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HEALTH-AFFIRMING LANDSCAPES.  
SELECTED ARCHITECTURAL ASPECTS  
OF RESIDENTIAL COMPLEX  
OF JEAN RENAUDIE

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MIEJSCA PROMOCJI ZDROWIA W MIEŚCIE.  
WYBRANE ASPEKTY ARCHITEKTONICZNE  
NA PRZYKŁADZIE ZABUDOWY MIESZKANIOWEJ  
JEAN'A RENAUDIE

**A b s t r a c t**

This paper touches upon the tradition and modernity in residential architecture and the concept of health affirming landscapes. What are the qualities the architecture must deliver to promote health and well-being? Some of the answers can be found in vast literature and research evidence. These answers can be coined into design recommendations. Although the traditional and vernacular architecture is a point of reference, there is still space for experiments and improvement. In the second part of this paper selected examples of XX century architectural experiments of Jean Renaudie and Renee Gailhoustet are critically reviewed. Possible reasons why their work is spurring reviving interest today are examined.

*Keywords: health affirming landscapes, architectural design, residential architecture, Jean Renaudie, architectural experiments*

**S t r e s z c z e n i e**

Artykuł przedstawia kwestie związane z tradycją i nowoczesnością w architekturze mieszkaniowej w relacji do koncepcji terapeutycznych krajobrazów sprzyjających zdrowiu. Jakie cechy musi zapewniać architektura, aby promować zdrowie i dobre samopoczucie? Niektóre odpowiedzi można znaleźć w obszernej literaturze przedmiotu i badaniach naukowych. Odpowiedzi te można ująć w zalecenia projektowe. Chociaż tradycyjna i wernakularna architektura stanowi punkt odniesienia, wydaje się jednak, że wciąż jest miejsce na eksperymenty i ulepszenia. W drugiej części tego artykułu dokonano krytycznego przeglądu wybranych przykładów eksperymentów architektonicznych XX wieku – projektów Jean Renaudie i Renee Gailhoustet. Szczególna uwaga zwrócono na powody, dla których ich praca wciąż budzi niegasnące zainteresowanie.

*Słowa kluczowe: krajobrazy sprzyjające zdrowiu, projektowanie architektoniczne, architektura mieszkaniowa, Jean Renaudie, eksperymenty architektoniczne*

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## 1. INTRODUCTION

Today, the most deadly of all human enemies are stress-related diseases – obesity, hypertension, and diabetes. The Charter of Athens was the planners' response to deplorable conditions of XIX century overcrowded cities. However, the medicine proved to be worse than the disease in some cases. The living conditions of large scale urban residential districts were improved in terms of hygiene (running water, spacious interiors, elevators, etc.) but the social life was destroyed. Then came voices like Jane Jacobs<sup>2</sup> and William Whyte<sup>3</sup>, who proclaimed the right to the city and vivid social life of small urban spaces. At the same time in France, the bankruptcy of *Grandes Ensembles* was obvious to Jean Renaudie, a visionary architect who in times of large scale residential project was brave enough to propose the multifunctional urban complexes in human scale. Together with René Gailhoustet, he left an important legacy, which to this day testify to good old rules of vernacular urban architecture. Even though his houses were cast in brutalism era concrete and expressionist crystal-like mountain forms, they are human-friendly. In this paper, we explore the intricate relations between tradition and modernity concerning the concept of health affirming places. The work of Jean Renaudie is discussed as a good example of health affirming everyday place where Environmental and Architectural qualities go in pair with social sustainability.

## 2. HEALTH AFFIRMING PLACES DEPEND ON URBANISM AND ARCHITECTURE

First, we should specify how to discern the health-affirming places from all other places. According to the definition *Urban health-affirming landscapes are everyday places which reunite the qualities of therapeutic landscapes to influence people physical, mental and spiritual healing in the urbanized environment*<sup>4</sup>.

The next good question is what are the qualities of therapeutic landscapes? Wilbert Gesler defined *therapeutic landscapes* as places where *physical and built environments, social conditions and human perceptions combine to produce an atmosphere which is conducive to healing*<sup>5</sup>. Therefore, not only physical qualities of the environment matter but the social infrastructure of perceived friendliness and well-being. The built environment seems slightly easier to construct and control, the human perceptions are more difficult to influence as they are elusive and impossible to measure with standardized mechanical tools and require subjective opinion evaluation scales.

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<sup>2</sup> Jacobs J., *The Death and Life of Great American Cities*, Random House, New York 1961, Polish edition: *Śmierć i życie wielkich miast Ameryki*, Centrum Architektury, Warszawa 2014.

<sup>3</sup> Whyte W., *The Social Life of Small Urban Spaces*, The Conservation Foundation, 1980.

<sup>4</sup> Trojanowska M., Sas-Bojarska A., *Health-affirming everyday landscapes in sustainable city. Theories and tools*, Architecture Civil Engineering Environment Journal, 2018, Vol. 11, no. 3, pp. 41–52.

<sup>5</sup> Gesler W., *Therapeutic Landscapes: An evolving theme*, Health & Place, 2005, no. 11, pp. 295–297.

The vast literature on relations between human comfort and architecture delivers some answers about the Architectural qualities of health-promoting places. The friendliness of the human environment is one of the aspects of health promotion by architecture.

## 2.1. TRADITIONAL AND MODERN DESIGN

Lucien Kroll<sup>6</sup> in his notes on friendly architecture specifies that up to the modernist era the architecture each culture invented ecologically sound, poetic and expressive forms which represented nature, families, local powers, religion, etc. He emphasizes that today the functional form has become autistic, ecologically alienated, completely devoid of symbolism thus identical in all cultures.

According to Lucien Kroll, today the only means of action for the urbanist-architect are “humanism and low-tech”. He recommends height limit and “organic disorder of resident initiatives”.

Christopher Alexander’s coined his fifteen “fundamental properties” of beautiful architecture<sup>7</sup>. Although not each of those properties occurs in every beautiful object, many of these properties can be perceived in many beautiful buildings and objects. Those properties can be applied when designing physical and build environment of health-affirming everyday places.

Table 1. Source: Christopher Alexander<sup>8</sup>.

1. Levels of scale.	6. Good shape.	11. Roughness.
2. Strong centers.	7. Local symmetries.	12. Echoes.
3. Boundaries.	8. Deep interlock and ambiguity.	13. The Void.
4. Alternating repetition.	9. Contrast.	14. Simplicity and Inner Calm.
5. Positive space.	10. Gradients	15. Not-separateness.

Numerous research proved that one quality is typical of all health affirming places – the presence of nature. It is explained by the biophilia hypothesis<sup>9</sup> or inborn fascination by fractal composition, present in the living forms of plants and animals. People feel better after some time spent in contact with nature, therefore it is recommended to provide opportunities for such contact in architectural-urban design.

The legacy of Jean Renaudie is full of examples of architecture where we can see the implementation of all those recommendations into the design of residential complexes.

<sup>6</sup> Kroll L., *Friendly Architecture. What is Good Architecture?*, OASE, 2013, no. 90, pp. 28–31, <https://oasejournal.nl/en/Issues/90/FriendlyArchitecture> (access: 02.07.2019).

<sup>7</sup> Alexander Ch. (2004), *The Nature of Order: An Essay on the Art of Building and the Nature of the Universe*, Center for Environmental Structure, Berkeley 2005.

<sup>8</sup> *Ibidem*.

<sup>9</sup> Wilson E.O., *Biophilia*, Harvard University Press, Cambridge 1984.

### 3. THE HEALTH-AFFIRMING QUALITIES OF JEAN RENAUDIE AND RENEE GAILHOUSTET DESIGNS

Jean Renaudie (1925–1981) was an architect and urban designer, described by many as brutalist<sup>10</sup>. From 1958 to 1968 he worked together with Pierre Riboulet, Gérard Thurnauer and Jean-Louis Véret in Architectural office – Atelier de Montrouge, which they created together. In 1968, the partners have expressed contradictory opinions towards Renaudie ideas for new town Le Vaudreuil in Val-de-Reuil and thus he decided to leave the firm<sup>11</sup>. From that time on, he started to work on his own, often collaborating with Renee Gailhoustet who for some time was also his partner in private life.

The *magnum opus* of Jean Renaudie was the town center of Givors developed from 1980. Some of his projects were finished post mortem, after his sudden death in 1981:

- Einstein School, Ivry-sur-Seine, 1982
- Cite du Parc, Ivry-sur-Seine, 1983
- ZAC Villetaneuse, La Corneuve, 1985
- Ilot Voltaire, Ivry-sur-Seine, 1985

Reneé Gailhoustet, apart from work with Jean Renaudie, and after his death designed numerous high-raised social housing towers Raspail, Lénine, and Spinoza (1963–1970), and residential complex, located mainly in Ivry-sur-Seine and northern Paris suburbs. She worked as the architect-in-chief of the town, in charge of the master plan of the 105-hectare complex. Reneé Gailhoustet worked mostly on social housing, but also spent some time teaching at the university and wrote numerous books. In 1964, she founded her architectural practice. She considered herself an artisan, her architectural practice never grew larger than 7–8 employees<sup>12</sup>. That allowed her to differentiate the architectural forms of her projects and dedicate reasonable amounts of time to architectural details.

#### 3.1. URBANISM IS ARCHITECTURE

Jean Renaudie and Reneé Gailhoustet were opposed to the idea of zoning which emerged as a fruit of the Athens Charter. They were trying to find a more humane alternative to *grands ensembles*.

The housing complexes in Ivry-sur-Seine are incessantly sparking the interest of architects around the world. They are perceived as examples of architecture becoming urban in an era of large scale residential suburbs *grands ensembles*, which today are considered a catastrophe of architecture. They blur the limits of public and private space. Housing is inseparably mixed with other urban functions. It is important to understand that the counterpart to Renaudie urban

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<sup>10</sup> Chaljub B., *Les oeuvres des architectes Jean Renaudie et Renée Gailhoustet, 1958–1998. Théorie et pratique*, PhD thesis 2007, <https://octaviana.fr/document/134096258> (access: 02.07.2019).

<sup>11</sup> Benedicte Chaljoub made a hypothesis that Renaudie, in his sketches for development of Le Vaudreuil reached the “organic order” described by Wright where the part is integrated to give the impression of the whole. The unfeasible ideas which were criticized by his partners from ATM, were in fact, the starting point for his design for the town-center in Givors.

<sup>12</sup> Renee Gailhoustet explained it herself during the conference dedicated to a book written by Benedicte Chaljoub. That conference was filmed in Cité de l’Architecture et du Patrimoine, Paris 22 October of 2009. Available on-line: <https://vimeo.com/7834737> (access: 22.06.2019).

mountains were the *grands ensembles* large scale housing projects of repetitious prefabricated blocks of flat, often deprived of any other functions.

### 3.2. HUMANISM AND LOW-TECH

Jean Renaudie designed three complexes in collaboration with Gailhoustet which strike for their audacity: the buildings Danielle Casanova, Jeanne Hachette, and Jean-Baptiste Clément.



Ill. 1. Center of Ivry-sur-Seine, residential complex by Jean Renaudie and Renee Gailhoustet, photo: Monika Trojanowska

Today, their work can be interpreted in many ways. Their projects combine the modernist expression with the regionalism. The concrete mountains are rather low-tech, when it comes to materials and construction methods. They are also low-key, when it comes to structural integrity and simple plastic effects. This was not a timid urban complex but one striking with expressive diagonal motifs.

There were some differences between Renaudie and Gailhoustet's approach to design. The buildings designed by Renaudie can be distinguished by the creative complexity of their planar layout, while Gailhoustet seemed to have brought a more intense emphasis on their sections. Consequently, the Renaudie buildings can be perceived as labyrinths, while the connections between the various floors are often more simple. The multiplicity of triangles and sharp angles and complexity of public and private spaces contribute to the uniqueness of his design. On the contrary, Gailhoustet buildings have a simple, rational plan while their uniqueness results from multiple changes of levels<sup>13</sup>.

<sup>13</sup> <https://thefunambulist.net/architectural-projects/ivry-sur-seine-architectural-genius-renee-gailhoustet-jean-renaudie-paris-banlieues>



III. 2. Center of Ivry-sur-Seine, residential complex by Jean Renaudie and Renee Gailhoustet, photo: Monika Trojanowska

Bénédicte Chaljub makes the hypothesis that Renaudie revived the art of imitation of nature, which was typical for the architecture of the eighteenth century<sup>14</sup>. He organized repetitive cells in a pattern inspired by the microscopic scale of living cells. His design was influenced by scientific findings to organize social life in the new form of urbanization present in Metabolists, Structuralists and Brutalist architects. His work resembles the Mount-Saint Michelle or termite mounds.



Ill. 3. Center of Ivry-sur-Seine, residential complex by Jean Renaudie and Renee Gailhoustet, photo: Monika Trojanowska

Jean Renaudie expressed his point of view during one of the conferences<sup>15</sup> that architecture needs experiments to find new solutions to new problems. He was especially concerned with design of new schools which should be integrated with the surrounding environment of residential complexes to offer a place of education capable to convey new educational methodology<sup>16</sup>. He applied that concept in his designs of school in Ivry-sur-Seine and Cergy. He was well aware and warned that the separation of functions proclaimed by The Athens Charter would lead to the destruction of social life and social bonds<sup>17</sup>.

<sup>14</sup> Chaljub Bénédicte, *op. cit.*, pp.78–79.

<sup>15</sup> [http://jeanrenaudie.fr/wp-content/uploads/2016/10/colloque\\_1978.pdf](http://jeanrenaudie.fr/wp-content/uploads/2016/10/colloque_1978.pdf)

<sup>16</sup> *Ibidem.*

<sup>17</sup> *Ibidem.*



Ill. 4. Center of Ivry-sur-Seine, residential complex by Jean Renaudie and Renee Gailhoustet, photo: Monika Trojanowska

Therefore, during the era when the charter of Athens reigned, his designs seemed utopian and unfeasible to many. However, Renaudie, himself was too stubborn and convinced about his projects to give them up. He consistently searched for a scientific foundation for his proposals – both structural and sociological. His radical elements of complex design, social housing and co-property were forerunners of today’s multi-functional urban planning. The creation of meaningful social spaces was at the heart of the design. The social bonds that the buildings would encourage and the social use of spaces were the centers of attention of both designers<sup>18</sup>. The public spaces of complexes are meeting points for children, teenagers, and adults. Space is being simultaneously used by the residents and passers-by as a vivid urban space.

### 3.3. CONTACT WITH NATURE AND DAYLIGHT

The ground floor is a space where the street permeates with the building through either interior or exterior stairs or ramps. The multiple terraces and rooftops are covered with soil which allows lush vegetation including small and mid-size trees. There is a sharp contrast of concrete and breathing porosity of vivid greenery. Each apartment has both exterior and interior gardens with cultivable soil to facilitate inhabitants’ everyday contact with nature.

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<sup>18</sup> <https://centerfordiagonality.org/jean-renaudie/>

However, the limits between semi-public and private spaces, in particular, the gardens, are significantly blurred. The city is allowed to penetrate within the residential complex. The daylight is also very important. Fragmentation of the ground allows natural light to penetrate the lower floors. Each of the flats is airy and well-lit.

### 3.4. FIFTEEN “FUNDAMENTAL PROPERTIES” OF BEAUTIFUL ARCHITECTURE BY ALEXANDER

It would be interesting to assess the presence of fifteen “fundamental properties” of beautiful architecture in Jean Renaudie and Renee Gailhoustet residential complexes<sup>19</sup>. For this assessment, two complexes in the center of Ivry-Sur-Seine were chosen: Danielle Casanova and Jeanne Hachette. However, the similarity of those two complexes leads to similar answers in all categories. According to subjective assessment, all 15 “fundamental properties” were observed within those complexes.

Table 2. Source: Christopher Alexander<sup>20</sup>. Assessment performer by author.

“FUNDAMENTAL PROPERTIES” OF BEAUTIFUL ARCHITECTURE	Danielle Casanova and Jeanne Hachette
1. Levels of scale.	Present. The complex is a complicated form created by the repetition of triangles varying in scale
2. Strong centers.	Present Strong centers can be easily distinguished.
3. Boundaries.	Present The external boundaries of the complex are legible, although the public and private spaces are blurred.
4. Alternating repetition.	Present The multiplicity of sharp angles can be interpreted as alternating repetition
5. Positive space.	Present The interior corridors, plazas and residential interiors give the impression of positive space
6. Good shape.	Present
7. Local symmetries.	Present
8. Deep interlock and ambiguity.	Present This is the very essence of Jean Renaudie and Renee Gailhoustet’s design.
9. Contrast.	Present Rough concrete and lush, delicate greenery
10. Gradients	Present
11. Roughness.	Present Rough concrete gives the impression of roughness
12. Echoes.	Present

<sup>19</sup> Alexander Ch., *op. cit.*

<sup>20</sup> *Ibidem.*

"FUNDAMENTAL PROPERTIES" OF BEAUTIFUL ARCHITECTURE	Danielle Casanova and Jeanne Hachette
13. The Void.	Present The complicated Pattern
14. Simplicity and Inner Calm.	Present The plastic effects are simple.
15. Not-separateness.	Present It is not possible to remove any elements without destroying the entire composition

### 3.5. WHY JEAN RENAUDIE IS STILL SO IMPORTANT TODAY?

The reception of Jean Renaudie and Renee Gailhoustet's aesthetic is somehow ambiguous today. The opinions of the residents and neighbors often diverge. There are voices that the complex is ugly to some extent. On the other hand, many artists and architects appreciate the complexity and intricateness of the design. Today majority of inhabitants are members of "creative class" – young families of designers and architects<sup>21</sup>. The uniqueness of Jean Renaudie and Renee Gailhoustet's residential complexes strongly contrasts with the typical, repetitious, simplistic layout of social housing.



Ill. 5. Center of Ivry-sur-Seine, residential complex by Jean Renaudie and Renee Gailhoustet, photo: Monika Trojanowska

<sup>21</sup> <https://thefunambulist.net/architectural-projects/ivry-sur-seine-architectural-genius-renee-gailhoustet-jean-renaudie-paris-banlieues>

This led the gentrifying process exceeding the limits of the Paris municipality. The inhabitants who were interviewed during this study expressed their content with the design and social ambiance of the complexes. They were happy and had no plans for changing their address of residence. The advantages pronounced were: the abundant greenery, contact with nature, and a feeling of having their piece of the universe. Each flat is organized to enclose a private garden on the terrace or rooftop. Today, the residential complexes of Jean Renaudie and René Gailhoustet are perceived as a friendly place to live, with relatively high satisfaction of inhabitants.

#### 4. CONCLUSIONS

The housing complexes of Jean Renaudie and Renee Gailhoustet, which were built in the 1970s embody today's guidelines for a health-affirming urban landscape and a place to live. They offer urban density with multiple functions to cater to the majority of inhabitants' needs within the limits of pedestrian paths. The social spaces are full of life. The borders between the private and public spaces are blurred. Every apartment has a little garden. This architecture is full of surprising beauty. The residential complex astonishes with lots of hideaways and secret passages that blur the borders between buildings and greenery. Unfortunately, the work of Jean Renaudie and René Gailhoustet is still unknown to many young architects, although it was a great example of humanistic approach to build a city for people during the *grand ensembles* era.

The fact that those complexes are perceived as an ideal place to live by many, but still considered ugly by others brings attention to individual perception of health-affirming places. While therapeutic landscapes are beautiful in collective memory (natural landscapes, etc.), the quality of health-affirming places, created by humans, may be more difficult to appreciate. What would be inspiring and health-promoting by its beauty and complexity to some, could bring ambiguity and anxiety to others. The perception of health-affirming is related to the personal experience of beauty and is as individual as a variable. It may derive from individual upbringing, education and other culture-dependent factors which are not innate, but learned. That brings our attention to one of the major criticism of *grands ensembles* – the repetition of simplistic forms devoid of any details. There is no such thing as one form fits all when it comes to health-affirming places.

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