

# English translations

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les pour le stationnement ne suffisent plus à la demande énorme. Si les autorités sont intéressées à une solution qui écarterait la menace d'un désordre complet du trafic, ce qui n'est pas douteux, la question se pose s'il n'était pas possible d'intéresser des fonds publics au financement de parcs à plusieurs niveaux, ce qui tirerait double et triple profit de l'espace disponible.

Une solution du problème financier a été trouvée par la société coopérative pour la construction de garages „Carport“ à Lucerne. La société loue ou achète les terrains propres à la construction de garages permanents ou provisoires de divers modèles.

Si à la fin de cet article nous parlons d'une aide financière vers la construction de garages et de parcs par les fonds publics, nous n'avons point voulu formuler une demande; nous avons simplement voulu contribuer, avec des propositions et des exemples, à la discussion d'un problème général, et qui devient de jour en jour plus brûlant pour toute ville moderne.

## English translations

### A house with a suspended balcony (pages 2—5)

The house of Marcel Breuer stands on a meadow slope near a little wood in New Canaan, Connecticut, and was built by him in 1947/48. The body of the building, whose ground plan is a long rectangle, is composed of an upper storey 22 m long and 6 m broad, based on a ground storey set slightly backward, of 16 m length and 5 m width. The overhanging upper storey thus creates an impression of floating, weightless construction.

Another characteristic of the house is the balcony on the upper floor, 6 m long and 4 m wide, hung on steel cables and corresponding with the ground by a staircase, from which a glass door leads into the living- and dining-room behind it. This room is divided by a big chimney-piece separating the two living functions. The dining-room corresponds with the kitchen, situated in the centre of the building along with the other household rooms, — a characteristic sign for the organization of a household without a maid.

To evade as far as possible that the different rooms be stereotypically furnished according to their functions, the big bedroom to the south of the upper storey was furnished also as a study and music-room. The same principle was followed in planning the smaller bedroom next door, whose size allows additional living-room furniture. In this way, the architect wanted to evade, as far as possible, a rigid separation of the different living functions; these are, on the contrary, developed freely according to the character of the house.

The ground floor has a separate entrance on ground level, as well as a staircase leading to the rooms on the upper floor. Besides an atelier which can also be used as a guest room, and the store-rooms and cellar, the ground floor includes nursery and bedroom for the five-year-old son of the architect. It is mainly reserved for the child and for a free development of its activities.

Construction: the ground floor is masonry, the upper storey a wood frame construction. The cantilevers, projecting about 3 m on both ends of the building, are supported by the longitudinal walls, reinforced by diagonal sheathing. The floors of the ground storey are of concrete, on the upper floor of wooden planking. The inner rooms all have plywood wainscoting, painted white, excepting the ceiling of the living- and dining-room, which was left natural wood. The white painting dominates everywhere, interrupted only by single accents of intense colouring on some walls and doors. The northern wall of the living-room, for example, is a cobalt blue, as well as the low partition between dining-room and landing. Of the four walls in the main bedroom, one is white, one cobalt blue, one dark brown and one grey, while the three inner doors to the bedrooms and bath are cadmium yellow, cobalt blue and chinese red.

All the furniture was designed by the architect.

Total building costs: 17 500 Dollars.

### House of an architect in the woods (pages 6—9)

This house was built for a family of two adults and three children, between 1946 and 1947, that is, at a moment when building materials and furnishings were scarce. The building site had been chosen on a rough piece of land in forest surroundings, on an estate of about 5 acres. Part of the main building was constructed on a sloping site, so that space for atelier rooms could be provided in the basement without great additional expense.

The ground plan is composed of two oblong areas joined together in the shape of a „T“, that of the main building 23 m long and 7 m deep, that of the garage building and porch measuring 12 m by 8 m. The two building blocks are connected by the porch, which is 2 m broad, and which is continued through the main entrance by a sort of corridor leading across the living-room and terminating in the flower garden on the other side of the building.

The possibility of opening the living- and dining-room to the north as well as to the south by large glass sliding doors creates a lofty, spacious atmosphere. The natural wind shelter of the trees around the house has permitted to insert two window walls opposite each other, in the whole height and width of the room. The kitchen, which has a private entrance, is separated from the dining-room by wall closets which can be attained from both sides by wooden and glass sliding doors.

The children's rooms, including three bedrooms and one play-room and nursery, are situated on the western side of the house and also have a separate entrance. Two bathrooms are provided in the centre of the building. Underneath the children's rooms are the atelier rooms of the architect, which can be entered through the house as well as by a separate door.

Construction: The foundation is of masonry, the floors are of reinforced concrete. The upper storey is a wood frame construction. The outer walls of the upper storey are painted a bluish grey. All the window-frames are white, excepting the two large glass sliding doors in the living-room, whose frames are painted red. The ceilings have a white „acoustic“ plaster coating. The walls of the main rooms have pinewood wainscoting treated with wax, the other walls are of plain wood or coated with light ocre plaster.

All the furniture was designed by the architect himself.

### Steel frame house on ground level (pages 10—12)

The building-site of this house, which measures about 3000 m<sup>2</sup>, was situated in a walnut grove, on a level stretch of land in San Fernando Valley, California. The position of the house was chosen according to the site where it was built, so that the main rooms have a full view of the beautiful trees and other plants of the grove.

Besides the usual necessary bed- and living-rooms, the owners of the house wanted a hall where a large gambling-table could be placed, and which was to communicate with the living- and dining-room as well as with a bar serving the three rooms; further, room for a future second bedroom, and a small green-house near the garage or the service-room.

The ground plan of the house, which measures 21 m 60 total length and 7 m 20 width, was developed on a quadratic screen of 3 m 60 mesh width. The dining-room, kitchen, green-house, bedroom and garage are all 3.60 wide. Twice the same measure gives the length of the living-room and of the gambling hall. This proportion was abandoned only for the partitions separating the entrance hall from the living-room on one side, from the bedroom wing on the other.

The outer walls of the house were coated with white plaster, the inner walls and partitions partly have plywood wainscoting, partly also plaster coating. The floors of the main rooms are covered by wall-to-wall spanned carpeting, the kitchen floor has linoleum. The whole house is heated by radiation heating through the floor.

Three large sliding glass doors, measuring 2.40 m height and 3.60 width each, lead from the living-rooms to the garden. The window wall in the gambling room is also divided into three sections; the uppermost and the lower panes are fixed, the middle row can be opened. The garage is open on both sides, so as to leave free entrance and exit possibilities for two cars.

This building is the result of a consequently developed construction principle; its inner and outer structure have therefore attained a new, specific harmony of form. Its simplicity conveys an immediate relation to the natural surroundings, and the house is a living contradiction to the usual prejudice that in building the materials, structures and colours of the surrounding landscape must be adopted.

Built in 1946, building costs about 20 000 dollars.

### Plan for a holiday-house built in three periods (page 13)

The dominating horizontal lines of the landscape in the Jura are reproduced in the long stretch of the building. Natural quarry-stone walls and dark wooden partitions are structural elements very near to the nature of the surroundings.

The rooms are arranged in free order according to practical necessities. A large hall, open to air and sunshine, leads into the main building situated on a somewhat higher level, this is divided into dining-room, kitchen etc. and a study on an upper floor. The bedrooms are placed on the back side of the building.

Construction: back wall of quarry-stones; the opposite wall of bare concrete. The walls to the North and South are of timber-work. The roof plates are also of wood-work, covered with copper sheets. The window wall in the living-room has an iron frame.

### House for an artist couple in Ascona (pages 14—15)

The plan was to create studies and living-rooms for two active artists, including the possibility of entertaining on a small as well as on a larger scale. To this end, the music-room can be opened both into the dining-room (by a folding partition) and into the garden (by large sliding doors), so that it can be converted into a kind of open-air music-room, enclosed on three sides by solid walls, and on the fourth by shrubbery.

On the ground floor of the house are located the living-rooms and studies of the couple, a dining-room, library and entrance hall, and one smaller guest room, besides the usual kitchen, toilet etc. On the first floor are the apartments of the housekeeper, together with laundry and drying room. To the south-east, three double rooms with douche and kitchenette, which are for rent to holiday guests. All the principal rooms have transversal ventilation. The court-yard garden lies in the shade behind the two lodging tracts.

Construction: wood frame construction with outer walls of Durisol plates; these are readymade and need only be inserted into the wooden framework on the building ground. This method of construction is especially indicated when the building time at disposal is short; it also offers very good insulation against heat and cold, and is, besides all this, very inexpensive. The roof consists of corrugated Eternit of a light colour, over a layer of insulating plates.

The architectural composition is functionally developed out of the building structure and spatial disposition of the house.

### Plan for a house on the sea (pages 16—17)

The house was planned for a bachelor who has a plot that is practically all rock overlooking the Atlantic on the jagged north shore of Massachusetts. I wanted to merge the interior of the building with the natural land forms and still make a clean-cut contrast between the superstructure and the rugged site. The practical problem was to make the most of the wild, sweeping view while affording adequate protection both against the weather and also the sense of being exposed and isolated, which can easily overcome the most stolid soul in such a place.

In the captions the two floors of the house are often called the upper and the lower deck, for they are most un-storey-like in design concept. The floors are not a box set upon a box; they have more continuity and single consciousness — like the orchestra and mezzanine of a theatre. Physiologically they complement each other, the upper offering light, air and freedom, the lower offering solid shelter. The „cockpit“ is the snug, deep living-room.

Hugh Stubbins, Jr.

### Project for a holiday-house with a sculptor's atelier near Solduno (pages 18—19)

The site of this house is in the lower part of the Maggia valley, on the steep slope of a vineyard above Solduno. It is enclosed to the west by a wild river

boarded with bushes and trees, to the north by a chestnut forest. The project adopts the usual simple architecture in the Tessin, and combines the traditional stone masonry with modern constructive elements. The living-house and the atelier are independent from one another, in design as well as in height, and represent two separate units. The desklike roof, often used in the mountainous Tessin, provides a very simple manner to obtain cross ventilation of the whole building.

### House in Laufenburg (page 20)

This house will be built on ground gently sloping northward. The buildings contemplated by the construction project are one-family houses surrounded by gardens. In between runs an animated road. In a project of this kind it is important that the several buildings, different from one another, be made to harmonize together by using an uniform roof design, and so also in this plan the general roof type had to be adopted. The main formal elements of the house are a 2 m high wall to the north-west, whose sharp-cut severity is broken by the introduction of steps, and the asymmetric roof of interlocking tiles. Both elements are combined into an esthetic unit and compose the big outer shell which covers the living-rooms underneath and shelters them from rain, wind, noise and intruders. This outer shell as well as the garden are planned on a screen of 1.30 m width of mesh.

The house includes three bedrooms on the eastern side, which are protected against the hot summer sun by the overhanging roof, without being shut off from the winter sun. The small nursery has more light, so that it can be used later on as a study. Kitchen, dining-room, living-room and work-room are all combined into a single large room. Only the kitchen is partly separated from this main room by a glass wall and a transparent cupboard. In front of the living-room lies a large flower-bed, set on a 40 cm high wall made of fieldstones encased in cement. This presents an attempt to blend the garden and the living-room into one unit. The same idea is repeated for the bedrooms. The fieldstones were dug out of the excavations for the house.

The house is entered through a porch. Near the entrance are also the kitchen door and the cellar staircase, so that the house traffic is, as far as possible, gathered outside. The main part of the garden is a large lawn, open, like the house, to the wide surrounding meadow scattered with trees. Other elements composing the garden are trees, concrete pipes sunk in the ground for water-lilies, a sand pit for the children and a hedge towards the east to protect against onlookers.

The house is constructed with the materials used in this country, concrete for cellar walls, brick lined with sandstone for outer walls, wood for partition walls, roof construction and bedroom ceilings. The roof consists of broad-side cross-beams as gutter supporting the boarding, insulation and final covering. The house has central heating combined with a Dutch ceramic stove in the living-room. The price of construction is from 90 000 to 100 000 Swiss francs. The total volume is of about 900 cubic meters.

### Renovation of a gentlemen's dress store (page 21)

One of the essential points in planning this interior was the necessity to restrict the structural alterations to a certain minimum, dictated by the rather small building allowance.

Excepting the removal of some of the partitions, the ground plan was therefore left unchanged. The main wish of the proprietor was to have the furnishings executed in a sober and unobtrusive style.

The accessories department, which is placed at the entrance of the shop, leads into a large room reserved for the sale and display of men's dress. In furnishing this room, an attempt was made to omit the usual barrier between customer and vendor, formed by the shop counters.

The outer and inner walls of the shop, as well as the ceiling, were painted a reddish brown. The seats of the chairs were covered with black cushioning, the carpets are grey. All the showcases are of mahogany. To achieve a better concentration of the light on the objects for sale, the lighting is distributed in single lamps above the different departments.

The flooring of the show-windows, which is on a level about 60 cm higher than the floor of the room, is extended towards the interior of the shop, to connect the show-windows with the shop.

## Organic expressiveness in the construction of salesrooms (pages 22—23)

This shop is situated on a square, facing a very busy main street. To make the most of this advantage, the interior of the salesroom was created to be especially attractive. The very large room, 12 m long and about 5 m wide, is visible in its full size to the entering customer. A second ceiling suspended from above gives an interesting accent to the depth of the room, creating an impression of movement, depth and space by its undulating surface, as well as covering up the juts and irregularities in the old ceiling, whose black painting is still partly visible at the edges.

A straight rail of neon light leads from the entrance to the back of the room. Independent low-levelled partitions screen off the compartments necessary for the management of the store: a dressing cabin, an office furnished so as to serve as an occasional second dressing cabin, a toilet and landing to the cellar stairs.

## A shop without a window (pages 24—25)

Unlike the salesroom described on the preceding pages, this relatively small room (8 m × 4.30) could not be transformed into an esthetic unity by the architect. To reserve the largest possible space for the salesroom, it was necessary to assemble all the shelves in a separate storeroom. This room, measuring about 10 m square, is divided by a transversal shelf which can be attained from both sides, so that it was possible to spare enough room for a small office with adjoining toilet. The salesroom itself is furnished as a show-room and as a waitingroom in the front half, while the shop counter is moved to the background — in order to enable an undisturbed service — and turned so that the client stands with his back to the street.

The usual shop window has here been replaced by a large glass front, slightly receding from the street level, and permitting a complete view of the interior of the shop from the main street outside. At night, a shutter is let down to protect the glass front, while the illuminated shop-board and inscription remain visible.

## Room problem solved by a mirror (pages 26—27)

This shop demonstrates very well how an unhappily proportioned, long narrow room can be improved and entirely transformed in its aspect by purely optic means. The room is about 18 m long and 3.50 m broad; mirrors applied to the entire surface of the left wall create the illusion of greater volume. The salesroom is separated from the anteroom by a high narrow glass door. The display tables are set obliquely, a fact which helps to subdivide and to enliven the long rectangular room.

According to the costliness of the objects for sale, the architects employed especially rich materials for the interior decoration. The walls of the salesroom f. i., were covered with leather of a pale ocre colour; the salestables are of African mahogany. Turquoise upholstery on the chairs and coral carpets add a distinguished colour note. The room gains in structure and in splendor by a regular pattern of round lamps distributed on the ceiling. This dotted lighting system is especially suited for the presentation of jewels as it considerably increases the luminous effects of the stones.

## An old 1888 kitchen is turned into a modern shop (pages 28—30)

New Design Inc. was founded in 1947 by a group of three young women architects and interior architects. Their common idea was, that although most of the furniture and other objects they proposed to sell was already for sale in other stores of the city, New York customers would be attracted if they had the opportunity of seeing these same objects matched together in harmonious surroundings, and sold by people who took a personal interest in them.

Their arrangement of well-designed furniture and of other decorative objects soon proved to be a success. The type of clients interested were, in general, young married couples of more than average means, with a preference for modern style, needing perhaps a little advice, but with a definite dislike for showy furniture.

New Design Inc. found the rooms suiting its purpose in an old two-storey brownstone, whose interior was arranged for exhibition rooms and offices by interior architect Miss Noyes and by architect Rosenberg. The transformation of the large old 1888 kitchen was mainly a matter of surface alterations which cost little money. The walls received a new coating of gray and white plaster, and the new reddish-brown oak flooring was laid upon metal tubes over the old wooden floor.

The idea of setting up a furniture salesroom with the atmosphere of a home already lived in was very successful. New Design Inc. employs two designers and a number of auxiliary craftsmen for its interior planning service. The managers of the enterprise solve problems ranging from the construction of a bookshelf to the planning and decorating of a whole house. The firm endeavours to acquaint the public with all interesting new products of furniture industry and handicraft. It deals in articles of home industry as well as of foreign manufacture.

## Renovation of exhibition rooms for cars (page 31)

The „Neue Amag“ has had its salesrooms on the ground floor of the Hotel Bellerive au Lac for years. But the two large nude rooms of concrete construction were neither esthetically nor technically equipped to meet the demands of modern sales service.

Problem: In the given space of the two rooms, the following departments had to be provided for: Exhibition space for cars, motor boats and accessories; seats for the clients; a special room for contract signing; office rooms for the management and for the salespeople. The colour composition was to serve as a background for the dominating accents of the exposed objects.

Solution: The different room functions were screened off by several independent partitions of different materials without interrupting the unity of space of the two large rooms. The suspended ceiling and the transversal partitions are of canulated wood (stabilised with Alimil). For the longitudinal partitioning, Thermolux glass was used.

The ceilings, walls and partitions of wood were painted white. The floors, the wall splinting and the ceiling and walls of the cinema are black with the previous construction, painted a moss green, still partly visible. The carpets are red.

Screen lamps direct the light on the exposed cars.

The cinema and the consultation rooms were fitted out with Knoll and Aalto furniture.

Experiences: The sloping of the ceilings and the white colouring considerably diminished the light reflexes on the show-windows, occasioned by the reflecting surface of the lake. — The Thermolux glass allows the daylight to enter even into the far corner of the hind rooms. — In the office rooms, the white canulated wooden walls proved to have a disagreeable effect on the eyes.

## Cars, parks and garages (pages 32—43)

The general situation of traffic in our towns

In the middle ages, when most of those towns originated which now form the centre of our European cities, town-building conditions were very much diverse from our modern ones. On sites chosen for their possibilities of defence and from the point of view of trade concerns, the middle age communities sprung up; in the security of their fortification walls, houses, small work shops and gardens were built. There existed no problems concerning traffic in its modern sense. Streets were narrow; vehicles and pedestrians hardly ever came into collision. Time moved with a slow and easy rhythm, and towns were static centres of repose.

In the age of absolute monarchy, the idea of representativeness was at the back of town construction. The problems of traffic and circulation existed merely with regard to the representative centre around which the town crystallized.

The problems of construction for the modern civic centre are of an entirely different order. The decisive influence of mechanic power on our civilization, and the ensuing necessity of greatest possible saving of time demand an entirely new organization of the civic centre. To master modern traffic and its menacing

chaos, which is dictating as an independent power the development of streets and squares, has become the greatest difficulty for modern city planning. Thousands of people travel daily to and from their work in the city centre, where commercial establishments, banks, stores and hotels form the focus of today's traffic.

This development of modern traffic is continuously flooding and overflowing the old, insufficiently organized civic centres. This is becoming the cause of obstructions and of accidents, which necessarily call for preventive measures seeming, to all reasoning, to be absurd.

Circulation, pressing through narrow, mediaeval streets, has to be continually interrupted. Tunnels for underground railways are drilled into the earth underneath blocks of buildings, elevated railways run above the streets, and America is already planning the construction of thoroughfares on two or three different levels. These scenes of nearly apocalyptic chaos common to great overseas cities have not yet come true for our Swiss civic centres; but even here, the beginnings of similar development are clearly visible. The rate of accidents is rapidly increasing, thanks to the confusion of pedestrians, who are not used to obey traffic regulations, and of cycles, automobiles and street-cars. A great many cars are parked nearly all day along the curb, a fact which helps to block the already narrow streets.

It is of no use to ignore this rapid and necessary evolution. We have to lend an ear to facts. In the USA, every fourth citizen possesses a car. In our country, this quote has already arrived at the number 23 and is growing rapidly smaller.

## Timing of in-town traffic

The most animated traffic results from the daily journeying to and from work. From the point of view of an automobile driver, this rhythm means an ever-recurring search for a place to park his car. For many persons, this means a considerable loss of time every day. At noon, habitation quarters are obstructed by cars, and at night it is quite a problem to find the necessary garage; an inquiry made in Zurich in October 1948 showed that about one quarter of all automobiles are left outside at night. In all, three thousand cars parked on public ground were counted.

Besides the daily intern traffic between homes and working-places, there exists the extern traffic from town to town, occasioned by stock-market and exchange, and marking a weekly rhythm. Preventive methods:

1. Important thorough-fares must be freed as much as possible for circulation. Parking and stationing of cars must be prohibited, or at least reduced as much as possible. On the main thorough-fares, only short parking for entering and alighting, or for loading goods are to be allowed.
2. Wherever this is possible, street-car circulation should be removed from the main thorough-fares and replaced by bus-traffic, as long as public traffic cannot be removed altogether from the most overrun thorough-fares.
3. Main thorough-fares should be freed as much as possible from crossing traffic. This can be obtained by blocking cross-streets. (Bellerivestr., Zurich), or better still, by erecting „stoplines“.
4. Pedestrians are to obey strictly, as well as all vehicles, to the traffic regulations; red stop-light should mean a check for everyone.
5. Separate parks should be constructed for bicycles, clearly distinguished as such.
6. America proposes a thorough regulation of curb-parking, limiting if necessary the allowed parking-time to 30, 60 or 120 minutes, as well as forbidding loading and unloading of lorries on certain stretches.
7. The space available for curb-parking is in no way sufficient for the growing demand; off-street parking space must therefore be reserved, on squares, quiet by-streets, in courtyards. For every city quarter, such free parking space is absolutely necessary. This problem is nearly impossible to solve for most centres, every square yard of soil being highly overrated.
8. The next step towards a solution of the parking problem is construction

of off-street parks on an underground level. (The Union Square in San Francisco).

9. In the city quarters of many modern towns, high-level garages have been constructed. The different storeys of the building are attainable, according to the allotted space, by elevators or by ramps of different constructions. The most profitable size seems to be (in America) a garage which will house about 400 to 500 cars.
10. Besides these „enclosed garages“, USA is building open-deck garages on a large scale. These consist of 2—3 deck surfaces on supports with enclosing railings. The roof of the building is parking deck at the same time. The building expenses of such garages amount to about one quarter to one third of the building expenses of enclosed garages.
11. An interesting solution is found by parking on the roofs of stores, bank buildings and public buildings in the USA.
12. Single groups of American trade companies are running shopper's parking places financed by the company.
13. For habitation quarters, central garages are planned, where homeless cars, parked outside for the night at present, may be housed. These garages are to be spaced at intervals of about 1 km, that is, attainable on foot in about 5—7 minutes time.
14. Collecting garages for the extern traffic on the town borders do not seem advisable, as no traveller likes to leave his car miles away from his hotel and to travel into town by street-car with his luggage. Establishments on the town borders seem to be of importance especially in the function of repair garages.
15. For suburban quarters, boxes, single or in rows, seem to be most indicated. The proposition of a single garage box that can be sunk into the ground presents a solution to the recurring problem of garages in backyards and on territory borders.

## Mechanized garage systems

When parked at a direct angle, about 55 % of the garaging area at disposal can be fully exploited, that is, 55 % of 100 cars are at all times attainable; when parked at a 45 degree angle, only 45 % of the garaging area are exploited. If we calculate the enormous rent rate in the city quarters of our modern towns, it seems evident that new systems must be found which allow a more rational exploitation of the building area.

There exist already several devices of united elevating and shifting platform systems, combining vertical and horizontal transfer possibilities. For mechanized garages, the primordial problem seems to be to find the balance between building expenses and profit. The considerable additional expense involved in such buildings is justified only where the central position of the establishment and the ensuing high prices of soil demand that every square-yard be utilized, and where on the other hand the vicinity of city quarters secures a sufficient demand.

## Financial problems

It seems obvious that plain-ground parking-spaces are managed out of public means. But it is becoming more and more evident that the available parking area is grossly insufficient for the enormous demand. As the authorities are undoubtedly interested in a solution of this problem, which would prevent the menacing chaos and disorder of traffic, we may ask the question if public means could not be invested in the construction of two- and three-level parking areas, which would considerably increase the available parking space. As a solution of financial problems, we must mention the Lucerne cooperative society for garage constructions „Carport“. This cooperative buys or rents the suited land, as near at hand as possible, and constructs permanent or transferable buildings of diverse systems which may be rented by the members of the society.

If we have spoken, in the last part of this article, of the possibilities of financial help towards the construction of parking area and of garages out of public means, this must not be regarded as a demand; it is meant to be a mere suggestion, including concrete plans and examples, towards a solution of this extensive problem, whose importance is steadily growing for every modern town.