⁰ within each of the projects, and therefore describe the partition of spaces according to their functions. For graphical concerns, all furniture have been designed in a homogeneous, simplified manner, outlining their positions in space with a minimum codification: gray hatch filling and occasional partitions of wardrobes and shelves. Such a graphical representation seems to emphasize the furniture's positions in space, as described by architect Kaufmann in *Das Neue Frankfurt's* edition of 1929¹¹, and hence do not inform the viewer on the displayed objects themselves. It hence appears that the function tied to a particular space is firstly informed by the textual designation attached to it. Küche, Schlafzimmer, Zimmer, Kammer, Wohnraum¹², are the foremost elements providing concrete and immediate understanding of a room, whose displayed furniture might not bring enough material for the viewer to automatically recognize its function. Secondly, the overly simplified outlined furniture drawings might, in some cases, provide a misconception of how one space is being used by its inhabitants. Some notable examples indeed require a close inspection to further grasp the furnishing of one place. This is the case for instance of fig.146¹³ of the exhibition (fig.28 of the catalog), in which the double bed is replaced by two beds running alongside the wall of the bedroom, graphically symbolized by a gray hatched rectangle of 4 x 0.8m. As a result, and out of a personal concern for deeper understanding of the spaces and their use, a special attention will be drawn towards the redesign of furniture within the selected plans. The exact replica of the actual furnishing is not the intended reach through this process - it is in either way not made possible due to insufficient data. The integration of furniture in fact ambitions to activate the spaces in terms of use and function, as well as to clarify the reading of the plan through the scope of analytical criterias. To proceed, an annexed catalog

¹⁰ Kaufmann. 'Die Internationale Ausstellung "Die Wohnung für das Existenzminimum"'. *Das Neue Frankfurt*, 1929. p.214

¹¹ Ibid

¹² CIAM, *Die Wohnung für das Existenzminimum*, Frankfurt am Main, 1930.

¹³ Ibid, fig.146



Lodz, fig.146

of historical design elements and furniture will be created and added to this volume. It will notably take its sources in late 20's photographs, exhibitions and reviews displaying furniture of the period, fitted to the low-income earner lifestyle of the late 20's.

PROCESS

To precise the process in which the building up of this design catalog will take place, it seems pertinent to discuss the characteristics of the envisioned furniture of the minimal dwelling at the time. In an article extracted from *Das Neue Frankfurt* of January 1938 edition, named 'Individual or Customized furniture!' ¹⁴, architect F.Kramer, would state 'They [the furniture] must only be cheap. In terms of their form and purpose, they must match the number of rooms and floor space of the reduced apartments' ¹⁵. Kramer had been one of Frankfurt's designers involved in developing the 'small, practical furniture' from as early as 1927 ¹⁶, though this latter concept "became critical when the minimal dwelling was mandated in 1929" ¹⁷. To answer a growing need of space-efficient furnishings to equip the minimal dwelling in times of modern production techniques, the concept of *Gebrauchsmöbel* was implemented through newly developed Hausrat (Household Furnishings Collection Center) ¹⁸. Believed to be a great influence on modern living, the newly designed furniture required to be "both affordable and suited in size, convenience and economy to the minimal dwelling." ¹⁹ The term *Gebrauchsmöbel* itself is an opposition to 'useless or unusable furniture' and is based on the immediate rejection of bourgeois luxury's standards towards values of efficiency, simplicity and hygienic purity ²⁰. This posture was notably embodied by Viennese architect and designer F.Schuster. Called to Frankfurt in 1927, Schuster integrated the Hausrat Group as artistic supervisor, where he was notably brought to assist May in "developing an economical range of furniture to suit the rationalist aesthetic and the smaller proportions of May's housing" ²¹. Schuster oriented the Hausrat Group towards modular-system furniture, whose 'simplicity of line would make it affordable to those of modest means' ²². A specific consideration had been paid to the furniture's manufacture, whose mass-production could be undertaken by workers of various backgrounds; unemployed carpenters and laborers ²³, unskilled workers - men and women -, unemployed such as the disabled ²⁴, could be brought in the design process. Idea of placing this latter

¹⁴ Translated from the original German title 'Individuelle oder typisierte Möbel!'

¹⁵ Kramer. 'Individuelle oder typisierte Möbel!'. *Das Neue Frankfurt*, January 1928. p.8

¹⁶ Henderson. *The New Woman's Home*. 1926-1931. p. 182

¹⁷ Ibid

¹⁸ Ibid, p.177

¹⁹ Ibid

²⁰ Ibid, p. 187

²¹ Tilson, 'Plan Furniture 1932-1938: The German Connection'. *Journal of Design History*, 1990. p. 149

²² Henderson. *The New Woman's Home*. 1926-1931. p.189

²³ Ibid, p. 181

²⁴ Ibid, p.178

in the hand of the masses had been mirroring Hausrat's philosophy through which "mass-production would result in furniture having a greater influence on modern living than the house itself."²⁵ Being a focal point of the minimal dwelling development, Schuster's furnishings had notably punctuated the publications of *Das Neue Frankfurt* 1928, 1929 and 1930's editions. Some of his publications regarding furniture for low-class housing - encompassing 1929's *Ein Möbelbuch* (A furniture book), and 1927's *Eine eingerichtete Kleinstwohnung* (A furnished small apartment) - have been added as an annex to the Existenzminimum CIAM exhibition's 1930 edition, under the appellative 'Die Kleinen Baubücher' (The small building books). Presented by the CIAM's architects as the only annexes attached to the exhibition, the selected material appears to be a guideline for further deepening one's understanding of how the displayed apartments could have been furnished at the time. Schuster's strong ideology of design meant for 'needy householders'²⁶ is hence comparable with CIAM II concerns of the dwelling for the 'living-income earner'²⁷. As a result, and considering the close tie assumed by the CIAM architects with Schuster's involvement in low-class meant furniture, the graphical effort poured in the thesis' catalog will inspect few examples of "seating and reclining furniture, tables, cupboards and cabinets"²⁸, in correspondence with previously mentioned references. These publications notably gathered photographs and hand drawings of designed furniture, and both media would be used as sources for the furnishing of the catalog plans. A specific attention will be drawn towards Schuster's *Ein Möbelbuch*, whose primary objective is to strengthen the concept through which "simple, smooth furniture must be the cheapest and finest"²⁹. Additionally, Schuster's intention of how modular design could be 'universal and interchangeable'³⁰, justifies the notion of furnishing plans from diverse contexts and urban settings in a homogeneous manner. Consequently, the forthcoming section would delve into Schuster's work of the late 1920s and serve as a 'furniture catalog' to furnish the plans featured in the third volume of this thesis.

²⁵ Ibid, p.177

²⁶ Tilson, 'Plan Furniture 1932-1938: The German Connection'. *Journal of Design History*, 1990. p. 149

²⁷ As named by E.May, in 'The Dwelling for the Living Income Earner', CIAM. *Die Wohnung für das Existenzminimum*, Frankfurt am Main, 1930.

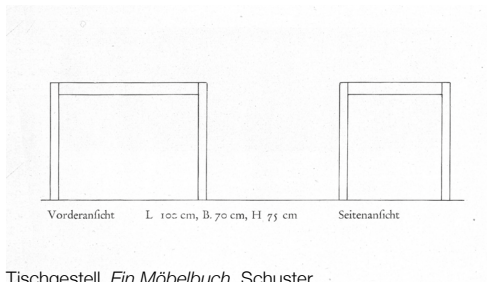
²⁸ Schuster. *Ein Möbelbuch*. 1929. p.6

²⁹ Ibid

³⁰ Henderson. *The New Woman's Home*. 1926-1931. p.189

FURNISHINGS & OBJECTS

TABLE



Tray and frame, *Ein Möbelbuch*

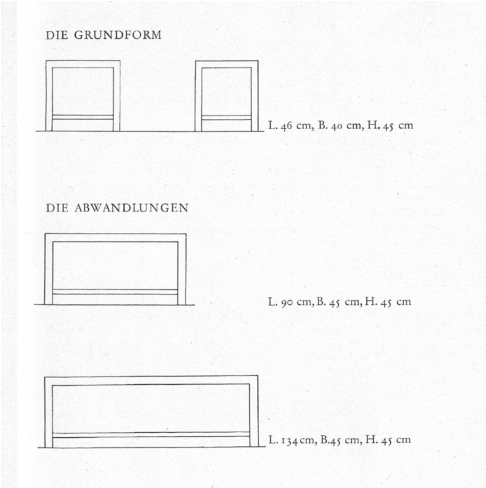


Furniture

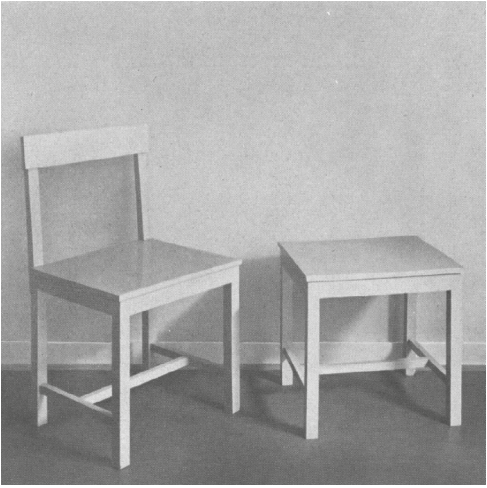


Objects

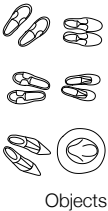
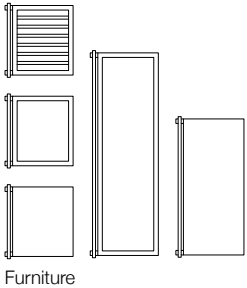
CHAIRS



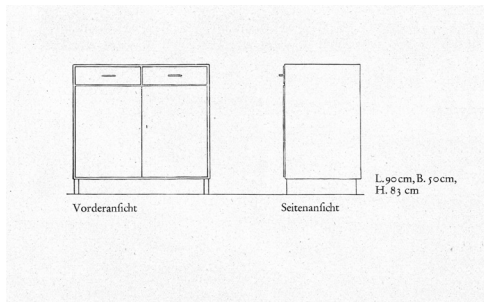
Das Gestell, *Ein Möbelbuch*, Schuster



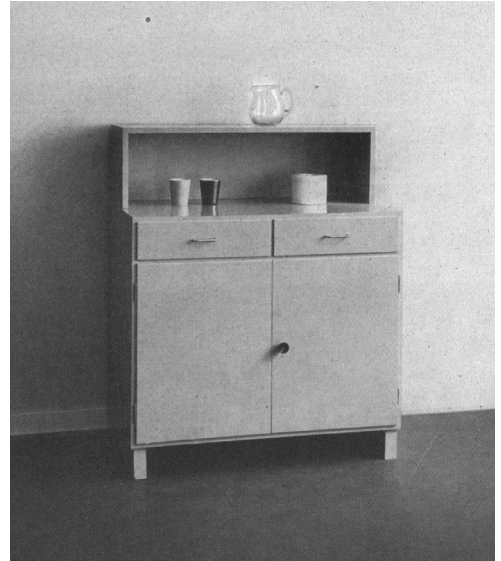
Declination, *Ein Möbelbuch*



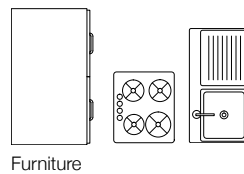
KITCHEN MODULE



Die Küchenkomode, *Ein Möbelbuch*, Schuster



Kitchen module and utensils, *Ein Möbelbuch*

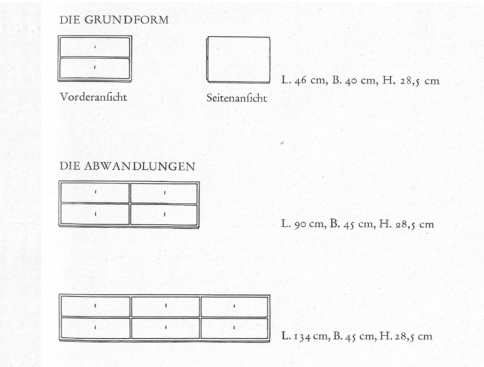


Furniture



Objects

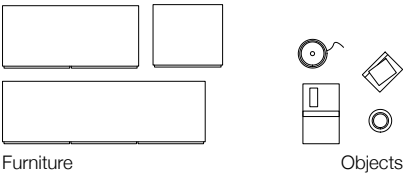
DRAWER



Die Lade, *Ein Möbelbuch*, Schuster

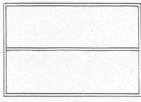


Drawer and teapot, *Ein Möbelbuch*



SHELF

DIE GRUNDFORM



Vorderansicht

L. 90 cm, B. 27 cm, H. 60 cm

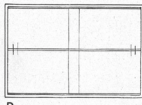


Seitenansicht

DIE ABWANDLUNGEN



R_h

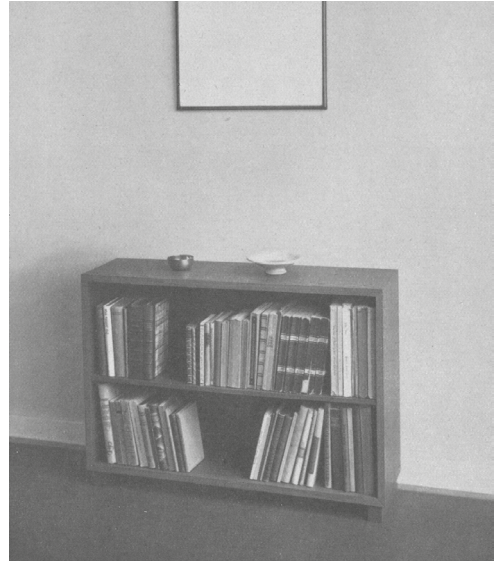


R_g

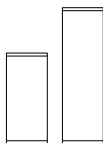


R_t

Das Regal, *Ein Möbelbuch*, Schuster



Shelf and books, *Ein Möbelbuch*

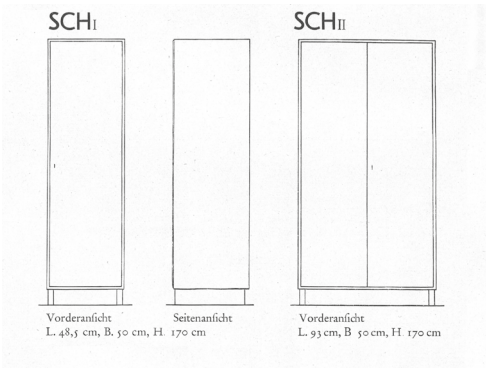


Furniture

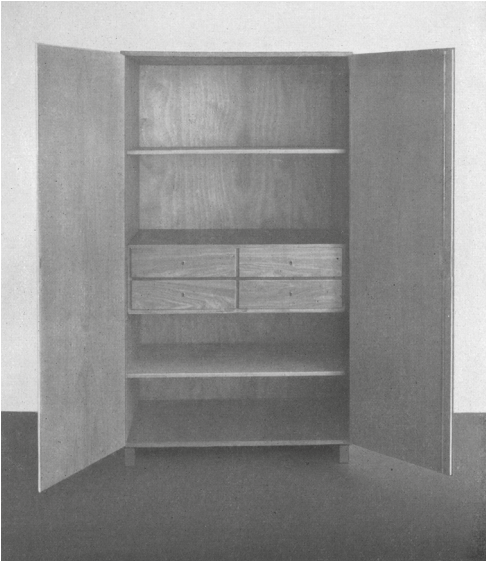


Objects

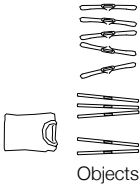
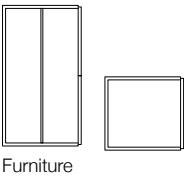
WARDROBE



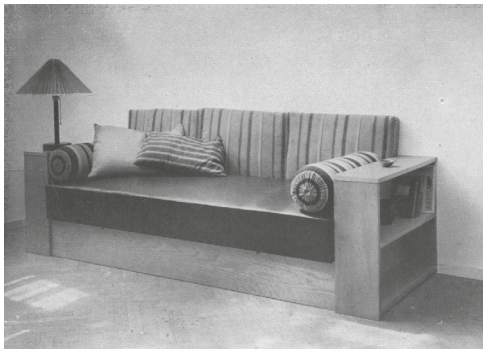
Der Schrank, *Ein Möbelbuch*, Schuster



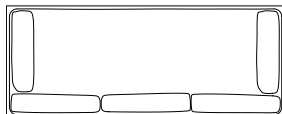
Wardrobe, *Ein Möbelbuch*



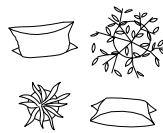
SETTEE



Settee and pillows, *Eine eingerichtete Kleinstwohnung*

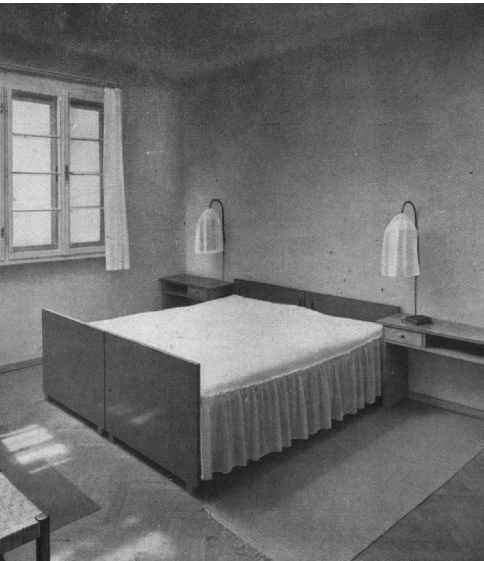


Furniture

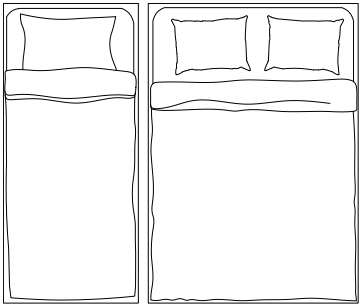
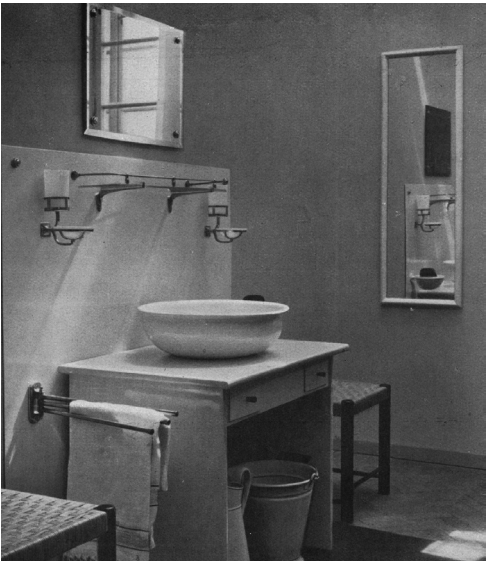


Objects

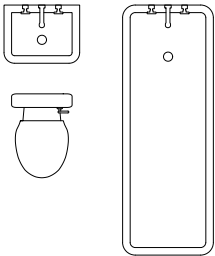
FUNDAMENTALS



Bedroom and Bathroom *Eine eingerichtete Kleinstwohnung*



Bedroom



Bathroom



Entrance and clothes, *Eine eingerichtete Kleinstwohnung*





Tea time, Eine eingerichtete Kleinwohnung



CRITERIA FOR THE CATALOG

SELECTION

As previously outlined, the CIAM II's exhibition foremostly undertook to evoke the plans in terms of their relationship to the built, urban and neighborhood context. This was emphasized through the exhibition's fragmentation into four main parts: single-family dwellings, two-family-dwellings, multiple-family dwellings, and special schemes. Since this catalog does not intend to discuss the typologies under the scope of this latter theme, it will nevertheless examine the plans according to their dynamics and organization through a sociological lens of 1920's society. To proceed, a close analysis of Gropius' lecture from the congress, 'Sociological Premises for the Minimal Dwelling of Urban Industrial Populations'³¹, will be conducted. This precise title is extracted from the original German appellation of the lecture, whose direct translation primitively excluded the designation 'of Urban Industrial Populations'. As a matter of fact, Gropius' original designation situated the minimum dwelling within the specific context of urban landscapes of 1920's industrial society. It hence foremostly informs the reader on what demographic samples Gropius decided to base his sociological analysis. Its protagonists are the workers of socialized labor, through which independence of individuals, - also that of the woman -, can be reached³². In doing so, Gropius aligns his argumentation with that of German sociologist Müller-Lyer, who describes the socialization of mankind as a process that goes "hand-in-hand with the individuation of the separate human-being"³³, as early as 1912. The architect's line of argumentation is directly inspired by the sociologist's foundations, as mentioned by Gropius himself in 1929³⁴. The strong connection between the two lines of arguments will therefore enrich the discourse on the sociological foundations of the minimum dwelling. Additionally, it will enhance the analysis presented in Gropius' lecture, fostering a deeper analysis of his inspirations. To proceed, the architect's argumentation will be divided to specifically address the four primary criteria by which

³¹ Gropius. *Scope of Total Architecture*. p.92

³² Gropius. 'Sociological Foundations of the Minimum Dwelling'. CIAM, *Die Wohnung für das Existenzminimum*, Frankfurt am Main, 1930.

³³ Müller-Lyer. 'The Evolutionary Trend of Socialization'. *Die Familie*, 1912.

³⁴ Gropius. 'Die soziologischen Grundlagen der Minimalwohnung'. *Die Justiz*, 1929.

the plans should be interpreted. These criteria will be inspected through Gropius and Müller-Lyer's argumentation and through related historical references as means to display how they might have materialized through typological elements. It is also primary to understand that although these sociological criteria constitute the lens through which the catalog attached to this thesis should be read, they simultaneously guided the very personal selection of plans extracted from 'Die Wohnung für das Existenzminimum's exhibition. The establishment of these criteria indeed determined this selection, explaining why the initial 97 floor plans of the exhibition were reduced to a final collection of 35 plans of the proposed catalog. These plans were personally chosen for their capacities and qualities to mirror these criteria and address the social problematics tied to them. For this reason, this catalog stands out as a unique reinterpretation of the exhibition held in 1929.

CRITERION I

The Family in modern society

The Family and the State

³⁵ Gropius. *Scope of Total Architecture*. p. 91

³⁶ Ibid

³⁷ Müller-Lyer. 'Summary of the Characteristics of the Full Family Phase'. *Die Familie*, 1912.

³⁸ Gropius. *Scope of Total Architecture*. p. 92

³⁹ Ibid

⁴⁰ Müller-Lyer. 'Causes and Factors contributing to the Full Family Phase'. *Die Familie*, 1912.

Gropius' opening statement regarding the 'Sociological Premises for the minimal dwelling' is addressing how "deep-rooted changes in the social structure of nations" should be the starting point for the establishment of 'new standards regarding the type and size of the necessary dwelling units'³⁵. Hence, the genesis of the architect's manifesto relies on the determination of these changes³⁶, and how they should influence the conception of the minimum dwelling accordingly. To provide evidence for his argumentation, Gropius discusses evolutionary progress through a social prism. This was originally initiated by Müller-Lyer, who introduced a chronological classification consisting of major eras of human society. Each era vividly depicts the social dynamics of its respective time. As argued by both authors, pre-industrial times are characterized by the predominance of the 'family law', through which the patriarchal family arises for it to become "self-supporting [...], producing what its members consume"³⁷. It is notably enhanced by the "subjugation of woman by man" as well as "the enslavement of man by the ruler"³⁸. At its zenith, the patriarchal family is characterized by the "supreme sovereignty of the family head"³⁹. The man becomes the only 'owner of wealth'⁴⁰ of the family unit, which consequently impacts the

nature of intrafamilial relationships. Subordinated, women are intended to remain their “husband’s housekeeper”, as well as “bearers for legitimate heirs”⁴¹. This latter designation points out the main relationship maintained between the family head and his children, foremostly described in economic terms rather than a father-to-son/daughter interrelations. These economic tensions, characterizing the familial relationships and sense of power, outline the dynamics of the pre-industrial family. According to Gropius, the social structure supporting this system “arises and persists up to the formation of our modern industrial state”.⁴² Such a phenomenon is due to multiple factors, of which both Gropius and Müller-Lyer express their foundation: the “rule by money in the industrial state”⁴³. As a matter of fact, a growing number of functions develop under the community, economically and administratively. As the State’s responsibility in the organization of public society thrives, the “family must become weaker and less significant as a sociological factor”⁴⁴. This can largely be explained by an increasing scientific knowledge that had the result to further develop advanced methods of production, hence placing economic production in the hands of industry, and to a certain extent, the State. The character of the household as “a self-contained productive unit”⁴⁵ is lost through the socialization of work and places economical exchanges in the heart of society rather than in the heart of the family. Considering the heightened role of the industry in the post-war period, one might question how these significant changes could have altered the intra-familial dynamics.

The Reduction of the Family

As previously argued, the modern period of the industrial society substantially impacted the sovereignty of the family. The initial explanation for the decline of the family’s portrayal lies in the purely physical reduction of the family. Originally enlarged by a few persons employed in domestic service, the “former serfs become free servants”⁴⁶ to seek personal freedom and independence in the industry. As their number gradually diminished throughout the early 20th century, so did the count of people composing the familial household. Furthermore, if these servants persisted within the familial sphere, their association with the family would shift from ‘status to contract’⁴⁷. This progressive transformation tended to alter the nature of the relations between the patriarch and the persons employed in domestic service. These latter ones tend to be based on purely professional foundations, through which the “domestic servant is liberated from the family discipline”⁴⁸. The domestic servants, initially regarded as members of

⁴¹ Ibid

⁴² Gropius. *Scope of Total Architecture*. p. 92

⁴³ Ibid

⁴⁴ Müller-Lyer. ‘The Late Family Phase in Modern Times’. *Die Familie*, 1912.

⁴⁵ Gropius. *Scope of Total Architecture*. p. 93

⁴⁶ Ibid, p.94

⁴⁷ Müller-Lyer. ‘The Late Family Phase in Modern Times’. *Die Familie*, 1912.

⁴⁸ Ibid

the household, are increasingly seen as “independent worker[s] with definite hours and conditions”⁴⁹. Their professional status no longer physically encompasses the servants within the familial household, thereby reducing the count of members in the ‘family’.

The count of members composing the family also undergoes drastic changes through the decreasing of the human birth rate. This phenomenon, analyzed by Gropius and Müller-Lyer in the European context of the early 20th century. The latter one attributes this diminishing to social issues through which “the demands of hygiene and education have become immeasurably greater”⁵⁰ when it comes to raising children. Consequently, the process of parenting demands not only higher incomes and more time but also specialized skills. According to Müller-Lyer, this could be a contributing factor in why “enormous families are realized as an intolerable and unnecessary burden”⁵¹. Considering these social factors, the early 20th century’s birth rate diminishes in all civilized countries. With statistical material, Gropius analyzes this social phenomenon in his ‘Sociological Premises for the Minimum Dwelling’. The architect bases his argumentation on determinations from the German census bureau sensing the birth rate in Germany between the years 1900 and 1928. In the span of 27 years, statistics show that the birth rate has declined from 35.6 per 1.000 population to 18.4 per 1.000 in the year 1927, thus “decreasing to a mere half”⁵². Both sociologists, first in 1912 and then in 1929, examine these social changes within the nuclear family. As the birth rate is undergoing a significant decrease, a new familial standard starts to emerge, framed by the increasingly prevalent limited two-child family. If Gropius assumed that this average comprised 4.5 members within the household, it would come down to 4 in larger cities and urban industrial populations⁵³. The unit of the family being diminished in its size, two conclusions can be drawn; firstly, with fewer individuals contributing to its functioning, the family struggles to maintain self-sufficiency; secondly, the declining birth rate and the departure of external figures from family, such as servants and domestic workers, contribute to “the weakening of the paternal authority”⁵⁴, as a significantly reduced number of individuals fall under its influence.

Intra-Familial Dynamics

The reduction in the family size prompts a reconsideration of the intra-familial dynamics, viewed through the prism of power relations. The weakening of the patriarchal figure nuances the model by which the family’s power could stand as an individual

⁴⁹ Müller-Lyer. ‘The Late Family Phase in Modern Times’. *Die Familie*, 1912.

⁵⁰ Ibid

⁵¹ Ibid

⁵² Gropius. *Scope of Total Architecture*. p. 93

⁵³ Ibid

⁵⁴ Müller-Lyer. ‘The Late Family Phase in Modern Times’. *Die Familie*, 1912.

microcosm. If the structure in which the patriarch held supreme sovereignty upon his wife and children is reconsidered, one might question the nature of 'newly' established interrelations. Firstly, both authors discuss the impact of this weakened authority on the parents/children relationship. Müller-Lyer, in *Die Familie*, addresses the growing role of the State in the education of the children through the institution of the school. According to the sociologist, the "individual family can no longer fully meet the educational requirements of modern life", and these latter are increasingly tackled by 'specially trained teachers' within the institution of the school⁵⁵. The authority of the patriarch is therefore challenged with the authority of the skilled educator. Gropius, developing the same discourse, further argues that such a change "intrudes into the relations between parents and children and regulates them according to the views of society"⁵⁶. Consequently, the children are rapidly brought to an extra-familial environment in which the parental monopoly cannot be exercised. As the theory of education gradually gains visibility, significant changes occur in the development of the child. Traditional practices through which the parental realm conventionally shaped the child's decisions and personal growth are under reinspection. Brought in an external educational environment that subjects the child to new influences, the grown-up child hence acquires further capacities to determine his/her own professional path and individual choices. This differs from the traditional perspective where the child would receive "inherited status" conferred by the parental authority. This largely participates in the downfall of family hegemony, as both parents and children undergo dissimilar influences in different contexts. This process paints "the alienation between the members of the household"⁵⁷, as their individual identities begin to prevail on the familial entity. In line with this logical argumentation, Müller-Lyer states that "the child as rights as well as the parents"⁵⁸ within the household. These rights notably encompass the child's education and respect of "intimate personality"⁵⁹. The sociologist reevaluates the existence of strict vertical relations between the parents and the children within the family unit. Instead, the "increased independence and consideration of the children"⁶⁰ seem to correspond the nature of these relations with horizontal ones, challenging the traditional familial hierarchy based on authority and subjugation. Such alterations shape the nuclear family in industrial societies, prompting Gropius to explore "an entirely new formulation" for the conception of the minimum dwelling. This approach aims to prevent "traditionally imagined historical needs"⁶¹ to veil the understanding of newly established requirements.

⁵⁵ Ibid

⁵⁶ Gropius. *Scope of Total Architecture*. p. 94

⁵⁷ Müller-Lyer. 'The Late Family Phase in Modern Times'. *Die Familie*, 1912.

⁵⁸ Ibid

⁵⁹ Ibid

⁶⁰ Ibid

⁶¹ Gropius. *Scope of Total Architecture*. p. 94

In the Catalog

In the context of the Catalog, this criterion will be noted C.I and named: Reconsidering the hierarchy of private spaces

The reduction in the size of the family, both in its 'external' and 'internal' members tends to standardize the family structure to 4 to 4.5 members. Not only does this phenomenon physically shrink the size of the household, but also undertakes to diminish the role of the patriarch as the head of the family. This shift can also be attributed to a growing belief that family members are no longer inclined toward self-sufficiency: both the industry and institutions such as schools redirect interests away from the home. Consequently, the 'historical' hierarchy in which parents exercised power onto their children is undergoing revaluation. Both authors inspect these hierarchical changes, the first in the early 20th century and the second in the context of the 20's urban populations. As a matter of fact, the catalog joined to this thesis will examine how the architects of the 1929's exhibition might have integrated these changing interrelations in their design. These dynamics would especially be inspected regarding designated private spaces of children and parents, feasible when there is sufficient data for identifying these spaces within typologies of minimum dwellings. Different tools will be used to compare these private spaces, including surface, hygienic requirements of air and light, degree of privacy and autonomy.

CRITERION II

The modern Woman in the Family

Women Status

⁶² Referring to Müller-Lyer's classification of 'four major legal eras of human society', Gropius. *Scope of Total Architecture*. 1962. p.92

⁶³ Gropius. *Scope of Total Architecture*. p. 95

⁶⁴ Müller-Lyer. 'Results of the Professional Differentiation of Women'. *Die Familie*, 1912.

If the relationship between the parental authority and the children have been inspected in the light of sociological occurrences, it remains to examine the evolution encompassed by the figure of the woman within this family. Both authors in their respective work, discuss the rise of the woman status in comparison with that of the man. This comparison is firstly established upon the growing rights of women in modern society. Gropius argues that since the 'family era'⁶² embodied the rise of the man, the 'individual era', corresponding to modern society, awakens 'the progressive emancipation of woman'⁶³. The recognition of individual rights among the family members is on the rise, and this gradual shift is evident in the relationship the woman holds with her husband. As of 1912, the German League for the Protection of Motherhood quotes that "marriage will become a free contract between two ethically and financially independent beings"⁶⁴. This resonates with Gropius' designation of the marriage, which

was “originally a compulsory institution sanctioned by the state and the church” but “evolves gradually into a voluntary union of persons who retain their intellectual and economic independence”⁶⁵. The architect acknowledges the social transformation through which the marriage becomes a social ‘contract’, whose members therefore enjoy rights and progressive equality. These rights gradually reach the political sphere, although this argument remains tied to each European governments’ policies, and hence disparate. It notably occurs in political decisions taken across Europe, such as post-war Germany, in which the “Weimar Constitution declared women to be the equals of men and granted them the vote”⁶⁶, marking the initiation of women’s integration into societal changes. As emphasized by Gropius in his characterization of the marriage contract, the household of the modern family of the 1920’s consists of two individuals who are economically independent. This incremental transformation is driven by two main dynamics: socialization of work is made available for women to obtain rights through their activity, and simultaneously, the socialized production shrinks women’s traditional sphere of domestic activity⁶⁷.

Women Enter Industry

The former point relates to women’s progressive emancipation, which is foremostly made possible through the development of industry. Müller-Lyer argues that industrialism have had the effect of making “Violence [...] less profitable than the power of wealth”⁶⁸, thereby notably fostering the woman’s involvement in the world of business and industry. According to information supplied by the Prussian district census bureau for Berlin in 1925, of three gainfully employed persons, two are men and one is a woman (Germany and Switzerland). Additionally, the bureau censuses that of two gainfully employed women, one is simultaneously a housewife⁶⁹. These numbers testify the proportion of women involved in the industry and prove the housewife’s capacity to enter a world that was exclusively reserved to men. A slight nuance remains to be established in what Gropius considered the ‘awakening of the woman’. If the recognition and rights of housewives progressed in the 1920’s industrial society, it can also be attributed to the dual role that industry sought for women - as inexpensive labor and as contributors to the generation of new workers⁷⁰. The necessity encountered by the industry mirrors that of the proletarian class, in which “the mother must often earn outside the home, as well as the father, in order to get enough food or pay the rent”⁷¹. One might therefore argue that the economic challenges faced by the proletarian families might have

⁶⁵ Gropius. *Scope of Total Architecture*. p. 96

⁶⁶ Henderson. ‘A Revolution in the Woman’s Sphere: Grete Lihotzky and the Frankfurt Kitchen’. *Architecture and Feminism*, 1959. p.222

⁶⁷ Gropius. *Scope of Total Architecture*. p. 95

⁶⁸ Müller-Lyer. ‘The Rise of the Women’s Status in the Late Familial Phase’. *Die Familie*, 1912.

⁶⁹ Gropius. *Scope of Total Architecture*. p. 97

⁷⁰ Henderson. ‘A Revolution in the Woman’s Sphere: Grete Lihotzky and the Frankfurt Kitchen’. *Architecture and Feminism*, 1959. p.223

⁷¹ Müller-Lyer. ‘The Rearing and Education of Children’. *Die Familie*, 1912.

driven the housewives to pursue these economic opportunities, through which their self-determination and professional differentiation were enhanced. Müller-Lyer wrote that as “the activities of the sexes tend to become more alike [...] their status become more equal”⁷². Whether this phenomenon was strictly caused by the industry and/or political shifts remains ambiguous, but it certainly signifies the initial step when “she looks beyond the family for an outlet for her natural need for occupation”⁷³.

The Reduction of Domestic Activity

In line with women’s growing access to socialized labor, Gropius argues for a paralleled occurrence of which “the woman’s sphere of domestic activity shrinks”⁷⁴. To provide further explanation towards this latter point, it seems pertinent to explore references intrinsically linked with this theme. This process will also provide adequate justification to the designs displayed in the CIAM 1929’s exhibition, as the theory behind the reduction of domestic activity established by Gropius and Müller-Lyer is not realized in practicality. Indeed, both authors center their argumentation on the centralized master household models, which, in Müller-Lyer’s view, allows the woman to “be relieved of her most monotonous and unpleasant household duties”⁷⁵, and in Gropius’ perspective, “relieve the individual woman of her domestic tasks”⁷⁶. These models focus on joint-households with improved centralized organizations, where domestic tasks are performed collectively for the sake of economical and time savings. They would notably take shape in the form of “large central kitchen”⁷⁷, allowing the burden of such domestic tasks to physically and mentally leave the realm of the small family by granting the woman “ways of gaining free time [...] while participating in gainful occupations”⁷⁸. However, despite conducting a typological analysis of the floor plans of the exhibition, it fails to demonstrate the exploration of this model, as the kitchen consistently remains at the heart of the minimal dwellings. This latter point is notably theorized by Tanja Poppelreuter in her essay on *Social Individualism*⁷⁹. When referring to the CIAM individual apartments, she explains that “the kitchens in the individual apartments were a deviation from Müller-Lyer’s idea of master household” from which Gropius originally based his line of argument. The theme of the reduction of domestic activity would therefore be inspected under the light of historical references, tied to modern issues of the 1920’s. The model of the centralized master household would nevertheless be further analyzed in a final critical part of the thesis.

In *Das Neue Frankfurt*’s 1928 edition, Designer Kramer - working alongside May and Schuster in Frankfurt - wrote an article titled

⁷² Müller-Lyer. ‘The Rise of the Women’s Status in the Late Familial Phase’. *Die Familie*, 1912.

⁷³ Gropius. *Scope of Total Architecture*. p. 95

⁷⁴ Ibid

⁷⁵ Müller-Lyer. ‘The Household Duties as Performed by and in the Family’. *Die Familie*, 1912.

⁷⁶ Gropius. *Scope of Total Architecture*. p. 95

⁷⁷ Müller-Lyer. ‘The Household Duties as Performed by and in the Family’. *Die Familie*, 1912.

⁷⁸ Gropius. *Scope of Total Architecture*. p. 95

⁷⁹ Poppelreuter. ‘Social Individualism: Walter Gropius and his Appropriation of Franz Müller-Lyer’s idea of a New Man’. 2011, p. 42

'Individuelle oder Typisierte Möbel'. In this article, the designer describes the process through which "the kitchen and its adjoining rooms became an appendix to the bedrooms, dining and living rooms"⁸⁰. To complement the vision through which the kitchen shrinks in size in the minimal dwelling, one might consider Dr.Hagen's article 'Biological and social prerequisites for micro-apartments', published along Kaufmann's review of CIAM II exhibition in *Das Neue Frankfurt* 1929 edition. In the article, the author discusses how "the independence of the small kitchen next to the main living room means the disappearance of the now superfluous parlor, resulting in today's standard floor plan of a small kitchen or kitchenette"⁸¹. The model of the kitchenette, or small kitchen, indeed gained increasing recognition throughout the 1920's. This was firstly intended within 'May's team' of the Frankfurt's five-year program of 1925-1930, in which in-depth investigation for "Modernizing efforts focused on the kitchen above all"⁸². The evidence for this research was found in the notion of rationalized and simplified household-design. This approach, incorporating time and motion studies, aimed to enhance productivity and reduce unnecessary effort.⁸³ In Frankfurt's five-year program, several designers explored the results of this research through the design of the so-called kitchenette. Noticeable is Franz Schuster's 'all-purpose cupboard kitchen of 2.3 square meters'⁸⁴, "designed for minimal dwellings, and installed in Praunheim and Römerstadt apartments"⁸⁵. The model was also integrated as a reference in the annexes of the CIAM II's exhibition. The annexed works notably include F.Schuster's *Eine eingerichtete Kleinstwohnung*, which seeks to "show a furnished small apartment that wants to be nothing more than the framework of an orderly life"⁸⁶. In this small furnishing review, a special attention is drawn towards the Kohnische, or Kitchenette. The small designed area of 2.3 sqm comprises "all the necessary furniture and kitchen utensils [...] in such a way that the woman can carry out all the kitchen tasks without having to leave her place."⁸⁷ The way in which the architects of CIAM referred to this model in the context of the exhibition actively promotes its integration into the exhibited floor plans. Moreover, the minimized kitchen area in small flats recalls the design principles of Margaret Schütte-Lihotzky's 1926 Frankfurt Kitchen. This design, originally presented in the Werkbund exhibition of 1927, drew inspiration from multi-

⁸⁰ Kramer. 'Individuelle oder typisierte Möbel!'. *Das Neue Frankfurt*, January 1928. p.8

⁸¹ Dr.Hagen. 'Biologische und soziale Voraussetzungen der Kleinstwohnung'. *Das Neue Frankfurt*, 1929. p.222

⁸² Henderson. 'A Revolution in the Woman's Sphere: Grete Lihotzky and the Frankfurt Kitchen'. *Architecture and Feminism*, 1959. p.232

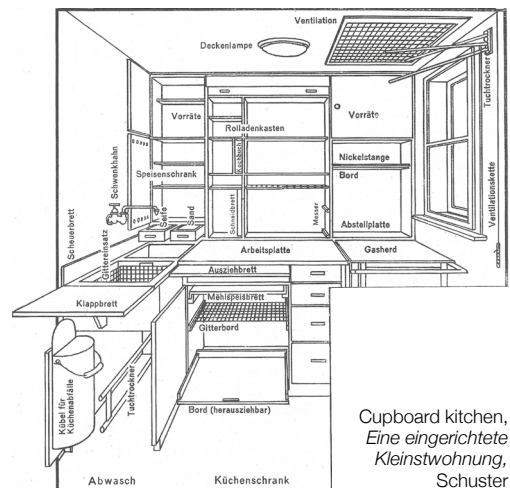
⁸³ Ibid, p.225

⁸⁴ Ibid, p.232

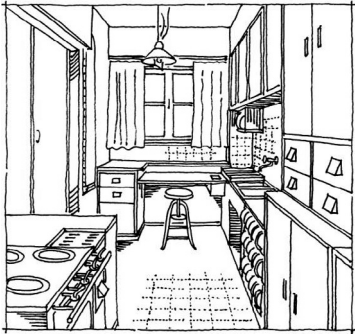
⁸⁵ Henderson. *The New Woman's Home*. 1926-1931. p.157

⁸⁶ Schuster. 'Die Aufgabe'. *Eine eingerichtete Kleinstwohnung*, 1927.

⁸⁷ Schuster. 'Die Kohnische'. *Eine eingerichtete Kleinstwohnung*, 1927.



Cupboard kitchen,
*Eine eingerichtete
Kleinstwohnung*,
Schuster



Frankfurt Kitchen, Lihotzky

⁸⁸ Henderson. 'A Revolution in the Woman's Sphere: Grete Lihotzky and the Frankfurt Kitchen'. *Architecture and Feminism*, 1959. p.235

⁸⁹ Ibid, p.236

⁹⁰ Ibid

⁹¹ Ibid, p.245

⁹² Brysch. 'Reinterpreting Existenzminimum in Contemporary Affordable Housing Solutions'. 2019. p.330

⁹³ see information supplied by the Prussian district census bureau for Berlin in 1925. Gropius. *Scope of Total Architecture*. 1962. p. 97

⁹⁴ Already mentioned references, encompassing: Schuster. *Eine eingerichtete Kleinstwohnung*, 1929, Henderson. *Architecture and Feminism*, 1959, Henderson. *The New Woman's Home*. 1926-1931.

⁹⁵ Schuster. *Eine eingerichtete Kleinstwohnung*. 1927. annexed in: CIAM, *Die Wohnung für das Existenzminimum*, 1930

ple sources for its conceptualization, including "ship galleys, railroad dining car kitchen, and the lunch wagon"⁸⁸. These commercial kitchens exemplified the efficiency of food service in limited timeframes, a breeding ground used by Lihotzky for developing a space in which the woman's "ambulatory movements were neatly confined to this small area"⁸⁹. The kitchen comprised labor-saving devices deployed on a minimized area of 1.9 x 3.44 sqm. Although designed as an attached 'room' to the main living-room, Lihotzky's design remained closely tied to the key concept that "the kitchen was no longer a room, but rather a

'niche'⁹⁰. This refers to the 'appendix' mentioned by Kramer, in which the kitchen ceased to stand out as an independent room, unlike dining, living and sleeping rooms. The transformations encompassed by the kitchen's design in Frankfurt's five-year program hence tend towards its extreme minimization and rationalization. This occurrence was originally intended by Lihotzky to "reject the confines of home in favor of participation in the public world of men"⁹¹. Therefore, the kitchenette or the niche, represented by models like the Frankfurt Kitchen or the cupboard kitchen, were, to some extent, envisioned as "more suitable for working mothers, who no longer had time for long and tiring domestic tasks"⁹². This conception translates the designers' desire to mirror the social transformations occurring at the time, aligning with the increasing number of women whose social status oscillated between being a worker and a housewife.⁹³

In the Catalog

Progressive political change and economic opportunities alter the relationship held between the woman and the man within the household of the family unit. As women's rights gain gradual recognition, encompassing both marital and professional aspects, an incremental shift may emerge in family dynamics. To address the growing proportion of women being professionally active, several designers and architects took the initiative to adapt the space where a majority of household duties are carried out: the kitchen. This transformation encompasses both its physical downsizing and incorporation of industrial features, aimed at achieving efficiency and productivity. In accordance with historical references highlighting the modern model of the kitchenette⁹⁴ and considering its acknowledgment in the context of the CIAM II's exhibition⁹⁵, the catalog will examine how this model was integrated into the selected floor plans. In each concerned plan, the kitchenette will be analyzed in terms of its area, layout and

In the context of the Catalog, this criterion will be noted C.II and named: Reduction of Domestic sphere

proportion to the whole - living, dining and bedroom - with the aim of recognizing its role as an appendix.

CRITERION III

Extra-nuclear households

Individual Households

If the early 20th century, and more precisely the decade following the war, altered drastically the intra-familial relations and the family unit in general, profound sociological shifts also occurred beyond this structural model. In the 'International Congresses of Novel Architecture (CIRPAC)' preceding the CIAM II congress, the secretary S.Giedion wrote: "Gropius himself called attention to [...] the many forms of domesticity outside the family system, quite inadequately attended to nowadays."⁹⁶ The misconception through which the single detached one-family house could be an answer to housing issues is described by Gropius as "no longer adequate today."⁹⁷ Following the architect's line of reasoning, this standard becomes obsolete "because it satisfies only a portion of the public needs, but not the needs of the industrial population."⁹⁸ Hence, the 'many forms of domesticity' discussed by Giedion will be examined using statistical material and concrete evidence of sociological changes. It will also dig into late 1920's projects that aimed to address "the needs of people living outside the structure of the nuclear family"⁹⁹, to help illustrate how the conception of the minimal dwelling could have been influenced accordingly, both in theory and practice.

Firstly, the statistics of civilized countries in the 1920's appear to indicate that "the number of single households is constantly increasing"¹⁰⁰, as noted by the Swiss historian J.Gantner in the 1929 edition of *Das Neue Frankfurt*. Indeed, as discussed by Gropius through sociological data extracted from the German bureau census of the époque, the proportion of individual households gained significance across the decades. In 1871, individual households represented 6.16% of the country's global households, a number that reached 7.26% in 1910, and 10.1% in 1927¹⁰¹. The precise analysis of these numbers documents the intensity of this evolution across two distinct periods of time. Firstly, over the span of 39 years (1871-1910) the growth rate of individual households averaged +0.028% per year¹⁰², a number

⁹⁶ Giedion. 'International Congresses of Novel Architecture CIRPAC'. *Die Wohnung für das Existenzminimum*. 1930

⁹⁷ Gropius. *Scope of Total Architecture*. p.99

⁹⁸ Ibid

⁹⁹ Henderson. *Housing the Single Woman: The Frankfurt Experience*, 2009. p.359

¹⁰⁰ Gantner. 'Zusammenfassung des Referates von Walter Gropius-Berlin über 'Die Soziologischen Grundlagen der Minimalwohnung''. *Das Neue Frankfurt*, 1929. p.225

¹⁰¹ Gropius. *Scope of Total Architecture*. p.99

¹⁰² Difference between the two percentages divided by the number of years

that reaches +0.17%¹⁰³ in the 17 years of the 1910-1927 period. The comparison of these rates indicates that the progression of individual households was 6 times¹⁰⁴ more significant in the later period than in the one spanning from 1871 to 1910, which provides substantial evidence for considering the reality of this societal phenomenon. Although there is a correlation between the rising number of individual households and the specified study period, these figures fail to document the sociological transformations that could provide its explanation. The inspection of data and historical references would therefore be employed to justify this societal occurrence.

Divorce

As previously argued, familial entities became tied to the concept of marriage being the “union of persons who retain their intellectual and economic independence.”¹⁰⁵ With diminished hierarchy and progressive recognition of equal status under the law, the ‘marriage contract’ therefore “implies the right to divorce.”¹⁰⁶ Since its uniformization under the German Reich in 1900¹⁰⁷, divorce as a right has been gaining recognition and increased numerically over the years. In 1927, the German census bureau reported that the number of divorces for that year had reached 36,449, a stark contrast to the 9,000 recorded in the year 1900. These statistics reflect the growing prevalence of joint households separating, notably allowed by the recognition of divorce as a right granted to both parties of the household. The separation of such households might have enhanced the establishment of individual households and participate in the growing need for developing according structures.

Widows

While a societal development of divorce occurs, there is also a significant growth in individual households composed of single women. This latter point can be attributed to different factors tied to historical, economical and political aspects. Historically, the 1920’s symbolizes the decade following WWI, which had a direct impact on the increase of individual households. Henderson elucidates the inherent connection between war casualties and demographic shifts, noting that “by 1925 German women outnumbered men between the ages of twenty-five and forty by 1.25 million.”¹⁰⁸ The author explains that these “surplus” women, who were turned into widows after the War, “comprised nearly 75 percent of Germany’s single-person households”¹⁰⁹ along with unmarried women, providing testimony to the significance of

¹⁰³ Ibid

¹⁰⁴ (0.17 / 0.028)

¹⁰⁵ Ibid, p.96

¹⁰⁶ Ibid

¹⁰⁷ Prof. Dieter Martiny, ‘Grounds for Divorce and Maintenance between Former Spouses Germany’. 2002.

¹⁰⁸ Henderson, *Housing the Single Woman: The Frankfurt Experience*, 2009. p.358

¹⁰⁹ Ibid

such households within the population. This was also the case in the French Republic in which “the devastation of the Great War created over half a million war widows in less than five years”¹¹⁰. The growing proportion of widows in the post-War period across Europe initiated diverse organisms to address its moral and physical needs. In French political landscape emerged the “advent of war widows’ associations during the 1920’s”, encompassing both private and public assistance for moral and economic support¹¹¹. These associations represented the interests of women affected by the war while contributing to their increasing visibility. In Germany, as of 1925 within May’s five-year program, growing regard was given to physical projects to address “the huge ‘surplus’ of single women ‘fathered’ by the war”¹¹². These include few projects from the New Frankfurt program, such as the Siedlung at Praunheim in Frankfurt, in which the accepted categories of tenants for the small apartments were war widows, along with small families and elderly couples¹¹³. These projects gradually helped to recognize their status by means of integrating extra-familial models into the built.

Single Mothers

To clarify the societal models of the divorced or the widowed woman, it remains essential to precise that these increasing ‘individual households’ did not entail that the household was effectively composed of one individual. Indeed, both the widow and the divorced stand out as models in which the woman could also be a mother. This is notably reflected by the increasing illegitimate births rate, as observed in the 1927 analysis conducted by the German census bureau. Constituting 8.7% of total births in 1900, this figure rises to 12.6% after 27 years¹¹⁴. The growth in these numbers translates a shifting tendency, indicating that the concept of establishing a familial entity is gradually becoming less embedded with that of marriage. It also suggests, to some extent, that the growing prevalence of divorce as a right granted to both parties may encourage post-marriage parenthood, leading to the formation of alternative family structures, often headed by a single mother. Moreover, widows anticipating their assignment to an individual household may have also found themselves in the role of single mothers. For instance, when considering the status of widows during WWI in France, “one must remember that the majority of widows were also mothers”¹¹⁵. Demographer and statistician Huber indeed informs that only 15% of French households headed by widows were childless¹¹⁶ during the war. This underscores the composition of these households, often headed by a single mother with her children. It also helps to

¹¹⁰ Lanthier. ‘Women Alone: Widows in Third Republic France, 1870-1940’, 2004. p.1

¹¹¹ Ibid

¹¹² L.Merz, ‘Eine neue Form fräulicher Wohnkultur’ Deutsche Bauzeitung 24, 1927. p.201

¹¹³ Henderson. *Housing the Single Woman: The Frankfurt Experience*, 2009. p.359

¹¹⁴ Gropius. *Scope of Total Architecture*. p.96

¹¹⁵ Lanthier. ‘Women Alone: Widows in Third Republic France, 1870-1940’, 2004. p.202

¹¹⁶ Michel Huber. *La population française pendant la guerre*, 1931. p.34

specify the definition of the individual household, conceived as a structure able to accommodate both the single adult as well as families excluded from the nuclear familial pattern, such as single mothers.

Single-Worker Housing

Along with household entities inspected until now - which are all linked in some ways with alternative forms of families - exist an additional structure of domestic unit: the individual household for the single worker. Evocation of this model is to be found in the 1929 *Das Neue Frankfurt* edition, referring to Gropius CIAM II lecture: "The family thus loses its significance as an economic unit [...] leading to a decrease in the average household size and even to the separation of self-employed people from their homes."¹¹⁷ Although both single men and women individual households might be considered, this paragraph will mainly examine studied references investigating examples for single working women. As already mentioned, the post-war period is characterized by the progressive entrance of woman in the "world of business and industry"¹¹⁸, as stated by Gropius. This latter argument has been previously inspected within the scope of the familial unit. However, the close analysis of data extracted from the Prussian district census bureau of Berlin of 1925 suggests that this argument might have extended beyond the family home. Primarily, the bureau notes that "of 5 women above age 20, only 3 are married"¹¹⁹, acknowledging the presence of a demographic model comprising unmarried women. Similarly, the study reveals that "Of 5 single women, 4 are gainfully employed"¹²⁰, providing insight into the prevalent employment status of unmarried women. Although the causes for celibacy might originate from different foundations, as described by Müller-Lyer in *Die Familie*¹²¹, they do not constitute the object of this research. This latter rather aims to focus on the factors that might have facilitated their emancipation. Regarding the studied data, seemingly correlating the celibacy of single women with their status of 'gainfully employed' worker, some late 1920's examples of single worker units will be inspected. At the Frankfurt city Council of 1926, Social Democrat Elsa Bauer asserted, while referring to working women living in boarding houses: "[T]hese women are independent [...] We are asking that units with small kitchenettes be built for them."¹²² This political claim mirrors the attempts made by political parties to answer the growing need for single-worker units. Some architects and designers notably addressed these issues in their work both theoretically and physically. This is the case of Lihotzky who furthered studies on housing for single

¹¹⁷ Gantner. 'Zusammenfassung des Referates von Walter Gropius-Berlin über 'Die Soziologischen Grundlagen der Minimalwohnung''. *Das Neue Frankfurt*, 1929. p.225

¹¹⁸ Gropius. *Scope of Total Architecture*. p.95

¹¹⁹ Ibid, p.97

¹²⁰ Ibid

¹²¹ see Müller-Lyer. 'Causes of Celibacy' *Die Familie*, 1912.

¹²² 'Minutes of the City Council', 8 June 1926, Frankfurt am Main, 526.

women while residing in Frankfurt, 1926 onwards. The architect indeed presented four of her Einliegerwohnung models to the city Council in 1927, meant to be developed under the New Frankfurt program. Lihotzky based her designing methodology on the “incomes of women workers, students, and professionals”¹²³, so that her housing units could suit both the “woman with a minimum income of 80 marks per month” and the “middle-class women with a monthly income of 300 marks.”¹²⁴

Growing political entities and associations in the city of Frankfurt triggered the emergence of organizations such as the Women’s Own Home Housing League (Verein für Fraueneigenheim). The League aimed to sponsor the construction of apartment blocks for professional women, an objective reached through the construction of Baublock Adickesallee and Platenstrasse “purported to be the first housing for professional women in Germany”¹²⁵ in 1927. The design, intended to house 120 women, was proposed by Architect Hermkes, whose work is notably displayed in the catalog attached to this essay. Such examples testify of the progressive consideration met at the time to include the social model of the working woman in built projects, although this point remained of moderate proportionality as highlighted by the city Council’s Communist Party: “When it comes to women, the city always turns its back.”¹²⁶

¹²³ Henderson. *Housing the Single Woman: The Frankfurt Experience*, 2009. p.361

¹²⁴ Ibid, p.362

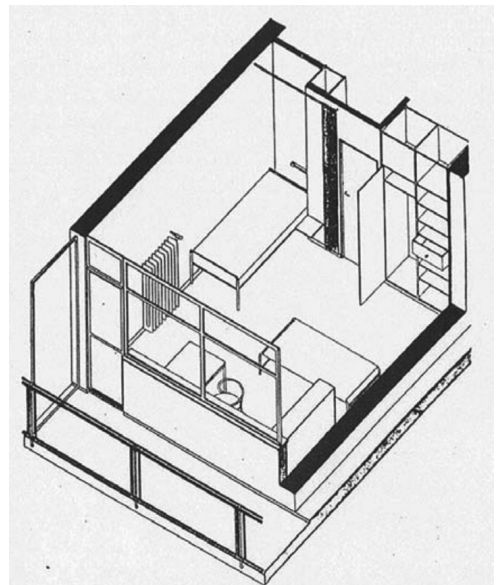
¹²⁵ Völckers, “12 Mietwohnungen in einem Block.”

¹²⁶ ‘Minutes of the City Council’, 14 May 1929, Frankfurt am Main, 497.

¹²⁷ Ibid, 31 Aug. 1926, 774.

In the Catalog

While the non-traditional household models aforementioned demographically increased within the industrial populations of the 1920’s, they nevertheless only faced gradual or proportionally limited consideration in practicality. If political entities notably helped to improve their recognition through shifting governance and organizational formation in the span of the 1920’s, the general belief was that “women’s housing was far less important than the housing for families”¹²⁷, as mentioned in the Frankfurt city Council of 1926. As a matter of fact, one could argue that these demographic shifts met distinct acknowledgment but limited governmental actions. This is pointed out by Gropius’ sociological analysis of industrial populations, in which he recalls that “the great demand for very smallest dwellings and individu-



Perspective from a housing unit, Hermkes, Platenstrasse

¹²⁸ CIAM. 'Excerpt of the Report of Mr. Walter Gropius of Berlin about 'Sociological Foundations of the Minimum Dwelling'. *Die Wohnung für das Existenzminimum*, 1930.

¹²⁹ Gropius. *Scope of Total Architecture*. p.95

¹³⁰ As titled by May. 'The Dwelling for the Income Earner'. *Die Wohnung für das Existenzminimum*, 1930.

**In the context of the Catalog, this criterion will be noted C.III and named:
Considering new social structures**

al dwellings for single, divorced mothers or mothers standing alone in the world with their children corresponds to a genuine requirement"¹²⁸. Gropius hence places CIAM II's exhibition under the prism of social change, through which new designs should be explored to meet the needs of larger parts of the population. The interest sparked by Gropius goes beyond this point, evident in the close correlation between alternative households and the conception of the minimum dwelling. He states, "The organizational structure of households for single men and women, for children, widowed or divorced adults, or newlyweds or for ideological and economic communities of various forms is connected intimately with the problem of the minimum dwelling"¹²⁹. The architect not only acknowledges these extra-nuclear family forms but highlights the 'natural' connection they nurture with the primary concern of the congress: providing dwelling[s] for the living income earner.¹³⁰ In the context of the catalog, attention will be put on models either displaying intentional alternative households, such as single-worker or single woman dwellings, but will also inspect examples in which the traditional nuclear-family structure might be reconsidered. This latter aspect will mainly focus on private spaces in terms of their qualities, organizations, layouts and furnishing, in order to examine the possible dynamics between their occupants. They will also be inspected in the 'ambiguity' addressed by certain architects in their design, of which hierarchical ties between the occupants might be reevaluated.

CRITERION IV

The era of the Individual

Individualism in modern society

The exhibition presumably investigates nuclear and extranuclear entities, both in their sociological, demographic and political aspects. These inspections aim for three distinct arguments, which should foremostly be addressed within the context of the exhibition according to Gropius. First, the modern evolution of the nuclear family tends towards the differentiation of its members, and hence weakens the traditional authority of its head. Secondly, industry is progressively enlarged by a generation of new workers composed of women, hence slowly initiating her displacement outside of the domestic sphere. Thirdly, non-traditional family forms and other household entities meet a real need for housing and participate in considering new forms of design within the concept of minimum dwelling. These three statements all translate concrete forms of domestic realities: the 4 mem-

bers family, the single mother, divorced, working or widowed. They analyze the households according to their members but also to their degree of distance or similarity with a traditional form of 'family'. Both Gropius and Müller-Lyer finally propose to inspect forms of domesticity under the prism of individualism. As aforementioned, Gropius aligns his argumentation with that of Müller-Lyer's designation of four major legal eras of human society, of which modern society gradually shifts from "the era of the family" to the "era of the individual"¹³¹. This shift was facilitated by the increasing influence of the state and the consequent socialization of work. This resulted in "socializing a greater part of the former functions of the family"¹³², thereby enabling each of its members to pursue social individualism beyond the realm of the familial entity. The architect advocates for the symbolic and economic importance of the individual, of which his independent rights and development "today overshadow that of the family as a sovereign unit"¹³³. As the model of the individual evolves in alignment with the state's aspirations, changes in the structure of society - through law, labor and cultural shifts - enable its realization. Considering this social phenomenon, Gropius calls for appropriate responses in the design of dwellings, wherein the standard dwelling should represent its primary solution. This new standardization focuses on the formula by which "every individual following a vocation gets his ration of a dwelling"¹³⁴, making it accessible to all the employed. To offer a more detailed depiction of the standard dwelling, Gropius describes the fundamental requirements hinted at in its conception. To further the development of each individual, enhanced by the structure of society, the industry and demographic changes, this dwelling should meet the "individual's justified demand for occasional withdrawal from his surroundings"¹³⁵. Gropius informs that this latter point should be investigated within the relations maintained between the members of the household, notably granting them with sufficient "distance from co-inhabitants of the dwelling"¹³⁶. The architect provides insight into how this 'distance' might be integrated into the floor plan of the minimum dwelling. Building his argument on the findings of hygienists Drigalski and Vogler, who asserted that a person's space requirements are minimal when efficiently organized and provided with light, sun and air¹³⁷, and drawing from his own analysis of individuals' need for privacy, Gropius offers additional insights into the concept of minimum dwelling: "Every grown-up person his own room even if it is the very smallest"¹³⁸. These considerations shed light on the status of the expected tenant, whose 'ration of a dwelling' is determined by their employment, and privacy is achieved through minimized private space isolated from the 'external communal life'.

¹³¹ Gropius. *Scope of Total Architecture*. p.91

¹³² CIAM. 'Excerpt of the Report of Mr.Walter Gropius of Berlin about 'Sociological Foundations of the Minimum Dwelling'. *Die Wohnung für das Existenzminimum*, 1930.

¹³³ Gropius. *Scope of Total Architecture*. p.96

¹³⁴ CIAM. 'Excerpt of the Report of Mr.Walter Gropius of Berlin about 'Sociological Foundations of the Minimum Dwelling'. *Die Wohnung für das Existenzminimum*, 1930.

¹³⁵ Gropius. *Scope of Total Architecture*. p.99

¹³⁶ CIAM. 'Excerpt of the Report of Mr.Walter Gropius of Berlin about 'Sociological Foundations of the Minimum Dwelling'. *Die Wohnung für das Existenzminimum*, 1930.

¹³⁷ Gropius. *Scope of Total Architecture*. p.99

¹³⁸ CIAM. 'Excerpt of the Report of Mr.Walter Gropius of Berlin about 'Sociological Foundations of the Minimum Dwelling'. *Die Wohnung für das Existenzminimum*, 1930.

In the Catalog

Evidence of growing individualism forms the final part of Gropius' argumentation. Whether it is amplified by increasing differentiation among family members, the growing rising proportion of workers in industrial masses, or the significant proportion of individuals shifting away from non-traditional households, all these aspects convey the growing significance of individuality. This trend provides concrete application as noted by the architect: the minimum dwelling should provide privacy to its members by means of enlightened and ventilated private spaces, "small though [they] may be!"¹³⁹. The implementation of such design has been discussed by Kaufmann in *Das Neue Frankfurt* of 1929, through a few examples extracted from the CIAM II exhibition. The architect designates a small group of architects to propagate the model of a house "with cabin-like sleeping cells, lined up in a living space that grew according to the number of beds"¹⁴⁰. Kaufmann names both architects Racz (Budapest) and Haesler (Celle), whose works are integrated in the joined catalog (resp. fig.34 and fig.29). Similarly to these architects, the catalog will explore floor plans in which minimized "cells" act as private spaces for their occupants to express their individuality while enjoying both autonomous and quality spaces. To process, private spaces will be inspected in their areas, qualities, and relation to each other. The relation they hold to their common space (living space) will also be examined to shed light on possible hierarchies within the households.

¹³⁹ Gropius. *Scope of Total Architecture*. p.99

¹⁴⁰ Kaufmann. 'Die Internationale Ausstellung 'Die Wohnung für das Existenzminimum''. *Das Neue Frankfurt*, 1929. p.215

**In the context of the Catalog, this criterion will be noted C.IV and named:
Extreme reduction of private spaces**

A CATALOGs CRITICISM

Teige's perspective

As acknowledged previously in this essay, some arguments advanced by both Gropius and Müller-Lyer have not been used in the context of this catalog for the building up of criteria. The concluding section of *Catalog Rules* aims to justify the personal motivations behind such choices, as well as investigating the limits of the 1929 exhibition in this context. It will be enriched by historical and literary references, adding nuances to the exhibition's outcome and establishing boundaries to the discussed themes. Notably, it will feature the perspectives of architect and author Karel Teige, examining his interpretation of the minimum dwelling and his critique of the work envisioned by Gropius and his contemporaries in *Die Wohnung für das Existenzminimum*.



Adolf Hoffmeister, "Karl Teige (Dreams about minimal dwelling)". From the *Jízdní řád literatury a poezie*, Prague, 1932

The model of the small kitchen

As previously detailed in the section of this volume dedicated to outlining the criteria for a proper understanding of this thesis'

catalog, the choice of the kitchenette or small kitchen's model is personally grounded in two main reasons. The first reason behind this choice is the large panel of floor plans from the exhibition - and as a result in the catalog - to display models of kitchenette or small kitchen. In the same breath, they also received acknowledgment in the context of the exhibition, as annexed by the CIAM team. Secondly, as previously discussed, the model of the kitchenette, or niche, was centered on the extreme rationalization and reduction of the traditional room hosting the kitchen. Meant as an appendix to other rooms, which kept their 'original' importance in the plan - living, sleeping, dining - the kitchen underwent drastic changes under design reconsideration occurring in Europe and most significantly in Germany in the second half of the 1920's. While these physical changes have already been examined in this thesis, they translated the architects and designers' belief of "eliminating household drudgery through rationalization"¹⁴¹ as intended by Lihotzky. Such reduced models and "new appliances and facilities made housework easier"¹⁴², as argued by Saldern in an analysis of the German Urban Housing Estates of the 1920's. If these models aimed to decrease the intensity of domestic chores and thereby provide more freedom to the individuals performing them, they nonetheless faced limitations that prevented the translation of theory into practice. Firstly, Saldern indicates that although the reduction of the kitchen area implied efficiency and productivity, it also meant that only one person was responsible for the domestic tasks, and "that was 'naturally' the housewife"¹⁴³. The author further informs that if these models enhanced new patterns of performing housework, they did not contribute to changing "the traditional view that only wives had to do the housework"¹⁴⁴. This critique can be nourished by many designations elaborated at the time, such as Schuster's design conceived "in such a way that the woman can carry out all the kitchen tasks"¹⁴⁵. Further examinations have been made by diverse authors to reconsider the accuracy of the kitchenette and its original intention to emancipate the woman from the confines of the household. They firstly comprise Henderson's remark towards the growing proportion of working wives and/or mothers and their stagnation into housework obligations. She notes, "with women assuming jobs outside the home and becoming isolated in smaller family units, all indications are that their burden was growing rather than diminishing, and this in spite of labor-saving devices."¹⁴⁶ As working mothers and/or wives progressively entered the realm of the industry, as stated by Gropius, one might consider that the kitchenette or models of small rationalized kitchens did not necessarily mean the reduction of labor, both encountered outside and inside the home for a growing portion

¹⁴¹ Henderson. 'A Revolution in the Woman's Sphere: Grete Lihotzky and the Frankfurt Kitchen'. *Architecture and Feminism*, 1959. p.245

¹⁴² Saldern. 'The Workers' Movement and Cultural Patterns on Urban Housing Estates and in Rural Settlements in Germany and Austria during the 1920s'. 1990. p.349

¹⁴³ Ibid, p.348

¹⁴⁴ Ibid, p.349

¹⁴⁵ Schuster. 'Die Kochnische'. *Eine eingerichtete Kleinstwohnung*, 1927.

¹⁴⁶ Henderson. 'A Revolution in the Woman's Sphere: Grete Lihotzky and the Frankfurt Kitchen'. *Architecture and Feminism*, 1959. p.245

of women. Finally, if the housework underwent simplification and rationalization notably with the help of enhanced organization, economized movements and labor-saving devices, the 1920's tendency for "higher standards of hygiene and cleanliness meant that the amount of work did not decrease as much as was expected."¹⁴⁷ Consequently, it can be argued that although the kitchenette embodied a modern model intending to shrink the housework within the familial unit, the societal shifts of the 1920's and the increasing demand for feminine emancipation did not convey a revolutionary sense to it.

The model of the Centralized Master Household

Examining the criticism surrounding the diminishment of the kitchenette and the broader reduction of kitchen to a mere appendage, both Gropius and Müller-Lyer explore alternative methods for performing household duties. As of 1912, the latter author investigates the possibility of "large-scale joint dwelling or communal household" to be designed for "a large section of the people"¹⁴⁸. This model is notably based on a progressive disparition of the kitchen in individual household units, for it to emerge in a collectivized form integrated in the built. Müller-Lyer informs that "instead of the sixty households each struggling round its [...] stove, it would be possible to have a large central kitchen", that, as a result of enhanced organization, would "only employ one woman in ten"¹⁴⁹. The sociologist communicates the increased savings on time and fundings the realization of this model would imply: as the number of individuals involved in domestic tasks decreases, the "liberation of energy for other occupations"¹⁵⁰ increases consequently. This last point is reminiscent of the characteristics of the model Gropius designates as the centralized master household. Indeed, as previously argued, the implementation of such structures intends to free women from the traditionally established conception in which they are solely responsible for performing household duties. This encompasses not only their gradual emancipation from domestic confines but also their growing access into the workforce, a domain traditionally associated with men. The main target behind the idea of centralized households thereby relies on "the intellectual and economic emancipation of women to equal partnership with man", addressing both political requisites for progress and answers to "the economic plight of urban populations"¹⁵¹. While this model is formulated first by Müller-Lyer's joint household, and later by Gropius's centralized master household in the context of the Frankfurt's exhibition of 1929, its recognition lacks in the exhibited floor plans of *Die Wohnung für das Existenzminimum*. A possible

¹⁴⁷ Saldern. 'The Workers' Movement and Cultural Patterns on Urban Housing Estates and in Rural Settlements in Germany and Austria during the 1920s'. 1990. p.349

¹⁴⁸ Müller-Lyer. 'The Household Duties as Performed by and in the Family'. *Die Familie*, 1912.

¹⁴⁹ Ibid

¹⁵⁰ Ibid

¹⁵¹ Gropius. *Scope of Total Architecture*. p. 96

explanation for which the idea of the collectivized household was praised in theory but barely addressed in practicality could rely on “estimations of the costs of communal facilities in high rise”¹⁵², as pointed out by Gropius. According to them, it was believed that the concept of centralized household was not economical for “fewer than 500-600 people”¹⁵³, as noted by Nerdinger in a retrospective of Gropius’ work. Whether this reason is not historically tied to the design choices of the exhibition, Poppelreuter argued that this aspect might “have been the reason why Gropius resorted to individual kitchens”¹⁵⁴ in the floor plans. Therefore, despite Müller-Lyer and Gropius emphasizing the model of the centralized master household as a crucial aspect of their argumentation, the paradoxical failure to showcase its design qualities during the 1929 congress opens the door to potential criticism. Such scrutiny was notably engaged by Czech figure Karel Teige.

Teige and the CIAM

A Czech author and theorist from the first half of the 20th century, Karel Teige’s legacy spans art, architectural and political criticism, covering the period from the end of WWI to the conclusion of WWII. Although a great contributor to the work of the Czech Avant-gardes of the post-War period, Teige’s legacy faced backlash both during his life and posthumously. This can be attributed to the author’s early radical left-wing orientation “that has resulted in his absence from both Western and eastern European historiographies”¹⁵⁵. Although a convinced Marxist, his political views diverged from that of the Stalinists, whose influence in Czechoslovakia had him silenced and solely published in Czech. For these reasons, “Teige simply escaped the attention of Western scholars”¹⁵⁶ at the time. While his work only gained measured recognition, Teige was nonetheless a contemporary of figures from the CIAM, including Madame de Mandrot of La Sarraz congress, Gropius in the context of the Bauhaus, as well as Le Corbusier¹⁵⁷. His interactions with the french architect in the early 1920’s solidified his contrasting opinions on architectural styles and movements compared to those of Le Corbusier. They eventually reached a peak with the ‘Mundaneum affair’ in 1928, in which Teige vividly criticized Le Corbusier’s design for the League of Nations headquarters in Geneva. According to the Czech architect, the project only “illustrate[d] the fiasco of theories and traditional prejudices”¹⁵⁸ embedded in the french architect’s design, who was also the prime organizer of the first CIAM meeting in 1928 along with critic Sigfried Giedion. Teige’s relation with members of the western world modernists brought him in proximity to the outcomes of the congresses and helped him further

¹⁵² Poppelreuter. ‘Social individualism: walter gropius and his appropriation of franz müller-lyer’s idea of a new man’. 2011, p. 43

¹⁵³ Nerdinger. *Architect Walter Gropius: Drawings, Prints and Photographs*, 1996. p. 136.

¹⁵⁴ Poppelreuter. ‘Social Individualism: Walter Gropius and his Appropriation of Franz Müller-Lyer’s idea of a New Man’. 2011, p. 43

¹⁵⁵ Dluhosch E. ‘Translator’s introduction’, 2002. p. xii, extracted from Teige K. *The Minimum Dwelling*, 2002.

¹⁵⁶ Ibid

¹⁵⁷ Ibid. p. xvii

¹⁵⁸ Karel Teige, “Mundaneum,” *Stavba* 7 (1928–1929): 145–155. Translated by Ladislav Holovsky, 1998.

his criticism in literary pieces. One of them, named *The Minimum Dwelling* (original Czech title: *Nejmensší byt*) published in 1932, was conceived by the author “as a contribution to the deliberations of the International Congresses of Modern Architecture”¹⁵⁹. Specifically, it aimed to contribute to the discussions held during the congresses of Frankfurt in 1929 focusing on the minimum dwelling and of Brussels in 1930 addressing its urban form. This concluding section thereby aims to delve into Teige’s perspectives on the 1929 exhibition and the criticisms he constructed in response to Gropius’ discourse. It will mainly focus on the model of centralized master household and assess Teige’s vision towards collective housing.

Teige and the independent household unit

In his book *The Minimum Dwelling*, Karel Teige undertakes to describe each typological element constituting the floor plans of the CIAM II exhibition. A consistent part of his analysis focuses on the kitchen and its organization within the plans. Teige differentiates the live-in kitchen, characterized as a single-room kitchen separated from the living space, and the model of kitchenette “transformed into a mere nook within the living room area”¹⁶⁰.

Teige’s view on the former form of design depicts a space combining both living and housekeeping functions (sleeping/eating), although separated in distinct rooms. As per the author’s perspective, this model “goes back to a time when all the inhabitants of a house spent most of their time at home”¹⁶¹. It alludes to familial structures in which the kitchen once served as the center of daily life and symbolized a cohesive economic unit. As this latter trend is not characteristic of the modern period of the 1920’s, in which “people [...] spend most of their time outside the home”¹⁶², the live-in system thereby grows obsolete. In parallel to the separated kitchen, Teige discusses the role and limits of the so-called kitchenette, or ‘nook in the living room’. The author acknowledges the intention behind the drastic dimensional reduction of the space dedicated to cooking, “especially in designs for subsistence-level minimum housing, lived in by a woman who is working outside the home and who is not able to devote much time to cooking”¹⁶³. Nevertheless, the author interrogates the limit of such a system, in which the domestic chores, although supposedly reduced, are still performed within the private realm of the home. While Teige’s consideration of the live-in kitchen sparked criticism for its outdated functioning, his assessment expands to the model of the kitchenette opened onto the living-room described in terms of a “live-in kitchen in disguised form”¹⁶⁴. In fact, it seems that the kitchenette addresses a similar

¹⁵⁹ Dluhosch E. ‘Translator’s introduction’, 2002. p. ix, extracted from Teige K. *The Minimum Dwelling*, 2002.

¹⁶⁰ Karel Teige. *The Minimum Dwelling* (1932). Translated by E.Dluhosch, 2002. p.240

¹⁶¹ Ibid, p.241

¹⁶² Ibid

¹⁶³ Ibid, p.245

¹⁶⁴ Ibid

aim to that of the separated kitchen, despite its physical form being drastically altered. The process through which the kitchen undergoes its reduction is paired with that of a minimized version of a large apartment, Teige notes. This line of reasoning leads the author to express the conventional trait embedded within this design, portraying it as nothing more than a “mere miniature version of the most typical form of a bourgeois apartment”¹⁶⁵. Author Poppelreuter examines Teige’s position towards the discourse held behind the CIAM exhibition. She particularly observes that the implementation of individual kitchens in the small apartments mirrors Teige’s opinion, suggesting that “they still supported the bourgeois family structure”¹⁶⁶. Teige especially confronts architect Gropius whose architectural practice appears inconsistent with his theoretical model of the centralized master household. This denunciation is especially marked by Teige’s designation of the architect’s aspirations: “[Gropius] does not derive [...] the professional consequences in his work and is [instead] content with escaping to the future through a diplomatic back door.”¹⁶⁷ It seems that the Czech author points out the limited resources provided by the CIAM’s architects to deeply revolutionize the conception of the minimum dwelling. Its achievement would rely on the elimination of all forms of house duties within the home, and their relocation to a novel form of habitation: the collective household.

Teige and the collective household

The description established by Teige of the ‘subsistence-level dwelling’, as portrayed by the architects of the CIAM, bears critique for its incomplete execution. His main line of argumentation lies in the internal organization suggested by these models, where bourgeois standards are somewhat repeated in a minimized version of a larger dwelling. This denunciation points out the existing gap between the theories of Gropius expressed in his ‘sociological prerequisites’ and their - non - application in the minimum dwellings of the exhibition. The “curious paradox”¹⁶⁸ conjoining the intended theory and its practical realization translates Teige’s desire to evolve towards extra-familial forms of dwellings. Indeed, it seems that the author’s emphasis on the kitchen - the place in which domestic tasks unfold - is, in fact, symptomatic of a growing tendency for “closed dwelling spaces of the past [to] expand more and more into common living spaces.”¹⁶⁹ Teige effectively acknowledges the urgent requirement for architects to address the ongoing degeneration of the traditional household, a social phenomenon scrutinized by Gropius. To facilitate this transformation, a crucial step involves the “gradual

¹⁶⁵ Ibid, p.242

¹⁶⁶ Poppelreuter. ‘Social Individualism: Walter Gropius and his Appropriation of Franz Müller-Lyer’s idea of a New Man’. 2011, p. 45

¹⁶⁷ Karel Teige. *The Minimum Dwelling* (1932). Translated by E.Dluhosch, 2002. p.300

¹⁶⁸ Ibid

¹⁶⁹ Ibid, p.329

socialization of the private household functions”¹⁷⁰. This approach aligns with existing architectural structures highlighted by Teige, such as hotels for permanent living, bachelor flatlets, hostels for working women, pensions, student dormitories and boarding houses¹⁷¹. While Gropius recognizes these models as consistent initiatives responding to the societal changes of the 1920’s, Teige blames the architect for his incapacity to apply the essence of their qualities. Both authors recognize the collective household as the ultimate version of the minimum dwelling, with the true difference in their conceptions lying in their divergent political stances to address the needs of the proletarians. In the political analysis undertaken by Teige, the author regards Gropius’ gesture as a mere description of how “political evolution [...] will be decisive in the choice of future housing types”¹⁷². Teige’s perspectives contrast with that of the architect, particularly because only “the practical implementation of a socialist way of dwelling”¹⁷³ could be the basis for a new culture of dwelling, according to the author. Teige’s difference relies not on the possible inspirations architects might extract from collective households when designing minimum dwellings; in fact, this model is already indivisible from his conception of a socialist architecture. Other alternative designs resulting from an adaptation of the traditional household unit are thereby destined to fail in addressing the needs of the living-income earners, as their habits alienate those of bourgeois society. Teige thus criticizes the CIAM architects’ illusion of addressing the needs of the proletarians within a political system inadequately tailored for them. This illusion is to persist as long as “insufficient knowledge of relevant sociological and political aspects”¹⁷⁴ of the worker’s life remains embedded into the architectural practice.

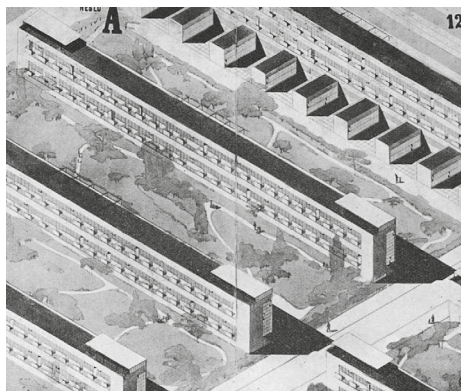
¹⁷⁰ Karel Teige. *The Minimum Dwelling* (1932). Translated by E. Dluhosch, 2002. p.329

¹⁷¹ Ibid

¹⁷² Ibid, p.299

¹⁷³ Ibid, p.300

¹⁷⁴ Ibid, p.335



First prize in competition of municipal Prague for conceptual proposals for houses with small apartments. The Minimum Dwelling, 1932

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