

# **Can Our New Cities Survive?**

\* Dr. Ugo Rossi 💿 Faculty of Architecture, Department of Architecture, University of Politecnico di Milano, Italy E-mail: ugo1.rossi@mail.polimi.it

# A B S T R A C T

The developmental growth of home-improving devices and equipment has ceaselessly progressed from the Industrial Revolution until the present day. From heating systems to lighting equipment and air conditioning, we have now reached the Smart house age. However, in order to be efficient, such a kind of home demands a new city: A Smart City, with devices, networks, and infrastructures that would be fundamental requisites for its functioning. That is why the ancient cities, on the way to becoming an inconvenience for the development of the brand-new ones, are going to find their place in a desert, in a "tabula rasa" devoid of relics, ruins, and debris of their history. This contribution investigates the challenges that architects must put forth in trying to overcome such a condition of exclusion from the process of building a new human landscape.

JOURNAL OF MEDITERRANEAN CITIES (2022), 2(1), 1-14 https://doi.org/10.38027/mediterranean-cities\_vol2no1\_1

## ARTICLEINFO:

Article history: Received: June 11 2022

Revised: July 05 2022

Accepted: July 25 2022

Available online: Aug 08 2022

#### Keywords:

Smart City; Historical City; Automatic house; CIAM; House of the Future; Gentrification; Jane Jacobs; Reyner Banham; Bernard Rudofsky.

This article is an open accessarticle distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license



Journal of Mediterranean Cities stays neutral with regards to jurisdictional claims in published maps and institutional affiliations

www.mediterranean-cities.com Copyright © 2022 by Dr. Ugo Rossi

#### 1. Introduction

Josep Lluís Sert, published Can Our Cities Survive? in 1942. In the introduction, Giedion pointed out that Sert presents in a manner comprehensible to everyone the present state of our urban life and its earlier development. It traces as far as it is possible the paths of future development and it points the way out of existing urban chaos. It shows that our cities have become unserviceable instruments but that at the same time they are eternal phenomena connected with every culture. In fact, in Sert's opinion, Civilization and city are words from the same root (Giedion, 1942: X).

**Corresponding Author:** Dr. Ugo Rossi Politecnico di Milano, Italia E-mail: <u>ugo 1.rossi@mail.polimi.it</u>

How to cite this article:

Rossi, U. (2022). Can our [new] cities survive?. Journal of Mediterranean Cities, 2(1), 01-14. https://doi.org/10.38027/mediterranean-cities\_vol2no1\_1



Figure 1. Cover of Josep Lluís Sert, "Can Our City Survive?" The Harvard University Press, Cambridge (1942)

In "Can Our Cities Survive?" Sert deals with the problem of modern cities, describing them as chaotic products of our civilization, nowadays as they were back then. Despite their unhappy elements, many of them are still the citadels of our culture, their roots reaching far into the past, and replacing them would involve a colossal undertaking. In particular, the cities occupying strategic geographic sites, are the focal points of convoluted networks of communication and transportation, whose modern technologies are constantly evolving. Even though they are endlessly emptying and overflowing into the countryside, all roads still converge upon them. As Sert writes, "The lesson of the past tells us that Troy was rebuilt on Troy, Rome on Rome, Paris on Paris. So, New York can and should be rebuilt on New York. Manhattan returned to the Indians" (Sert, 1942: 212). This could represent a fantastic conception of "the world of tomorrow," which assumes that our civilization will go on despite the devious processes of its evolution and that we shall "not return to the Dark Ages" (Sert, 1942: 212).

Needless to say, Sert believed in the necessity and the possibility of a complete transformation of cities. The signs of the times as highlights of such transformations, their enormous cost just a minor drawback. Sert also believed that cities were rooted in certain elements, expressions of something higher than the manoeuvres of speculation and individual gain. Around those living and eternal elements, he believed that the new cities of a future day to come tomorrow will rise like symbols of the spirit of man, out of the cities shattered by the war. Their civilization will have experienced a profound change, "but the continuity of the spirit and their heritage will be saved" (Sert, 1942: 214).

The first thing that Sert underlines in Can Our Cities Survive? is the importance of the CIAM way of working, that, since its foundation in 1928, had dealt with and discussed the fate of architecture and the modern city, and at that time Sert believed to "prove to be valuable for the reconstruction and rehabilitation work of the post-war period" (Giedion, 1942: XI).

After WWII, in 1947, the architectural debate resumed at CIAM VI, held in Bridgewater (UK), where participants discussed the strategies and the instruments to adopt in managing the destiny of the cities shattered by the war. During the following one, CIAM VII, held in Bergamo (Italy) in 1949, for the first time since they were drawn up, the principles of city planning, anticipated in the Charte d'Athènes (Le Corbusier, 1948), were put into question. The very same ones that will be contested again in 1951, as a discussion topic during CIAM VIII, in Hoddesdon (UK), whose intention was to deal with "The Heart of the City" (Tyrwhitt, 1952), see (figure 2). On that occasion – contrary to what Sert affirmed in Can our cities survive? – was shown yet again the inadequacy of the results of the "functional" planning devised in Athens (Le Corbusier, 1943), deemed to be ineffective to solve the problems of most cities, including the ones destroyed by the war and in need of reconstruction.

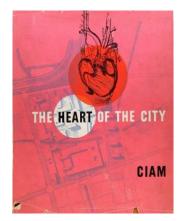


Figure 2. Cover of "The Heart of the City: Towards the Humanisation of Urban Life", Tyrwhitt, Sert, Natan Rogers, London, Lund Humphries (1952)

During CIAM IX, organised in 1953 in Aix-en-Provence (France), the processing of the Charte de l'Habitat (Bodiansky, 1953), revealed contrasting positions on the purposes of the congress'. Furthermore, in Aixen-Provence, was asserted the increasing sense of failure concerning the instruments elaborated up to that moment by the CIAM, and the crisis of the fundamental premises of European civilization, its philosophical and scientific thoughts, its industrial and developing processes, and its anthropological ethnocentrism. Particularly pressing was the need to intensify the research for incentive solutions aimed at more favourable processes for the creation of more humane urban spaces and the organisation of the life of its inhabitants according to their biological, social, and cultural necessities. The proposal of young architects, Jaap Bakema, Georges Candilis, Aldo van Eyck, Sandy van Ginkel, Rolf Gutmann, Bill Howell, Gill Howell, Blanche Lemco, Alison Smithson, Peter Smithson, John Voelcker, Shadrach Woods, demonstrated, within the CIAM system itself, the coexistence of irreconcilable positions. On one side were those who adhered to the functionalist city planning expressed by the Charte d'Athènes, on the other one was those who criticised it, trying to include cultural and anthropological parameters instead of statistical standards. The young "contestants" got together in the infamous Team X group, later appointed to organise, at the 1956 CIAM X in Dubrovnik (Yugoslavia), the discussion Habitat: the problem of relationships.

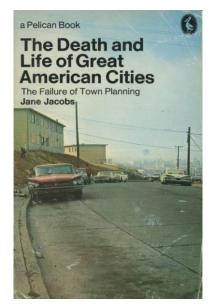
It will be during CIAM XI, held in 1959 in Otterlo (The Netherlands), that Team X, because of the disagreements and the impossibility to have a partaken discussion, will formalise the dissolution of the International Congress and at the same time will celebrate, in Europe at least, the end of the hegemony of International modern architecture, seeking solutions for the new social community in the ones less evolved.

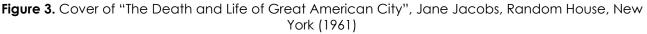
## 2. Blow it up!

While in Europe the hegemony of the CIAM's thought was dissolving, in the US, as Peter Blake pointed out, architects believed that the only solution to urban decay – and the only way to reconstruct cities bombed out in WWII – was to raze a large portion of what was left and replace it with something akin to the diagrams drawn up in the 1920s by Le Corbusier and others, in projects like Corbus's Ville Radieuse. Most architects accepted all that as a sort of modern urban catechism and rarely questioned it. Only a very few among them were ready to challenge Le Corbusier's diagrams, and the brightest of those critics was Jane Jacobs (Blake, 1977; 1993).

While politics continued to promote Urban Renewal, Jane Jacobs raised more and more questions until, in 1960, she challenged all the notions accepted until then. Jacob's book The Death and Life of Great American Cities (1961) completely altered the discourse on nature and the future of cities, see (Figure

3). She wrote that the urban renewal laws were an attempt to break this linkage in the vicious circles by forthrightly wiping away slums and their populations and replacing them with projects intended to produce higher tax yields or to lure back easier populations with less expensive public requirements – in that consists of the Gentrification process. The method failed, as Jacobs stated, because at best, it merely shifted slums from here to there, adding its tincture of extra hardship and disruption, and at worst, it destroyed neighbourhoods, "where constructive and improving communities exist and where the situation calls for encouragement rather than destruction" (Jacobs, 1961: 270-271).





Jacobs documented the failure of modern architecture to solve the problems of the congested inner city, advocating for the chaos of the unplanned urban centre over the ordered compositions of the modern cityscapes: "What will the projects look like? They will be spacious, park-like, and uncrowded. They will feature long green vistas. They will be stable, symmetrical, and orderly. They will be clean, impressive, and monumental. They will have all the attributes of a well-kept, dignified cemetery [...]", in Jacobs' opinion this kind of project does not revitalise downtown; they do not deaden it, rather, they banish the street, its function, its variety, without exception; this kind of projects have one standard solution for every need "they take a part of the city's life, abstract it from the hustle and bustle of downtown, and set it, like a self-sufficient island, in majestic isolation" (Jacobs, 1958).

Similarly, to Jacobs, Peter Blake (1974, 1977, 1979) –and some years after Tom Wolfe (1981)– described the false truthfulness of modern theories proved by the exemplary 1955 Pruitt-Igoe housing project in St. Louis.

Signed by Minoru Yamasaki and built as a model for rational living, the Pruitt-Igoe complex was designed according to the most progressive ideas of the CIAM and with what Le Corbusier called the "three essential joys of urbanism": "streets in the air", safe from cars, only "sun, space and greenery". When it was designed in 1955, the Pruitt-Igoe won the AIA award, but by 1971, it had deteriorated into an uninhabitable and inhospitable welfare slum (Comrio, 1981; Bristol, 1991). When it was asked to the ones still living in it, what to do about it, they had no qualms about it: "blow it up! Blow it ... up!" they loudly replied. In April 1972, the city of St. Louis considered the residents' wishes and blew Pruitt-Igoe up

with dynamite (Figure 4), "a historical moment", Wolfe recalled: "someone had finally asked the client for his two cents' worth", but "That part of the worker-housing saga has not ended. It has just begun", Wolfe pointed out (Wolfe, 1981: 82).



Figure 4. Minoru Yamasaki, public housing complex Pruitt-Igoe, St. Louis. Constructed in (1951-1955) was demolished in 1972-1976 (Source: U.S. Department of Housing and Urban Development)

At almost the same time that Pruitt-Igoe went down, the Oriental Gardens project, promoted by the Department of Housing and Urban Development and designed by Paul Rudolph, went up in New Haven, it was 1968. Oriental Gardens consisted of 148 units on 12.5 acres, but with the cause of construction problem, in September 1980, there were only seventeen tenants left and in 1981 the Department of Housing and Urban Development itself set about to demolish it.

## 3. New challenges: The failure of the house of the Future

The dream of a self-sustainable home or city, completely regulated, easily manageable and monitored throughout its developing future was, and still is, a feasible idea. It is a fair deduction that comes from

Witold Rybczynsky's studies (1986), who stated that the arrival of aaslight and ventilation, flawed as these technologies were, signified the beginning of the rationalization, and the mechanization, of the home. Domestic technology such as the heating and the ventilation duct represented an invasion of the home, not only by new devices but by a different sensibility, that of the engineer and the businessman. This was an invasion that most architects, not their clients, chose to ignore (Rybczynsky, 1986: 145). If architects were not prepared and interested to deal with those new devices and technologies, others would have been, as Rybczynsky recalls. In 1872, John Hayward, a doctor, built his own home to demonstrate his ideas of proper ventilation giving us an example of how new technology should have been integrated into architecture (Drysdale and Hayward, 1872). Another one was Henry Ruttan, an engineer, who published a book giving details on how many of his ideas, double glazing, for example, could have been applied to house construction (Ruttan, 1862). Not only did the architect get further away from technical problems and issues, Rybczynsky carries on, delegating them to technicians, engineers, or passionate amateurs, but he also moved away from what would have drastically influenced its comfort, its general layout, and its day-to-day management, leaving the Housewifery and the Domestic Engineering to interested and motivated housewives (Beecher, 1849, 1869; Frederick, 1914; Pattison, 1915; Balderston, 1921; Frederick, 1923).

However, the greatest challenge for architects was "The House of the Future", the 1927 Dymaxion House by Buckminster Fuller, the 1933 Space House, by Friedrich Kiesler, and the 1958 House of the Future by Monsanto Chemical Company (Figure 5), which wanted to convince the building sector to use the material most representative of the future: plastics.

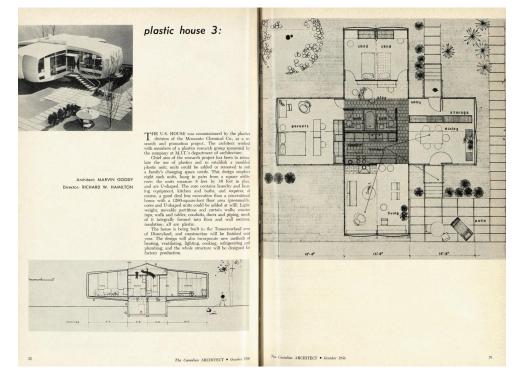


Figure 5. Richard Hamilton, Marvin Goody, and Albert G.H. Dietz, MIT Plastic Research Laboratory, "Monsanto House of the Future" project (1958) (Source: The Canadian Architect, October 1956, pp. 28-29)

Discussing this sort of house in 1989, Alan Hess described the paradoxical condition of the 1950s, an era of technological progress and when solutions went in search of problems. Even so, the building industry

was not impressed by the gymnastics of a plastic house. And in the end, plastic did not turn out to solve structural problems more inexpensively or efficiently than traditional materials. As Alan Hess pointed out, "The House of the Future had answered a lot of questions nobody asked" (Hess, 1989: 75).

Also, Peter and Alison Smithson, in 1956, introduced, at the Daily Mail Ideal Home Exhibition, the prototype of the House of the Future (Figure 6), consisting of prefabricated tridimensional components built with new plastic materials.

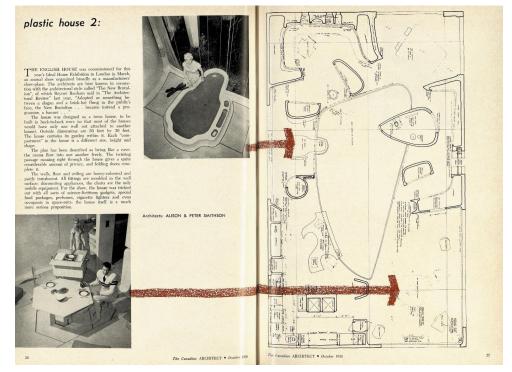


Figure 6. Alison and Peter Smithson, "The House of the Future" (Source: The Canadian Architect, October 1956, pp. 26-27)

A few months after that proposal, the Smithson, at the exhibition This is Tomorrow at the Whitechapel Art Gallery, put together an installation made of one small pavilion representing a house containing all the necessary things to survive after a nuclear war: a bicycle wheel. It revealed that the dissatisfaction, the instability, and the datedness of those projects, were directly proportional to the obsolescence of the technological structures on which their original premises were based, and the uncertainty about the future.

That is a theme though, that does not just belong to the past. From Adolf Loos's plumbers to Rem Koolhas Elements of Architecture, at the XIV Biennale Internazionale d'Architettura di Venezia (2014), the issue regarding the use of mechanical systems is a central topic in the history of modern architecture, as well as the one regarding materials. The actual threads of continuity are well demonstrated by Koolhas, who revealed and explained them in all their relevance at the stand organised in the Biennale's Gardens.

The problem of the relationship between systems and houses has always been a fundamental one in modern architecture. Banham dealt critically with the matter in 1965. In his article, he describes a modern-day home in which all the pieces of mechanical equipment could exist without the house itself. He reminds us that a Home is not a House (Banham, 1970), when a house contains such a complex of

devices, when it contains so many services that the hardware could stand up by itself without any assistance from the house, "why have a house to hold it up?"

The importance that equipment has in the construction, both regarding the cost and the dimensions, is equal to half of the house itself. Banham seems to be aware of this aspect, so much so that in his ironical assumption, the house could become a glass bauble, a wooden beam floor and column made of several pieces of equipment, as Buckminster Fuller clearly put forward at that time.

The house described by Ray Bradbury in There Will Come Soft Rains (1950), or the one in Jacques Tati's Mon Oncle (1958), were, at the time, simple figments of the imagination. Nowadays, evidently, from heating systems to lighting equipment and air conditioning – together with electrical appliances and all kinds of devices engineered to lessen the domestic workload – we have reached the time of the eco-friendly and sustainable automated house, the Smart house age. A house respecting the basic environmental needs of our time, first and foremost the imminent depletion of non-renewable sources and the necessary reduction of global warming. For its actual efficiency, this kind of home asks for a new city: the Smart City, whose devices, networks, and infrastructures are the fundamental requisites for its functioning.

# 4. Debris, Relics, and Ruins

Purely in reply to the environmental Conferences and the many Protocols aimed at the planet safeguard – in order to convert a linear development into a circular and sustainable one – architects and urban planners together with scientists and the world's most important lab researchers, articulated sophisticated technological projects\proposals like smart homes and Smart Cities.

In real terms, general power consumption in Smart Cities – as well as in smart homes – employs reusable sources, artificial intelligence, and super high-tech devices, able to process enormous amounts of data that, applied to efficient urban projects, with passive planning elements, can achieve up to 70% energy saving compared to the consumption of "traditional" metropolis and homes. However, Smart Cities, built from nothing in a completely prescribed way – in them every single element must be regulated, defined, monitored, and calculated, as advocated since time immemorial – are extremely expensive products, as suggested by Richard Sennet in his book. They are cities "whose construction costs instead of decreasing is getting higher and higher" (Sennett, 2018: 162). That is why the most obvious question that comes to mind in planning terms is: why is it that a country like India, for example, where the population has hardly any drinkable water, where there is no sewage system or local communities' medical surgeries, is trying to pursue this road, inevitably doomed, and trying to plan 100 brand new Smart Cities? (Sennett, 2018: 162).

Besides the purely economical and operational aspects of the Smart Cities – which would inevitably be implied an outright exclusion from their fruition of the less developed countries – another relevant problem would also intrinsically present itself to many countries, even the most advanced ones, with a grand historical architectural heritage – inevitably ancient and obsolete for contemporary technological standards – often enough ill-fitting for transformations or technical adjustments, resulting utterly inadequate for Smart Cities. That heritage is unavoidably perceived as an inconvenience for the development of the new city, which will probably find its place in a desert, a "tabula rasa" devoid of the historical city's relics, ruins, and debris.

In a completely free context, Smart Cities could certainly appear as the most positive of all possible answers, but inescapably the largest section of the built environment would be ruled out because judged un-adjustable: Venice, Arezzo, Urbino, Cordova, and Istanbul are just some of the striking examples, although the list is much longer.

What is then the fate of those cities? What alternatives are beaming on the horizon? What alternatives have been devised and are now available? Is it possible that historical cities might be deserted

because it is impossible to turn them into environments like the Smart Cities? Will they simply be demolished to make on for the City of Bits, and Cyberspace? (Mitchel, 1995): "Troy was rebuilt on Troy" (Sert, 1942), see (Figure 7).

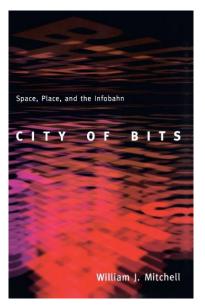


Figure 7. Cover of "City of Bits: Space, Place, and the Infobahn", William J. Mitchel, MIT Press (1995)

Will those very same Smart Cities, managed by the most advanced technologies, be able to upgrade, keep up and adapt through the evolution of time? Will they be able to regenerate, implementing the upgrading that new technologies constantly require? Will they just become obsolete? Are we perhaps all destined to turn into wandering nomads, forever looking for the newest and most advanced of places, leaving behind the debris of thousands of abandoned, inoperable cities?

#### 5. What we need is a new way of living

Contrary to what architects, industry and science produced during the first age of the machine (Banham, 1960), the architect Bernard Rudofsky offered instead a subversive alternative (Rossi, 2016). In open contrast with the Existenzminimum norms and measures devised for the universal man, with the processes of industrialization, and with the international architecture without specific cultural and geographical connotations, Rudofsky put forth a new brand of architecture without architects, or names (Rudofsky, 1964), culturally distinguished and built on primitive elements: walls, pillars, fireplaces, pergolas and balconies, gardens, and yards, see (Figure 8).

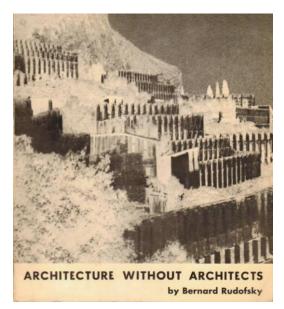


Figure 8. Cover of "Architecture Without Architects", Bernard Rudofsky, MoMA, New York 1964

As Ada Louise Huxtable affirmed, "the master iconoclast of the modern movement [Rudofsky] has spent a lifetime analysing and challenging all the conventional and received wisdom about the arts of living and design. In this wrap-up approach to the basic functions of eating, sleeping, sitting, cleaning, and bathing, he is as delightfully provocative and contentious as ever" (Huxtable, 1981).

Still acknowledging that technology could partially rectify the excesses of climate and provide several comforts – heating and air conditioning, for example, to make us believe that we have the upper hand on temperatures, or electrical appliances to ease the burden of daily domestic activities – Rudofsky lamented their influence on our lives and on how our homes were clattered with such devices and equipment. Clashing all together with the illusion offered by the planning of homes and cities in which science and technology would have bestowed happiness and the dissolution of any kind of problems, Rudofsky, was convinced that "Today's house is vulnerable, to put it mildly. It is not really a house but a machine that runs on electricity, and without it, simply, does not work" (Rudofsky, 1973: 5).

In his article What We Need is not a New Technology but a New Way of Living, and in several other ones that appeared in the February, March, and April 1938 issues of Domus, Rudofsky investigates the mythical and cultural side of architecture, demonstrating how the matter was not just about being modern, but rather about which kind of culture, probably more than just a single one, would realise and achieve coherent modernity. If on one side he sheds some light on the aporias and the contradictions of Modernity, addressing his critique of the way people dress, the footwear they wear and the western way of living altogether on the other he produces and elaborates a vocabulary to overcome the uniformity of the solutions provided by the mechanised and internationalist modernism.

Together with the article What We Need is not a New Technology but a New Way of Living, Rudofsky also publishes a project of his own called "Una casa per Procida" (a house for Procida), in which he explains the theoretical contents which are later going to become the expression of his entire architectural thought.

What is going to set that kind of home apart from the ones advocated by the CIAM, and by the architects supporting the scientific progress of the machine that marks that era, is the relationship that every single room establishes with the pursued ways of living adopted by the house occupiers. A house with a yard in which the patio is a room without a roof, a home in which conventional furniture has

almost disappeared. A new domestic custom that favours a mattress placed on the floor and a curtain hanging from the ceiling, like in Japan, to the traditional bed; spaces and floors are uncluttered because colourful rugs have replaced chairs and tables. Eating becomes a collective, convivial ritual, the food is prepared in the kitchen and is served on a big plate from which guests help themselves by hand, doing away with any kind of cutlery or tool, just like in Turkey and in the Middle East, or during the last supper, laying on the floor or on a triclinium. The traditional western bathroom is replaced by a Japanese one, which also recalls the ones in ancient Rome. It provides a simple washtub, or a bathtub encased on the floor, because it does not really serve a hygienic purpose (washing) but rather the meditating ritual of soaking into the water; for this same reason the other, more intimate, bathroom fixtures are placed in a separate space. Those constituent elements, and the several interconnected cultural relationships, shape the planning of houses that, each in its unique way, will evoke the different ways of living of the many Mediterranean cultures as well as the ones in the Middle and the Far East.

The elementary constants of his vocabulary are to be identified in the walls, the trellises, the windows, the niches, and the fireplaces. Here the design priority seems to measure up to the idea of the gardenhouse that Rudofsky calls Outdoor Conditioned Room (Figure 9).

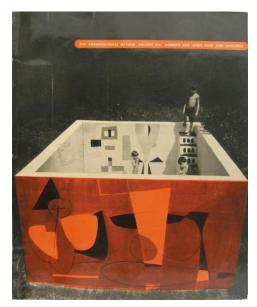


Figure 9. Cover of The Architectural Review, April 1952, with the project of the Nivola Garden-House in Long Island, NY (1950), by Bernard Rudofsky and Costantino Nivola

In Rudofsky's point of view, the luxury of a home is not determined by its technical appliances and fixtures: air conditioning, jacuzzi, televisions, vacuum cleaners, electric ovens, fridges and so on, but by the fact of being an open-air room where, like in the Garden of Eden, the occupants can, at the same time, work and sleep, cook and eat, play and relax, an environment with a natural climate determined by trees, water, and the light of the sun.

# 6. Conclusion

It is evident from the debates and controversies around architecture, cities, and houses, that the issue of the confrontation between cultures was only ever vaguely addressed, and the same went for any way of living not verging solely on mere quantities and figures regarding emissions, water consumption, number of inhabitants, parking spaces and acres of urban parkland. Very often the debate and the proposals of architects dealt with the solution of the problem relating to the management and the shape and functioning of cities and housing in general, forgetting all together with a number of other transversal issues overlapping with the matter of the actual architecture of the house and planning of the city.

Most certainly, in Rudofsky's books and planning proposals we will not find the solutions for the mechanised and modernised, in one word globalised, society in which we live, and for a planet on the verge of collapse, but they could at least offer elements on which to reflect upon.

The current situation is inevitably leading us to consider a necessary U-turn when it comes to the relationship between different cultures, developing processes, the very same fate of our planet, and all the issues surrounding our chosen way of living within a given built environment, but also a rethinking of the strategies already as well as the ones that are going to be implemented in the very next future.

For quite a long while now, architects have been challenged with the attempt of trying to put forth different answers to the existing ones that have already proven to be detrimental failures, even though the solutions articulated thus far are just directing us into blind corners.

The situation of paralysis is due on one hand to the fact that old historical cities are excluded by the processes of development and industrialization (modernisation), and on the other, because the new cities, conceived to be monitored by a control room and artificial intelligence, will suffer a fast process of technological obsolescence that not everyone will be able to endure.

However, the old cities live on, and the new ones, built in rural or deserted areas, provide new empty buildings often in need of demolition, like the Pruitt-Igoe, a neighbourhood built on the model of the Radiant City by Le Corbusier (1936).

In actual architectural terms, technology and science have had minor effects if compared to the cultural and historical ones of the ancient cities. Even the new technologies, iron, glass, concrete, and plastic, so important for the affirmation of the Modern Movement, have led to a house and cities only marginally better than the ones built in the past (Rybczynsky, 1986).

Unlike any universal scientific and technological pattern, or the global economic one, cities and architectures possess the characteristics of a biotope, and they are the result of unique conditions, with their very own cultural landscape.

In Smart Cities, we see the actual possibility of a solution for the sustainability problem of the planet, but in those hi-tech new cities, operations are standardised and homologous, because the scientific and technological solutions are universal. We ought to remember that cities and architectures are not just machines to use for the purposes of living and inhabiting, but the actual experience of living and inhabiting, they do not relate to quantities and figures but to cultural landscapes and fragile ecologies (Banham, 1971).

## Acknowledgements

This research did not receive any specific grant from funding agencies in the public, commercial, or notfor-profit sectors.

#### Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

#### **Ethics statements**

Studies involving animal subjects: No animal studies are presented in this manuscript.

Studies involving human subjects: No human studies are presented in this manuscript. Inclusion of identifiable human data: No potentially identifiable human images or data is presented in this study.

## **Conflict of Interests**

The author declares no conflict of interest.

## References

The Canadian Architect (1956). Plastic Houses: new form for a new architecture.

Balderston, L. R. (1921). Housewifery, a manual and textbook of practical housekeeping. Lippincott: Philadelphia.

Banham, R. (1960). Theory and Design in the First Machine Age. Praeger: New York.

Banham, R. (1970). A Home is Not a House, Art in America, vol. 2, NY 1965, pp. 70-79, Charles Jencks and George Baird, Meaning in Architecture, George Braziller: New York.

Banham, R. (1971). Los Angeles: The Architecture of Four Ecologies. Allen Lane: Los Angeles.

Beecher, C. E. (1849). A Treatise on Domestic Economy: For the Use of Young Ladies at Home and at School. Harper: New York.

Beecher, C. E. Stowe H. B. (1869). The American Woman's Home. J. B. Ford: New York, https://onlinebooks.library.upenn.edu/webbin/book/lookupid?key=ha000708605.figure

Behrendt, E. (1956 April). Plastic House. Popular Science.

Blake, P. (1974, September). The Folly of Modem Architecture. Atlantic Monthly.

Blake, P. (1977) Form Follows Fiasco, Why Modern Architecture Hasn't Worked. Little Brown and Company: Boston and Toronto/

Blake, P. (1979 winter). The Modern Movement: What Went Wrong? The Wilson Quarterly, 3, pp. 121-127, <u>http://www.jstor.org/stable/40255568</u>.

Blake, P. (1993). No Place Like Utopia. Modern Architecture and the Company We Kept. Knopf: New York.

Bodiansky, V. (1953). For a charter of habitat. CIAM 9. Aix-en-Provence 19-25 Juillet 1953. Contribution de L'Architecture d'aujourd'hui a la Charte de l'habitat. Paris, <u>https://doi.org/10.1111/j.1467-8292.1953.tb00686.x</u>.

Bradbury, R. (1950 May). There Will Come Soft Rains, Collier's, 6, pp. 34-49, ISSN: 2161-6469.

Bristol, K. G. (1991 May). The Pruitt-Igoe Myth, Journal of Architectural Education, 44, pp. 163-171, https://doi.org/10.1080/10464883.1991.11102687.

Comerio, M. C. (1981 Summer). Pruitt Igoe and Other Stories, JAE, 34, pp. 26-31, https://doi.org/10.1080/10464883.2013.767131.

Drysdale, J., Hayward, J. (1872). Health and Comfort in Home Building. Spon: London.

Frederick C. (1923). Household Engineering: Scientific Management in the Home. American School of Home Economics: Chicago.

FredericK, C. (1914). The New Housekeeping: Efficiency Studies in Home Management. Double day: New York.

Hess, A. (1989 August-September). Monsanto House of the Future, Fine Homebuilding.

Huxtable, A. L. (1981). Shows with a Personal Vision, The New York Times, 11 January.

Jacobs, J. (1958 April), Downtown is for people, Fortune.

Jacobs, J. (1961). The Death and Life of Great American City, Random House: New York.

- Le Corbusier (1937). Quand les cathédrales étaient blanches. Voyage au pays des timides. Éditions Plon, París [When the Cathedrals Were White].
- Le Corbusier (1943). La Charte d'Athènes. Éditions de l'Architecture d'Aujourd'hui: Boulogne-sur-Seine.
- Le Corbusier (1948). Grille CIAM d'urbanisme: Mise en application de la charte d'Athènes. Éditions de l'Architecture d'Aujourd'hui: Boulogne-sur-Seine.

Mitchel, W. J. (1995). City of Bits. Space, Place, and the Infobahn. MIT Press: Cambridge.

Pattison, M. (1915). Principles of Domestic Engineering: Or the What, Why and How of a House. Trow Press: New York.

Rossi, U. (2016). Bernard Rudofsky Architect, Clean: Napoli.

Rudofsky, B. (1938 March). Non ci vuole un nuovo modo di costruire, ci vuole un nuovo modo di vivere, Domus, 123, pp. 6-15; What We need Is Not a New Technology but a New Way of Living, in Platzer, M. (2007). Lessons from Bernard Rudofsky, Life as a Voyage, Birkhäuser: Basel.

Rudofsky, B. (1964) Architecture Without Architects. MoMA: New York.

Rudofsky, B. (1973?). Lectures Provincetown (Rudofsky Papers, 920004, The Getty Research Institute).

Ruttan, R. (1862). Ventilation and Warming of Building. Putman: New York.

Rybczynsky, W. (1986). Home. A short History of an Idea. Penguin: New York.

Sennet, R. (2018). Building and Dwelling, Ethics for the City, Farras, Straus and Giroux: New York.

Sert, J. L. (1942). Can Our City Survive? The Harvard University Press: Cambridge.

Tyrwhitt, J., Sert, J. L., & Rogers, E. N. (1952). The Heart of the City: Towards the Humanisation of Urban Life. Lund Humphries: London.

Wolfe, T. (1981). From Bauhaus to Our House. Straus and Giroux: New York.