

WHERE THERE IS A HOUSE THERE IS A WAGON. RAILWAY COMPARTMENTS AND PRIVATE DOMESTIC INTERIORS: THE PLACES OF MODERN MAN

ROCÍO ROBLES TARDÍO | UNIVERSIDAD COMPLUTENSE DE MADRID (ESPAÑA)

I

Railways offered the perfect image of the regained planet by man thanks to the tools that the industrial revolution gave him. As railways achieved velocity, they also wanted to improve their habitability conditions and so put a very comfortable means of transport at travellers' disposal. The model that they took to carry out this task was the domestic arrangements. Quickly the spatial and ornamental interferences between wagons and housings got mutual. Ones gave the ornamental patron, the others that of the practical and functional spatial organization.

In this paper we want to show from the point of view of the architecture and the decorative solutions when and why in the second half of the nineteenth century the equality between travelling and dwelling was achieved and even continued in the first third of the twentieth century. One of the arguments to this analysis is the coincidence in time of the theoretical formulation of the modern house and the electrification of railways at the end of the nineteenth century.

II. TRAINS AND COMFORT

The combination of the terms «railway» and «pleasure» replayed to an advertising formula more than to reality. The first *trains de plaisir* in France started in 1847 but soon users realized that this enounced was a contradiction. This pleasure was questioned from the first moment: these journeys showed an inhuman phenomenon of hordes (a great crowd of people) into wagons and waiting in the docks. There was a timetable to arrivals and departures, so even time for pleasure was prefixed. Pleasure, that of journeys or destinations, was replaced for the concepts of comfort, exactness and security. Poster designers and railway engineers gave well account of that with advertisings and with the continuously increase of the accommodation conditions on the wagons. These concepts became the three rules that travellers demanded to their journeys and owners required to theirs houses. Railway companies worked to make that comfort was a quality inherent to trains. The traveller comfort during the journeys, the progressive improvement of the services that they offered on board and the accomplishment of the timetable were theirs duties and obligations. In France, after the social revolutions of 1830 and 1848, Gustave Flaubert declared that comfort was the most valued modern discovery¹, and very quickly bourgeois class appropriated it as a feature of its social class definition. Comfort was joined with pleasant and the

¹ Gustave Flaubert. *Dictionnaire des idées reçues*, s. I., Éditions Mille et une nuits, 2000 [1847c], p. 24: «Confortable: Précieuse découverte moderne».

wakening of senses to watch and touch, that is, was linked to the organization of the spaces where man developed his life and the particular decoration of them. That same comfort, elevated to its maximum expression and exhaustion, let free way to luxury. In this sense railway continued reflecting the social class divisions and even accentuated them in view of the different degrees of conveniences and services that wagons put at users' disposal. Trains and houses revealed that in this time each social class had its own kind of compartment and housing.

Exactness, comfort and velocity became the preferred adjectives in the 1920s for being the most directly signs of technological progress. They were not only used in the scope of railways but also in that of housing, sports, economy or leisure. Comfort, precision and security were the adjectives that the SCNF chose as slogan because they were the better to qualify its enterprise policy. The French government identified itself with these conquests that had made possible its arrangement as nation.

III. HABITACLES FOR LONG DISTANCE JOURNEYS

Gradually travels got longer the list of destinations was also more extensive. The quality of mobility inherent to trains demanded that journeys did not stop when night comes. For this reason railways became cities on wheels running twenty four hours a day. With the assistance of technology and art, and due to its new condition of city, companies attained that travellers could have breakfast, lunch and dinner on board, also to read the newspaper, talk friendly with others passengers in the wagon-salon, enjoy the landscape and sleep in wagons-lit. Even some trains were equipped with wagons-gym and wagons-chapel, as the Transiberian was. They wanted that international and intercontinental travels by train became a sort of stays or peculiar holydays to passengers and with the goal of making it possible trains must be arranged with the best technical and ornamental solutions.

In order to manage long distance travels engineers proposed wagons in which were combined the worthiest comfort conditions to travellers. The first known examples came from America and were designed around 1838. Different names linked to the wagons-lit evolution then followed: T. Woodruff, Burligton, Webster Wagner and finally, the most outstanding and renowned of all, Georges Mortimer Pullman, who lent his name to the definitive model in the 1860s. To the long wagons-lit with central corridor and bunks in both sides –a basic formula close to the solutions of field hospitals or the communal bedrooms in convents and monasteries– he added curtains and spatial division structures with which offer a guarantee of intimacy to travellers. Pullman's wagon-lit displayed the idea of the American democratic comfort; he exported it to England and in 1882 he founded the Pullman Palace Car Company in London. In other hand, his model was introduced in the continent by the Belgian engineer Georges Nagelmackers after a visit to the United States in 1869. Nagelmackers published the memory of his sojourn in 1870, which was titled *Project d'installation de wagons-lits sur les chemins de fer du continent* and in 1876 he set up the CIWL. One year later Nagelmackers must firm an economic alliance with the American William d'Alton Mann's Mann Boudoir Sleeping Car Company, who had devised a peculiar version of wagon-boudoir² but it did not find a well reception in the United States.

² A boudoir is a lady's private bedroom, sitting room or dressing room. Historically, the boudoir formed part of the private suite of rooms of a lady, for bathing and dressing, adjacent to her bedchamber, being the female equivalent of the male cabinet. In later periods, the

This deal made possible to redefine the wagon in the Pullman and Nagelmarckers' projects: in the morning it was an elegant living room and at night it was transformed in a warmed bedroom with cushioned beds on boudoirs, specially muffled against noise and well suspended in order to eliminate any oscillation or vibration produced during the journey. Nagelmackers wanted to build palaces and houses on rails. So at the end of 1881 he introduced the wagon-restaurant as a fundamental piece of the convoy and he gave a crucial step to make reality his purpose. It was no more necessary to stop since the company could provide travellers with delicious meals; in consequence the duration of travels was considerably reduced. In this way, railway was progressively defined in adequate manners addressed in particular to bourgeois newest exigencies. Customers wanted to feel that they participated in long journeys over the continent at the same time that they found the comfort and luxury that they enjoyed in their houses. And in 1886, the Orient-Express of the CIWL made its first journey from Paris to Vienna. Their desire was «to sleep in a compartment well warmed in winter and well ventilated in summer, stretch out the body ready for have a good sleep while train goes on to faraway stations»³. The artists echoed the companies' wishes to sell the economy of time and make productive the time during nights. Pullman and Nagelmarckers success was to get that travellers enjoined their time from lunch to dinner as they were at home. The general catalogue of the International Exhibition of Paris of 1900, in the section dedicated to railways, pointed this success: «Innovation was wonderful and practical. Sitting down in front of a table elegantly dressed and politely served, tasting without hurry hot meals cooked with care and having displayed in the other side of the window a funny running panorama, a crazy sight of cities, countries and forest. Is it not delightful to travel in this manner? And journeys, instead of being a torture that we want to conclude, do not become a pleasant experience that we want to prolong?»⁴

Descriptions of how these wagons were give us the clear idea that they were not very distant from the most exuberant ornamented dwellings or the most austere houses. The attention that users received served to mute any reminiscence to trains as noisy, uncomfortable and dirty machines: «With regard to the arrangement of wagons-lit they provide all the desired improvements: beds are set crossed according to a new and practical disposition; toilettes are close to each compartment, so they save to travellers the annoying morning walk through the corridor. Heating, lighting and ventilation give account of the maximum technical progress applied to means of transports... Further to add that the service in luxury railways is taken in the best manners, with an irreproachable exactness and probity. The personnel is chosen with an extreme care and conducted with strict discipline. This is one of the most appreciated qualities that the cosmopolitan customers of the CIWL valued of its magnificent administrative organization»⁵. If railway was a running house, travelling was not only a matter of arriving to

boudoir was used as a private drawing room, and was used for other activities, such as embroidery, or entertaining intimate acquaintances.

³ *Catalogue Général Officiel. Exposition Internationale Universelle de 1900. Tome Premier. Groupe I. Éducation et Enseignement. Classe I à 6*. Paris, Imprimeries Lemercier, 1900, s. p: «...dormir à l'aise dans un wagon bien chauffé l'hiver, bien aéré l'été, le corps étendue en un délassement réparateur, tandis que le train roulait vers des stations lointaines...».

⁴ *Ibid.*, s. p: «L'innovation était charmante et pratique. S'asseoir devant une table élégamment dressée et prestement servie, savourer sans hâte des mets chauds, préparés avec soin, et avoir sous les yeux par delà les glaces du wagon un amusant panorama mobile, la course éperdue des villages, des plaines et des bois: n'était-ce pas exquis de voyager ainsi, et les voyages, au lieu d'être une corvée qu'on est impatient d'accomplir, ne devenaient-ils pas un agrément qu'on aime à prolonger?».

⁵ *Ibid.*, s. p: «Quant à l'aménagement intérieur, il offre les perfectionnements désirables. ... les lits sont entrecroisés, suivant, une disposition nouvelle, commode et pratique. Des cabinets de toilette sont annexés à chaque compartiment, afin d'éviter aux voyageurs la promenade matinale à travers le couloir. Le chauffage, l'éclairage et la ventilation réalisent le maximum de progrès appliqué à l'industrie des transports... Ajoutez que le service, à bord des trains de luxe, est fait avec une correction, une exactitude et une probité absolument

destinations. Travellers gained the possibility to enjoy and profit the time expend in train without interruptions, just as they were reposing in theirs living-rooms.

IV. THE COMPARTMENT: MODEL FOR DWELLING

The functional minimum space that wagons-lit displayed –an anonymous room in constant circulation– revealed it as a place equated to a house. In the Universal Exhibition of 1867, celebrated in Paris, it was exhibited the comfort that railways had achieved. There the first class wagons were shown as equivalent to a luxury apartment in order to advertise it as a place consecrated to the intimate sensible experiences. This idea was carried out until paroxysm in the last decades in the nineteenth century and so, after the First World War, railways became one of the targets to the prodigal decoration *art deco* taste, what coincided with the summit of the luxury trains period. These ornamental manifestations and works were the prologue to the International Exhibition of Decorative and Industrial arts of Paris, in 1925: «We could see in the Exhibition of Paris wagons-lit and wagons-salon in which ours best decorators Ruhlmann, Francis Jourdain, Rapin, had made excellent works»⁶. These most well-known decorators of the moment were not only dedicated to make habitable train compartments with theirs furniture designs or wooden works. They applied there the same decorative solutions that they had used to furnish the private houses interiors. It was the real example that the dominant ornamental taste had expanded beyond the range of dwelling. A good example to illustrate this current was the case of the French writer Maurice Dekobra, who commanded to install a wagon into his apartment. He did not decorated one room on the order of a train but he placed a true wagon inside his house. «It could not be in a different manner if it was a matter regarding *La madone des sleeping's* author»⁷, his contemporaries said. It was also the time in which the Train Bleu (1924), the Golden Arrow –Flèche d'Or (1927) or Etoile du Nord (1927) appeared and became the most fashionable railways to the aristocratic and snob international customers in Europe.

In this way the formula of the 1920s was accomplished: who have a house have a wagon. We can check that artists took so far the task of familiarizing travellers with railways that the borders of both ended fused. In both cases, in houses and wagons, they managed to recreate the journey experience by joining the same degree of comfort. The propose of the nineteenth century was continued and updated in the manifestations based on the artistic doctrine of simplification and the rational decorative taste in the 1920s, which were the aesthetic principles that dominated the second machine era. Le Corbusier baptised like that the period and he mean that the problem of the modern man housing will be resolved when architects take resolutely and without any prejudice the compartment and the wagon as an architectural model and constructive solution⁸. «The sinister aspect of the

irréprochables. Le personnel est choisi avec un soin extrême et soumis à la plus stricte discipline. C'est une des qualités que la clientèle cosmopolite apprécie le plus dans l'excellente organisation administrative de la Compagnie Internationales des Wagons-Lits».

⁶ Vestier. «Les Arts», *Nord Magazine*, num. 36, décembre 1930, 3è. année, p. 43: «On a pu voir à l'Exposition Internationale des Arts Décoratifs de 1925 des wagons-lits et des wagons salons pour lesquels nos grands décorateurs, les Ruhlmann, les Francis Jourdain, les Rapin, avaient exécuté des ensembles remarquables».

⁷ Ibid., p. 43: «Il ne pouvait en être autrement de la part de l'auteur de *La Madone des Sleepings*».

⁸ Le Corbusier. «Rapport num. 1. Solutions de Principe», in CIAM. 5è. Congrès de Paris: «Logis et loisirs», du 28 juin au 2 juillet 1937; and «Aux étudiants des écoles d'Architecture. Construire des logis», in *La Charte d'Athènes. Suivi de Entretien avec les étudiants des écoles d'Architecture*, Paris, Éditions de Minuit, 1971 [1944], p. 141. When Le Corbusier spoke about a machinist civilization second era we must remember that, for him, the first one was the railway period in the nineteenth century, which began with the Stephenson's steam machine, such as he said in 1929 in the introduction to the first edition of *Le Corbusier et Pierre Jeanneret. Œuvre complète 1910-1929* (W. Boesiger and O. Stonorov, (eds.), cit in Le Corbusier. *Lettres à Auguste Perret*, Paris, Éditions du Linteau, 2002, p. 224.

machinery that first was so evident and frightening gradually disappeared, and with this disappearance, fear waned and was replaced by a feeling of security based on familiarity»⁹, said Wolfgang Schivelbusch. So, none could be afraid neither in their houses nor in trains.

The problems that architects of the Modern Movement posed to themselves was to devise the house of the working and middle class man, following for that the principles and laws of the industrial and working culture. These architects wanted to define a new rational and functional architecture, right in its purposes and according to the second machine era foundations. Le Corbusier formula: «a wagon is a twenty metre long house and a train is a city»¹⁰ marked the way to resolve this question in the most of the architectural proposals. From architecture they taught how to life in minimum spatial cells and to consider urbanism as an ensemble of wagons. Railways and the idea of circulation, as a value inherent to trains, remained in city and urban plans such as Arturo Soria's Linear city for Madrid (1890s), Le Corbusier Plan Voisin for Paris (1924), Hilbersheimer 'one million habitants city, in Germany (1927), Le Corbusier 'Unité d'habitation, for Marsella (1945-1954) and other examples of radial or garden cities. In brief, their middle class dwellings were wagons put one after another in a continuous vertical and horizontal growing. The values of economy and standard played a very important role to design houses and to plan cities. These values had been borrowed by politicians and engineers directly from the American industrial society: Taylorism, Fordism and gestural economy became the main references that conducted their projects. Standard applied to the scope of art in general and that of the decorative arts in particular claimed the elimination of all ornamental element and decorative detail that was not able to be submitted to a pattern, reduced to a model. So, and the same time they theorized on modern housing they increased the ruin of the aesthetic experience of the man in his home because rationalist architects and decorators pleaded for a sort of eviction, decorative austerity and unornamented interiors.

Sigfried Giedion, a Swiss architect and theorist on Architecture, in his treatise *Mechanization takes the command. A contribution to an anonymous history* (1948) analyzed the transformations of the ordinary life tools and household furniture as the logical evolution to get and extend comfort in man life following always the material and technological advances and the dominant taste applied to the mass-production methods. In order to get comfort engineers had to mind the latest studies on ergonomic and human health. Giedion analyzed the typologies and models of railway chairs, from the primitive wooden bench to the individual barber chair and the cushiony, upholstered and articulated armchairs, the apparition of headrest in seats, etc. Giedion wanted to expose with that work that technology had assumed the task of defining and improving constantly the bourgeois comfort, the economy and the functionality of utensils of daily life so in private or public places.

«At the end of the 1850s investigators were interested in the idea that railway chair, with its narrow space, must attain the feature of comfort, regularity and articulation as humanly possible as it was. They had not satisfied with “to adjust the seat to any wished position”, they wanted to make “folded seats to night travel until getting to a comfortable bunk”, that is to transform seats into beds without decreasing their quantity»¹¹.

⁹ Wolfgang Schivelbusch. *The railway journey. The industrialization of time and space in the 19th century*, Los Angeles, Berkeley, The University of California Press, 1986, p. 160.

¹⁰ Le Corbusier. *Sur les quatre routes. L'automobile. L'avion. Le bateau. Le chemin de fer. Comment aménager notre territoire*, Paris, La Fondation Le Corbusier, Éditions Denöel, 1970, p. 118: «Le problème s'énonce: un wagon est une maison de vingt mètres de long, et le train est un village».

¹¹ Sigfried Giedion. *La mecanización toma el mando*, Barcelona, Gustavo Gili, 1978 [1943], p. 453: «Al finalizar la década de 1850, pareció invadir a los inventores la idea de que el asiento del ferrocarril, con su angosto espacio, debía alcanzar unas características tan

Giedion contributed with his study to explain with historical and iconographic arguments the problem posed by architects in the 1920s: the modern man housing. Giedion justified the principle of the reciprocal influence of modern houses and wagons by their practical spatial organization and their equivalent decorative programme according to the formula of the patented piece of furniture, that is, the piece of furniture reduced to model in order to be mass-produced. Giedion made what Le Corbusier and Ozenfant proposed in his manifesto *Après le Cubisme* (1918) and in their review *L'Esprit Nouveau* (1920-1924), and what German architects had promoted with the Werkbund since 1907: to dismiss the picturesque aspects in the means of transports and consider them as useful examples to know how to life in the planet. In brief, all they proposed to apply the engineers' lesson to the architectural practice.

«We sing, we describe, we paint modern objects, so we think we are modern and we are in touch with our time. Transatlantic and railway are painted retained only their picturesque, romantic or accidentally aspect. That is not the matter, not at all. In a transatlantic structure there is an organic beauty. We are indifferent to it but war teaches us something important: suddenly navy becomes the unexpected argument to renovate the subjects and the originality of the vision! »¹².

The traveller in the wagon was the essay of the man in his house, so at the end of 1920s this man ended travelling in wagons without furniture and almost without any artistic work, except the pictures holding in the compartments walls over the headrests or the landscape that he could still contemplate through the window. That running house on wheels contained also a wagon-restaurant and an independent kitchen, so no smell arrived at the wagons-lit. All the activities were there separated and the spaces were consciously isolated.

Giedion remembered some years later that modern architects had assumed in the 1st CIAM (1928) the task of looking for and thinking about housing as functional habitacles. Giedion enumerated then the conquests attained in steam boats, wagons-lit, wagons-restaurant and yacht cabins, what was also a manner to demonstrate that they had made some very important steps in their purposes. Architects had been able to fuse in all these places the necessary minimum space with its utilitarian functions¹³. The studies on spatial economy had been initiated by American engineers and applied mainly by housewives in their kitchens¹⁴, looking for its rational organization and logical distribution of furniture to cook in the best manner without wasting time. They used there the principles of Taylorism and the mechanization of the gesture. In Europe, in 1926, the German architect Margarithte Schütte-Lihotzky displayed her «Frankfurt kitchen model», which had been deduced from the kitchens of

confortables, tan regulables y tan convertibles como fuese humanamente posible. No satisfechos con “ajustar el asiento a cualquier posición deseada”, quisieron hacer “los asientos... regulables para el viaje nocturno, hasta formar una litera confortable”, es decir, transformar asientos en camas sin merma en la cantidad».

¹² Amadée Ozenfant and Le Corbusier. «Después del purismo (1918)», in Ozenfant/Le Corbusier. *Acerca del purismo. Escritos. 1918-1926*, Madrid, El Croquis, cit., p. 24: «Se canta, se describe, se pintan objetos modernos; así se cree ser moderno y entrar en contacto con su época. Se pintan transatlánticos, vagones, trenes, reteniendo solamente el lado pintoresco, romántico, accidental. No se trata de esto, en absoluto. En la estructura de un transatlántico hay una belleza orgánica; somos indiferentes a ella; pero la guerra nos sirve par algo, ¡de repente, los buques de guerra se convierten instantáneamente en el argumento inesperado de la “renovación del tema” y de la “originalidad de la visión”!».

¹³ Siegfried Giedion. «Le problème du luxe dans l'architecture moderne. À propos d'une nouvelle construction à Garches de Le Corbusier et Pierre Jeanneret», *Cahiers d'Art*, num. 5-6, 3è. année, 1928, p. 254.

¹⁴ Catherine Beecher. *Treatise on Domestic Economy, For the Use of Young Ladies at Home and at School* (1841) and Christine Frederick. *The New Housekeeping. Efficiency Studies in Home Management* (1913). References quoted in Mercedes Valdivieso. «La aportación de la Bauhaus a la innovación del espacio doméstico: la “casa modelo” Haus am Horn (1923)», in *Jornadas internacionales Espais interiors. Casa i art (des del segle XVIII al XXI)*, 26-28 gener 2006, Universitat de Barcelona, pp. 8-9.

wagons-restaurant. This was a perfect example where the requirements of functionality and modern habitability harmonized with simple ornamental furniture. So, in Giedion architectural and aesthetic theory as in Le Corbusier or Robert Mallet-Stevens' ones, the wagon became the reference for houses where working man expends his time. Mallet-Stevens pointed that «housings, public buildings, workingman houses and the richest villas will be design in the future with the same “spirit” that factories are built»¹⁵. Further, Le Corbusier and Walter Gropius spoken from their own experience when in 1927 they pronounced their comic and terrible proposals of house minimum:

«We must operate against the old house that useless the space... It is necessary to rectify the dimensions of windows and doors; wagons and limousines give us the proof that man can pass by the narrowest places and distance can be calculated in square centimetre... As building have quadrupled its price it is obligatory to reduce at half the old architectonic pretensions and reduce from the half the volume of the house»¹⁶.

Le Corbusier adopted wagons as model for houses with some objections and nuances. The architect tried to eliminate in his projects all that could recall the nineteenth century. He disliked railways because they had being poetized in the romantic period, they had stopped being a terrify machine to become a «machine to dream» for travellers. But, by other hand, Le Corbusier recognized trains as model by their functional and spatial efficacy: «L. C., 1922. House for artist... It is necessary to pose clearly the problem, to decide the needs-type of a house, to resolve the question in the same manner that wagons and tools are been defined, etc.»¹⁷. From wagons he picked the solutions for long horizontal windows *–fenêtres en longueur–* to assure the direct lighting in his houses and also to lighten the perimeter walls. Le Corbusier dogmatized about the incidence of railway engineering in the definition of the modern house from a theoretical point of view, but Gropius made it from his own practical experience, since he designed two diesel locomotives to the Prussian railways in 1913 and, in 1930, he worked to the German motor company Adler.

In this situation the dignity of houses was reduced to the notion of cell and receptacle. Architects assumed that at the same time they conceived a useful house-type they devised a new workingman type, the perfect owner for their houses without any material or affective necessity. «The time to build the smallest habitable cell (the workingman house) has just arrived»¹⁸, affirmed Giedion in 1928, the year of the 1st CIAM. With this cell as formal and functional solution, Adolf Loos' article «Ornament and punishment» (1898) became the artistic credo to artists, architects and decorators that defended the purist, hygienist and rationalist aesthetic theories. To them luxury and ornament had no more raison to exist in a mechanized life submitted to standard and economy laws¹⁹.

¹⁵ cit. in Laurence Benaim. *Marie Laure de Noailles. La vicomtesse du bizarre*, Paris, Livre de poche, 2003, p. 161: «Les maisons de rapport, les édifices publics, les habitations ouvrières, les plus riches villas seront dans l'avenir conçus avec le même esprit que les usines».

¹⁶ Le Corbusier. «Casas en serie», *Hacia una arquitectura*, Buenos Aires, Editorial Poseidón, 1965 [1924], p. 200: «Hay que actuar contra la vieja casa que hacía mal uso del espacio... Hay que rectificar las dimensiones de las ventanas y las puertas; los vagones y las limusinas nos han probado que el hombre puede pasar por lugares más restringidos y que se puede calcular la distancia por centímetros cuadrados... Como el precio de la construcción se ha cuadruplicado, hay que reducir a la mitad las antiguas pretensiones arquitectónicas, y de la mitad para abajo la masa de las casas».

¹⁷ Ibid., p. 198: «L. C. 1922. Casa de artista: ... Hay que presentarse claramente el problema, determinar las necesidades-tipo de una vivienda, resolver la cuestión como se han resuelto los vagones, las herramientas, etc.».

¹⁸ Sigfried Giedion. «Le problème du luxe dans l'architecture moderne. À propos d'une nouvelle construction à Garches de Le Corbusier et Pierre Jeanneret», cit., p. 254: «Le moment est venue de créer même la plus petite cellule d'habitation (maison ouvrière)».

¹⁹ Vid. Adolf Loos. «Moda de señora» (1898), in *Escritos I (1897-1909)*, Madrid, Editorial El Croquis, 1993, p. 144.

That was also the Marcel Breuer aesthetic ideology which he displayed in his pieces of furniture as the aluminium Wassily chair or in all the works he made such in the Bauhaus at Dessau (1925-1929) as in collaboration with the Finnish decorator and architect Alvar Aalto and the German Alfred Roth: the Piscator's house, in Berlin(1927); the apartment-type in Zurich (1932) or the Harnishmacher house, in Wiesbaden (1932).

Le Corbusier projected and built housing in which art had no more place, among others reasons because he reduced the dimension of the workingman houses and he narrowed the width of corridors and doors, so no picture, sculpture or big piece of furniture could come into then. Besides, perimeter walls disappeared in its upper half to become a long wall-window, and the lower half was occupied with shelves and bookcases with sliding doors in order to hide what these stands contained, like it happened in the Beistegui apartment, in Paris (1930). Too, the lack of ornament made that the relation between architecture and industrial works was closer. When Le Corbusier pointed that a house is a machine to life he minded that machines surfaces must be even, cold and polished, and this was one of his arguments to refuse all superfluous ornament or detail on houses. He considered the house as a working space, as the prolonged space of factories or means of transport where man expends his days. «An exact, quick and economic circulation is the key of the contemporary architecture. The concise tasks of the daily life require different places, which minimum capacity can be fixed with much precision. To each task corresponds a minimum-type, standard, necessary and sufficient capacity (human scale)»²⁰. In 1929, the main matter of the 2nd CIAM, celebrated in Frankfurt, was the irresolute question of the house minimum. That year Le Corbusier had declared his idea about household life: «What household life is? It is to do concise, constant and successive chores. One, two, three or four persons move to carry out regular actions, renewed each day. So, definitively it is a problem of circulation»²¹. And circulation was also the value in which Wolfgang Schivelbush resumed the nineteenth century's preoccupation: the conquest and mastery of space and time²². So circulation became the best concept to qualify the railway century.

If artists worked making up locomotives to offer to travellers familiar places, «to empty» the interiors of the bourgeois apartments was the slogan that pronounced the most important decorators at the end of the 1920s. In France Jean-Michel Frank became the «desolater» of the decadent aristocracy domestic decoration: «Put out, put out always. The latest rage in elegance is elimination»²³. Frank was to housing decoration what Coco Chanel and her «look of poor woman» to fashion: «Austerity, this is the first synonym of Frank manner»²⁴. He worked to the Viscounts of Noailles, Eugenia Errazuriz, Pierre David-Weill or Georges Henri Rivière for exemple. Getting elegance, luxury and delight of senses required depuration and cleanliness. If coal had infected the urban centres

²⁰ Le Corbusier y Pierre Jeanneret. «Analyse des éléments fondamentaux du problème de la maison "minimum"», *Grand'Route*, num. 1, mars 1930, p. 28: «L'exploitation domestique consiste en une suite régulière de fonctions précises. La suite régulière de ces fonctions constitue un phénomène de circulation. La circulation exacte, économe, rapide, est à la clef de l'architecture contemporaine. Les fonctions précises de la vie domestique exigent divers espaces dont la contenance minimum peut être fixée avec assez de précision; à chaque fonction, il faut une contenance minimum type, standard, nécessaire et suffisante (échelle humaine)».

²¹ Le Corbusier. «Économie domestique et construction économique», communication au 4^e congrès de l'Organisation scientifique du travail, Paris, 19-23 juin 1929, manuscrit conservé at the Fondation Le Corbusier de Paris, cit. in cat. *Charlotte Perriand*, Paris, Centre Georges Pompidou, 2005, p. 28: «Qu'est-ce que la vie domestique? La réalisation de fonctions précises, constantes, successives. Une, deux, trois, quatre personnes se déplacent, accomplissant des fonctions régulières, renouvelées chaque jour. À la base donc, un problème de circulation».

²² Wolfgang Schivelbush. *The railway journey. The industrialization of time and space in the 19th century*, cit., p. 194.

²³ Laurence Benaïm. *Marie Laure de Noailles. La vizcomtesse du bizarre*, cit., p. 149: «Jetez, jetez toujours. La dernière élégance c'est l'élimination».

²⁴ François Baudot. *Jean-Michel Frank*, Paris, Editions Assouline, 1998, pp. 10-11: «Dépouillement: c'est le premier synonyme du style Frank... Le Beau, c'est avant tout un bon rapport de proportions...».

with its black leprosy all along the nineteenth century, miraculously the first sign of renaissance appeared with the soft coal –bituminous coal– and the electricity, the best medicines to cure all the nineteenth-century illness and manias: «This simple technical transformation will revolutionized the iron urbanism. The landscape of the purgatory will disappear. Black hands, dirty faces, black fronts, black cars, black suitcases, black pavements, stench mixed with sulfur will be only a souvenir»²⁵. For Le Corbusier and the artists joined to the purist ideology, electricity and lime and mathematical laws was considered as a vital and necessary question for the survival and regeneration of Architecture. For this, we can affirm that the elimination of smoke and steam from the landscape coincided with the exclusion of the superfluous ornament in the interiors of the houses and wagons because they followed the current decorative principles of that moment.

V. LIVING IN A WAGON

The complete equated between wagons and houses arrived to its summit in the scope of art when decorators, artists and architects resolved to eliminate trains according to a cultural, aesthetic or political programme. That was what happened in 1937, with a pair of posters made by Hein Neuner to the German national railway which slogan was «the railway travel comfort». These posters resumed graphically and propagandistically the work carried out by companies, artists and politicians over one hundred years. These were two steps more in the course to aesthetic railways in order to become them the paradigm of the modern man house. In these advertisings the features that railway possessed at the beginning of the nineteenth century were showed, profiled, nuanced, enlarged and poetized there. So, any concept did not stand out for its novelty, on the contrary, the posters were the resume of all them.

One of these advertising illustrated that comfort had attained its maximum material and conceptual degree. To arrive at this point Neuner erased the train image and confirmed that railway compartments were private living-rooms. He painted a wagon as a salon and vice-versa by reducing both places at their minimum expression. Neuner submitted the wagon to a radical process of emptiness. There are not walls and the wagon travels suspended in rails that have been metamorphosed into a carpet. The journey that German railways proposed has annulated also the notion of real time and space. This is a journey in a wagon without walls or windows, without landscape and so without any possibility to display any aesthetic experience, such as it had happened when art was evicted (dismissed) from housings. The characters of this essential domestic interior are a smiling and dressed-up couple. She is a cheerful and nonchalant woman; he is a talkative handsome man with a cigar in one hand and a newspaper in the other. Jules Janin had pointed in 1847 that travelling consisted in reading the newspaper and smoking a cigarette²⁶, actions specially linked to the range of private life too.

The other poster shows another couple. In this case there is neither a compartment structure but just a window to limit the wagon as place where dreaming is not only possible but wished. A bunch of grapes appears on a

²⁵ Le Corbusier. *Sur les quatre routes. L'automobile. L'avion. Le bateau. Le chemin de fer. Comment aménager notre territoire*, Paris, La Fondation Le Corbusier, Éditions Denöel, 1970 [1941], p. 112: «Cette simple transformation technique révolutionnera l'urbanisme du fer. Le paysage de purgatoire s'effacera. Mains noires, visages salis, le paysage de purgatoire s'effacera. Mains noires, visages salis, façades noires, voitures noires, bagages noirs, trottoirs noirs, puanteur mêlée se soufre, ne seront plus qu'un souvenir».

²⁶ Jules Janin. *Voyage de Paris à la mer. Description des villes, bourgs, villages et sites sur le parcours du chemin de fer et des bords de la Seine*. Orné d'un grand nombre de vignettes dessinées sur les lieux par Morel-Fatio et Daubigny. De quatre cartes et plans gravés par P. Tardieu, Paris, Ernest Bourdin, Éditeur, [1847?], p.6.

folding table and the woman hold a book that she does not read, instead she moves her dreamily sight towards the window. Jules Janin had also said that everyone could be poet travelling by train²⁷. And this unworried woman, one hundred years later, exemplified this idea by observing the landscape that velocity made to her. The characters of these two posters have undergone the change of public spaces into private when the complete equated between houses and wagons was attained. Personages keep the same behaviour and feel the same sensible experiences as they were at home. The wagon was the spatial and sensorial prolongation of the house, and so houses took part in a great circuit of spatial units in continuous circulation, what was the illustration of the rational idea of urbanism. Cities formed by wagons was what the Hungarian writer Lajos Zilahy described in *The city on wagons* (1944) and what the German painter George Grosz saw in Russia when he travelled from Berlin to Moscow after the First World War²⁸. In both cases wagons became the housing solution in countries impoverished and devastated by the war. In these cases the concept of comfortable life, civil well-being policy or delightful journeys remained very distant. A city on wagons implied the real possibility that man can be simplified, reduced, managed and considered as merchandise.

VI. A HAPPY PLANNING LIFE IN TRAINS

Trains, as housings and other places of transit, could have so many owners as journeys they accomplished. So they did not let to users develop any kind of property feeling. From a rationalistic point of view wagons were functional places that made possible to rest or to go comfortably from a geographical point to another. For this reason architects used the term house rather than that of home. More they looked for names such cell, capsule, box, machine, etc. because these revealed clearly their identification with abstract, useful and normative industrial and mechanical solutions.

Trains and houses acted as the laboratories where architects and decorators displayed their experiments to simplify art following industrial laws of mass-production. Or as Wolfgang Schivelbusch asserted, «the traveller was the object of an industrial process and all the upholstery in the world could not make him forget it»²⁹. Like the industrialization of travelling, housing also underwent a similar process of industrialization, of standardization, in order to present to man safety solutions to daily life and where technical progress brought out. The industrialization of the artistic process and manifestations have remained strongly ingrained until now in architectonic and decorative solutions and proposals –such minimal, radical rationalism- and all they are considered the summit of modern life, taste and comfort. On the contrary that was minded as a right manner to uniform, to homogenize people in order to offer it an easy and pleasant life. In changing modern man gave up his capacity to keep a direct and individual relation with art and so his aesthetic experience was controlled since machine economy law became the man ordinary life law.

²⁷ Ibid., p. 5: «La poésie du dix-neuvième siècle, il faut le dire, c'est la vapeur. Autrefois il n'avait que les vrais poètes pour s'aventurer, sur les ailes de l'imagination, dans les pays inconnus; aujourd'hui, sur les ailes de flamme de la vapeur, tout le monde est poète».

²⁸ George Grosz. *Un sí mayor y un no menor*, Madrid, Mario Munchik Editores, 1998, p. 56.

²⁹ Wolfgang Schivelbusch. *The railway journey. The industrialization of time and space in the 19th century*, cit., p. 73.