PROSTOR

31 [2023]

2 [66]

A SCHOLARLY JOURNAL OF ARCHITECTURE AND URBAN PLANNING ZNANSTVENI CASOPIS ZA ARHITEKTURU I URBANIZAM

UNIVERSITY OF ZAGREB FACULTY OF ARCHITECTURE SVEUČILIŠTE U ZAGREBU ARHITEKTONSKI FAKULTET

ISSN 1330-0652 https://doi.org/ 10.31522/p CODEN PORREV UDC 71/72 31 [2023] 2 [66] 139-324 7-12 [2023] 168-181 JANA HORVAT KARIN ŠERMAN On the Phenomenon of Decay in Architecture
Theoretical Perspectives from the 1950s to the 2020s

ORIGINAL SCIENTIFIC PAPER https://doi.org/10.31522/p.31.2(66).3 UDC 72:7.025.2"195/202"



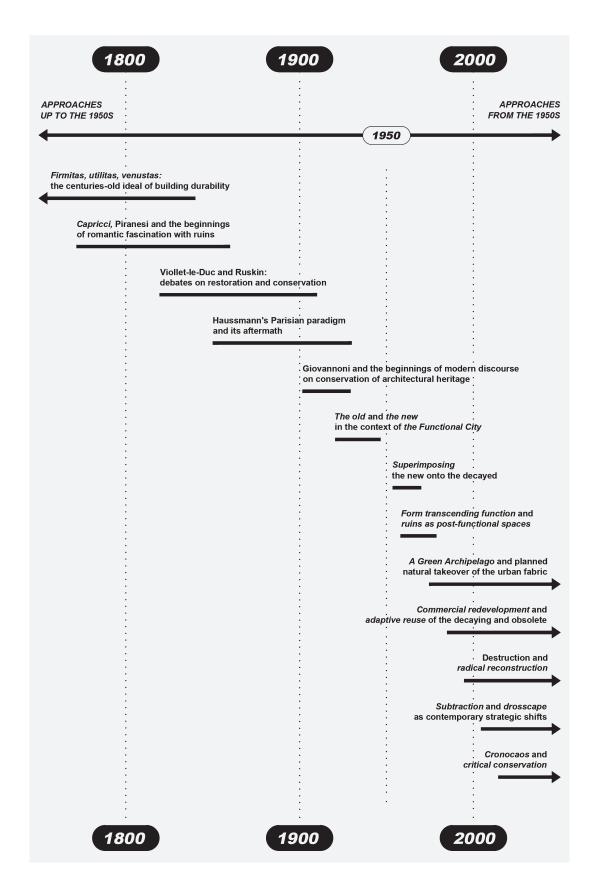


FIG. 1 TIMELINE OF ANALYZED THEORETICAL APPROACHES TO THE PHENOMENON OF DECAY IN ARCHITECTURE

Scientific Paper 31[2023] 2[66] **PROSTOR 169**

JANA HORVAT¹, KARIN ŠERMAN²



¹University of Zagreb Faculty of Architecture, Fra Andrije Kačića Miošića 26, Zagreb, Croatia © orcid.org/0009-0001-8539-4592

² University of Zagreb Faculty of Architecture, Fra Andrije Kačića Miošića 26, Zagreb, Croatia

jana.horvat@arhitekt.unizg.hr karin.serman@arhitekt.unizg.hr

Original Scientific Paper
https://doi.org/10.31522/p.31.2(66).3
UDC 72:7.025.2"195/202"
Technical Sciences / Architecture and Urban Planning
2.01.04. — History and Theory of Architecture and Preservation of the Built Heritage
Article Received / Accepted: 4, 10, 2023. / 20, 12, 2023.

ON THE PHENOMENON OF DECAY IN ARCHITECTURE THEORETICAL PERSPECTIVES FROM THE 1950s TO THE 2020s

ADAPTIVE REUSE
ARCHITECTURAL RUIN
BUILDING DECAY
BUILDING OBSOLESCENCE
URBAN TRANSFORMATION

Derelict, dilapidated buildings in various states of ruin have always been present in our built environment. Theoretical approaches to the issue of ruins within the field of architecture have been changing continuously in response to shifting social, political, economic, and cultural conditions. Although origins of the debates on ruins can be traced centuries back, the topic came into focus with renewed

intensity following the mass destruction in the wake of World War II. This paper discusses relevant perspectives on the phenomenon of decay in architecture from the 1950s to the 2020s, and offers a critical synthesis of their diverse viewpoints, thus enabling further formulations of contemporary positions and design strategies concerning this increasingly significant subject matter.

INTRODUCTION

he origins of the visible, spatial phenomenon of decay in architecture are guite diverse, brought on by a number of different destructive forces or processes. Sometimes uncontrollable natural disasters like floods or earthquakes leave the built environment in ruins, and sometimes, it is about long processes of decay. In most cases, however, the damaging processes are manmade, driven by, or resulting from diverse political, economic, or socio-demographic disruptions (Abramson, 2017: 18; Lowe, 2012:1). It is possible to distinguish more or less extreme instances of these processes and their consequences: from extraordinary circumstances of war or severe economic crises to everyday occurrences such as market changes and population migrations.

As a result of just one or several such disruptions, derelict, damaged, dysfunctional, or abandoned buildings are becoming increasingly present in urbanized areas across the globe (Lončar, Pavić, 2020: 198). In certain situations, buildings are brought to this state suddenly, and in others, they decay slowly over the years (Abramson, 2017: 3). Whatever the cause might be, such buildings represent a daring spatial issue that has become the focus of increasing debate in contemporary architectural and urban planning discourse.¹

This article aims to briefly contextualize the origins of theoretical debates on the phe-

nomenon of decay in architecture and further examine a selection of specific perspectives on the subject from the 1950s onwards, precisely those that have informed, and may continue to inform, contemporary architectural and urban design strategies that address this issue.

RESEARCH SCOPE AND METHODS

The paper² will present some of the key approaches to the phenomenon of decay in architecture, as they have been formulated by prominent architects and architectural theoreticians. Although the origins of the debates on ruins can be traced centuries back, the topic came into focus with renewed intensity following the mass destruction in the wake of World War II. Theories then emerged that are still applicable and useful in our contemporary moment; the paper, therefore, focuses on the period from the 1950s to the 2020s.

The relevance of the examined perspectives has been determined by their continuous presence in contemporary architectural and urban planning discourse, as well as their clearly exhibited potential to inform concrete architectural and/or urban design strategies. The main research goal of the paper is to provide a critical synthesis of these diverse viewpoints, enabling the formulation of fresh positions and design strategies on the theme of architectural decay. The key research method this article uses is literature review.

ORIGINS OF THEORETICAL DEBATES ON DECAY IN ARCHITECTURE

Before focusing on recent theories from the 1950s onwards, an insight into their historical background is needed in order to position them within an adequate historical context. Theories on the topic of architectural decay started appearing predominantly in the 19th century, with some important instances dating back even further. Centuries-old ideals of

- 1 This is corroborated by the growing number of scientific articles published in the past two decades with keywords such as *brownfield*, *ruin*, *regeneration*, *redevelopment*, *reuse*, etc.
- 2 This paper is a result of the first author's ongoing research for the Ph.D. thesis at the University of Zagreb Faculty of Architecture, with the guiding cooperation of the mentor as the second author.
- 3 As contained in the first word of Vitruvius' famous triad *Firmitas, Utilitas, Venustas,* whose evolution can be traced through Alberti (*De re aedificatoria,* 1452) and Palladio (*I quattro libri,* 1570) to the Renaissance and beyond. See: https://www.britannica.com/topic/architecture/Commodity-firmness-and-delight-the-ultimate-synthesis [accessed 23.08.2023.].
- **4** Paintings by authors such as Giovanni Paolo Panini (1691-1765) and Canaletto (1697-1768) frequently

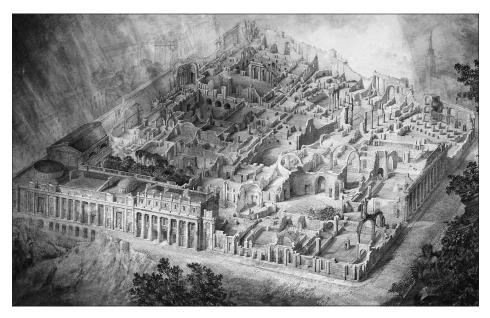
building durability and permanence³ began to be rivaled by the newly flourished interest in ruins, made visible already in the work of the 18th-century Italian *capriccio* painters⁴ and in particular, in the work of the highly influential architect Giovanni Battista Piranesi. In his etchings, ruins appeared as bearers of the attribute of the *Sublime*, posing as central motifs of his dark and complex architectural fantasies that inspired numerous other iconic graphic representations in the history of architecture (Hill, 2020: 295-296).

The perspective drawing of John Soane's *Bank of England* project (Fig. 2), for instance, clearly displays this increasingly romanticized notion of decay that remained the dominant perspective throughout the 19th century⁵, along with the ongoing theoretical debates on restoration and conservation.⁶ This changed only with Georges-Eugene Haussmann's grand scheme for the urban renovation of Paris.

Representing a clear paradigm shift, Haussmann's series of radical, planned erasures of the city fabric ignited novel discussion about the old versus new layers of the city (Frampton, 1985: 23). In turn, this resulted in numerous intriguing and fresh urban theories, such as Gustavo Giovannoni's early 20th century concept of urban pruning, by which he advocated the planned demolition of certain derelict buildings and their replacement with small piazzas or parks within residential neighborhoods (Giovannoni, 1931). It can be argued that the haussmannization of Paris also helped pave the way for the later series of politically motivated urban erasures throughout Europe, such as *sventramenti* in fascist Italy of the 1920s and 1930s (Spikic, 2018: 124).

All these approaches, including topics such as demolition of dilapidated urban fabric and the imperative of urban hygiene (sufficient sunlight and air), paired with ideas of the developing city as a *tabula rasa* ready for brave new masterplans, were further broadened and exploited in the early modernist first half of the

combined imaginary and real architectural elements, often ancient ruins, thus creating curious architectural fantasies known as *capricci*.



20th century, in the context of then dominant heroic planning operations (Giedion, 1959: 725) for the Functional City (Mumford, 2002: 164), promoted by the early CIAM (Congrcs Internationaux d'Architecture Moderne). Here, the topics of architectural ruins and urban decay were categorically abandoned and surpassed by the focus on the concept of ideal

cities with spatially and geometrically guaran-

teed urban and social order.

However, after the destruction brought on by World War II, fresh viewpoints on the subject of urban demolition, architectural ruins, and urban decay needed to be formulated: the reality of destroyed European cities simply dictated such a theoretical turn. Many of the approaches formulated at that time, no matter how dated, can be productively linked to the present moment, and they have directly influenced newer, contemporary 21st-century perspectives on the topic.

KEY PERSPECTIVES ON DECAY IN ARCHITECTURE FROM THE 1950S TO THE 2020S

SUPERIMPOSING THE NEW ONTO THE DECAYED

Brutal and large-scale destruction made the post-war renewal and reconstruction a prime architectural concern. Numerous approaches to the topic were thoroughly argued and profiled through theoretical discussions, ranging from facsimile reconstruction of destroyed buildings to proposals for the deliberate absence of any reconstruction. A number of these positions were collated and published as part of *The Venice Charter for the Conser-*

Fig. 2 Joseph M. Gandy for John Soane, An imagined view of the Bank of England in ruins, 1830 © Sir John Soane's Museum, I ondon

⁵ Architectural ruins, for instance, became a frequent, often indispensable, motif in the designs of public spaces and landscapes, especially in England. It is illustrative to stress that the popular *follies* were not, in fact, always real ruins — on the contrary, they were often entirely new objects, merely designed and built in a way to suggest old age and decay.

⁶ Protagonists of the debate were the French architect Eugcne Viollet-le-Duc, an advocate for restoring buildings in their original style (see: Jokilehto, 2006: 151), and the English architect John Ruskin, who viewed restoration as a means of destroying the authenticity of historical monuments (Ruskin, 1903: 221), arguing for much more subtle conservation methods.



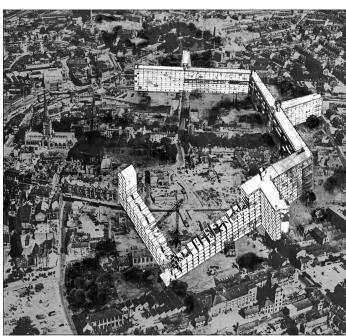


Fig. 3 Nigel Henderson, photograph of a demolished building, 1949-1954, © Nigel Henderson Estate, Photo: © Tate [TGA 9211/9/6/69]

FIG. 4 ALISON AND PETER SMITHSON, GOLDEN LANE MONTAGE ONTO AIR-VIEW OF COVENTRY, 1953, ALISON AND PETER SMITHSON ARCHIVE, COURTESY OF THE FRANCES LOEB LIBRARY, HARVARD UNIVERSITY GRADUATE SCHOOL OF DESIGN

vation and Restoration of Monuments and Sites (1964).⁷

However, the newly damaged and decayed spatial layers present in numerous European cities did not spark the discussion solely on the issues of restoration and preservation; they addressed the ways of new construction too. It became increasingly clear that in those novel urban conditions, the pre-war utopian ideas of the functional city would not be sufficient to confront all the rapidly arising spatial challenges and progressively complex socio-cultural circumstances. New ideas and approaches thus started to surface, as it was already discernible from the titles of the postwar CIAM conferences. Discussions on man's emotional needs (CIAM VI, Bridgewater), the Heart of the City (CIAM VIII, Hoddesdon, 1951), and Habitat (CIAM IX, Aix-en-Provence, 1953, and CIAM X, Dubrovnik, 1956) started addressing sensitive themes of urban identification, belonging, human associations, and complex issues of dwelling in the post-war world, at the same time offering criticism to the Modern Movement's failure to ever fully address those topics.8 This not only pointed to a decisive shift, but to a clear split between old and new ideologies within CIAM, which ultimately led to the organization's final dissolution in 1959.

Among the new architectural voices that emerged within CIAM's late modernist discussions, in the context of this paper, it is particularly interesting to look at the ideas promoted by British architects Alison and Peter Smithson. As prominent members of

Team X, a rebel group of younger architects formed within the CIAM, they were at the forefront of challenging the received Modern Movement's doctrinaire approach to urbanism. Incidentally, some origins of their arguments can be traced back to their relationship with the London post-war art scene, especially The Independent Group, and with the ideas of the British photographer Nigel Henderson in particular. It is Henderson who developed strong inclination and interest for the issue of architectural and urban decay. In Henderson's photographs of derelict postwar London, a certain celebration of ruins is present, understood as vivid remnants of authenticity and vitality of urban life (Fig. 3). Of course, this commendation of ruins differs greatly from the case of romanticising ruins that was prevalent a century earlier, in English romantic gardens or the writings of John Ruskin (1903: 234).9 Rather than glorifying the form of the ruin itself, Henderson and the Smithsons seem to be fascinated by the implied qualities of its authenticity, vitality, and groundedness in the real world. They in fact famously claimed that: "(...) the short, narrow street of a slum succeeds where spacious redevelopment frequently fails" (Frampton, 1985: 271).

⁷ Along with *The Athens Charter for the Restoration* of *Historic Monuments* (1931), it is today considered one of the key documents of the 20th century on the preservation and restoration of architectural heritage.

⁸ A written critique by the theorist of architecture and critic Reyner Banham went as far as to proclaim that the ideas of the Modern Movement could merely

Based on such ideas of identity, belonging, and human associations that thrive in such authentic surviving urban contexts, the Smithsons proceeded to develop their noted Golden Lane Housing Project of 1952 (Fig. 4). One of the possible implementations of that potent theoretical project was represented as a superposition of the new spatial system upon the architectural debris of Coventry, heavily damaged in WW2 bombing. Although this embracing of urban decay was intended as criticism of modernist tabula rasa planning, and was, therefore, considered promising and welcomed, numerous critics later guestioned the inevitable and somewhat awkward spatial conflicts between existing and added layers of the project (Frampton, 1985: 273). Whatever the case may be, the issue of architectural decay and its potential in provoking novel ideas and approaches to urban planning and design was decidedly brought back to the theoretical scene.

FORM TRANSCENDING FUNCTION AND RUINS AS POST-FUNCTIONAL SPACES

Despite its demanding beginnings, the postwar period soon started registering rapid advances in technology and the introduction of new market types based on mass production. Together with other social and cultural transformations, this slowly started leaving visible traces in the built environment as well, eventually leading to the wakening of a whole new cultural period known as postmodernism in the late 1960s. In such a changed cultural context, the approach to the issue of decay also changed indicatively. The noted postmodern Italian architect and theorist Aldo Rossi (1984: 22) stated on the issues of destruction and decay: "Destruction and demolition, expropriation and rapid changes in use as a result of speculation and obsolescence, are the most recognizable signs of urban dynamics." Regarding these notions of erasure and replacement, it is interesting to examine Rossi's corresponding concepts and theories.

From his seminal work The Architecture of the City, it is clear that Rossi perceived the appearance of decay in urban fabric neither as an extraordinary nor as a negative phenomenon, and certainly not as one that would require grand interventions in order to fix it. Conversely, Rossi viewed decay and deterioration as integral parts of the life cycles of

be considered "(...) an aesthetic preference that effectively paralyzed research into other forms of housing' (Frampton, 1985: 270).

Ruskin, 1903: 234: "(...) it is in that golden stain of time, that we are to look for the real light, and colour, and preciousness of architecture (...)".

certain parts of urban fabric, which equally contribute to the endless transformation of the city. Terminating one use of a structure allows for the introduction of another, which creates opportunities to inscribe new meanings or introduce new programs into the existing forms. Therefore, according to him, form transcends function, function changes, whereas form persists, and thereby both architecture and the city ultimately persevere. Further on, in his approach to the forms of the city, Rossi distinguished two essential layers – the so-called *primary elements*, or monuments, and, in contrast, the surrounding neutral fabric, or area (Fig. 5; Rossi 1984: 22). While the first layer, with its persisting memorable structures, generates continuity, urbanity and memory, bearing the identity of the place, the second one, the neutral *urban* area or section, presents an opportunity for painless and, in fact, necessary changes that the new life demands. So, whereas monuments endure and persist, the area develops and changes, and it is in this complex dynamics that the city is ultimately preserved.

In view of the relation between function and form, another specific contribution to the overall debate on the issue of architectural decay was made by the famous late modernist Louis Kahn. Namely, for him, architectural ruin is a sort of post-functional space, which, freed from its once-possessed program, becomes a novel object of interest: "A building built is a building in bondage of use. Its spirit must then call out and remind its user of its will to have been. Isn't it true that sometimes a building being built is of more interest than the one that is finished? A building that has become a ruin is again free of the bondage of use. But it is different from when it was being built because it now allows foliage to grow over it, as loving as a father permitting the child to pull at his carefully chosen clothes." (Kahn, 1965: 330-331). Such an object can then take on a number of new, sometimes even seemingly unexpected roles.

With their specific takes on the issue of ruins, these theoretical approaches could be consulted decades later to inform the notion of reusing decaying building forms, a theme that will start gaining momentum towards the end of the 20th century.

COMMERCIAL REDEVELOPMENT AND ADAPTIVE REUSE OF THE DECAYING AND OBSOLETE

Widespread recognition of the hidden spatial and economic potential within deteriorating structures and urban fabric, primarily as an opportunity for commercial exploitation, can be dated to the latter half of the 20th centu-

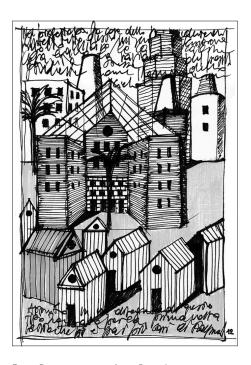


Fig. 5 Photograph of Aldo Rossi's sketch FROM IL LIBRO AZZURRO – LMIFI PROGETTI 1981 IN 1983, POSSIBLY DEPICTING MONUMENTS AND THE SURROUNDING NEUTRAL FABRIC



FIG. 6 A GREYFIELD SITE IN ZAGREB HOUSING AN UNFINISHED PUBLIC BUILDING. THE SAME PLOT WAS PREVIOUSLY ALSO OCCUPIED BY ANOTHER UNFINISHED PROJECT FROM THE LATE 1980S. SEE: HTTPS://MAPIRANJETRESNJEVKE.COM/KVARTOVI/STAGLISCE/CIMOS/[ACCESSED 28.8.2023.].

ry. These ideas are strongly linked to the urban transformation or redevelopment of brownfield sites. Upon examining current scholarly papers on the topic, it is telling to note that a larger part of those papers seems to be written from the standpoint of economic sciences, rather than urban planning.

In this regard, Matković and Jakovčić (2019: 354) enclose the categorization of brownfields according to their market value, as well as the expected profit from their potential regeneration. The latter depends on the origin and type of investment in the regeneration – entirely public, public-private, or entirely private. A number of studies indicate that it is often more financially advantageous for developers to initiate projects in disused brownfield locations rather than in unbuilt greenfield¹² ones (Berger, 2007: 70). This is particularly applicable in the cases with existing infrastructure in usable condition, where lower initial investments are required, or in the cases of desirable, central locations that thus ensure a high return on investment (Hollander, Kirkwood, Gold, 2010: 52, 60).

Apart from economic motives, the growing interest in degraded urban areas in recent decades may also be attributed to political reasons. Visions and promises of urban regeneration of *brownfields* are, for instance, increasingly featured in pre-election campaigns in Europe.¹³ While a number of the pledges are subsequently revealed to have been mere PR spins, some elected officials aspire to use urban regeneration projects as a way of leaving a visible mark of their actions on the city.¹⁴

It is evident that the majority of *brownfield* areas, such as former industrial or military zones, were originally used for activities or

programs that have become obsolete as a result of changes in social, political, and/or economic circumstances. However, at the same time, we are witnessing an increase in the number of abandoned buildings and building complexes, whose state of neglect can hardly be justified either by age or by use (Fig. 6). For such real estate, the term *grey*field is frequently used in relevant literature. According to Palich et al. (2011: 11) and Newton (2010: 81), the term refers to formerly highly developed commercial real estate which has become obsolete and abandoned due to sudden changes in market trends. It does, however, remain attractive for new investments for a variety of reasons. 15-Typical examples of greyfield zones include unfinished or abandoned office buildings and shopping centers (dead malls), usually surrounded by large, grey parking areas, which originally earned them their name.

All this leads to the conclusion that, in addition to looking into the sheer physical deterioration of buildings, programmatic degradation must also be included in the discussion on the phenomena of architectural decay. Rossi, as it was mentioned, already addressed this topic decades ago, defining obsolete buildings as those that "outlived the dynamics of land use in the surrounding area" and therefore "do not follow life" (Ros-

- **10** In less ambitious cases, abandoned and dilapidated spaces merely became locations of guided tourist tours and urban exploration, frequently referred to as *disaster tourism* or *ruin porn* (Lyons, 2018: 2).
- 11 The majority of existing definitions characterize brownfield sites as areas of land, along with any structures present on them, which are neglected, insufficiently exploited, or abandoned (Matkovic, Jakovcic, 2019: 352). On some sites, there may also be a presence of certain contamination.
- **12** According to Hollander, Kirkwood, Gold (2010: 2), *greenfields* are undeveloped areas without laid out infrastructure, such as forests, pastures, and agricultural land.
- 13 Croatia's capital, Zagreb, for example, has numerous brownfield sites that are officially recognized as city projects (Jukic, Smode Cvitanovic, 2011: 30-31) and have thus been the topic of numerous public political debates in the past decade.
- 14 In the past decades in Paris, for instance, a number of large urban planning projects (the so-called *city projects*), based precisely on the transformation of former *brownfield* zones, were politically initiated (Jukic, Smode Cvitanovic, 2011: 70).
- 15 Unlike most brownfield areas, typical greyfield zones are not contaminated nor do they have a negative impact on the environment. Due to the fact that they have still been used until recently, they mostly remain connected to all the necessary infrastructure networks, and built structures located on such areas still meet the basic requirements of building stability, mechanical resistance, safety in case of fire, etc.
- **16** In this regard, on an urban scale, *adaptive reuse* is closely connected to processes of *gentrification*: "In the gentrified city, the fabric remains but the commu-

si, 1984: 96). Among a number of potential design strategies for combating architectural obsolescence, Abramson (2017: 114-115) identifies *adaptive reuse* as the most frequently used one.

Adaptive reuse encompasses the repurposing of an outdated building with only minimal spatial interventions, necessary to accommodate the newly proposed program, function or users.16 With emphasis being put on transformation and soft changes, rather than on demolition, these practices align well with numerous contemporary concerns linked to issues of *sustainability* in the construction industry.17 Architecture in a state of decay is therefore not understood as something essentially *irreparable*, that needs to be eliminated and built anew, but rather as something that requires only a carefully planned, painless adaptation to suit the new conditions – until the next (market) change.

DESTRUCTION AND RADICAL RECONSTRUCTION

In the context of growing complexity of the contemporary world, it is crucial to look into certain alternative perspectives on the phenomenon of decay in architecture and include them in consideration and discussion. For instance, Lebbeus Woods was an architect whose very particular viewpoint can certainly

nity is cleared out. Gentrification renders, in effect, the previous inhabitants obsolete." (Abramson, 2017: 118)

- 17 A number of prominent 21st-century architects advocate for this kind of approach, and it is informative, for instance, to look into a recent quote by the Pritzker Prize 2021 laureates Anne Lacaton and Jean-Philippe Vassal: "Never demolish. Never subtract, remove, or replace. Always add, transform, and utilize, with and for the inhabitants." (Anne Lacaton at the inaugural Jaqueline Tyrwhitt Urban Design Lecture at the Harvard GSD. 2022).
- **18** Woods, 1997: 19 "Cities have always needed to accept the new, the strange, the unexpected, the upsetting, the disturbing. Today they need to engage the conflicts at their core at a higher pitch of intensity, a more rapid tempo than ever, and at an unprecedented scale (...)."
- 19 Woods, 1997: 15 "Modernist architecture, just as the positivism that formed its foundations, was as single layered and hierarchical as the damaged cultural tissue it claimed to erase. Modernist architecture was too classical in its knowledge, too tied to cause-and-effect conceptions of process, too slavish in its worship of the machine (and its deterministic processes) to embody the chaotic spirit of the new age."
- **20** Woods, 1997: 19 "What is radical architecture? I have only one answer: the one in which you do not already know how to behave."
- 21 Woods, 1997: 19 "At such a moment of recovery, it is crucial that new directions and new choices are articulated. Because governments and corporations cannot be expected to take the initiative in establishing new and multilayered societies, the impetus for wheir creation must come from below, from people who begin to build directly, without the sanction of any institutionalized authority."

be highlighted as a point in case. In his publications War and Architecture (1993) and Radical Reconstruction (1997), Woods examines and offers commentary on areas that have endured a significant amount of destruction, whether from conflict (Sarajevo in the 1990s) or from natural disasters (San Francisco after the earthquake of 1989).

The focus of Woods' interest is finding innovative and ambitious spatial strategies that have the potential of viability amidst the complicated, unforeseen, and deeply disturbed spatial situations as in the mentioned cases, as well as in other ones that share the same grave spatial challenges. 18 His approach to the contemporary metropolis also presupposes sharp criticism of earlier modernist ideas, which he openly condemned as being overly single-layered and hierarchical, and thus maladjusted to the new social reality.19 One of the modernist principles that he deemed especially problematic is that of the tabula rasa, which results in urban areas stripped of their degraded spatial layers and real-life problematic, so as to create a "better" city (Woods, 1997: 15). Rather than denying the actual complexity of the city, by employing just restorative or futuristic interventions that merely return the state of space to outdated and inapplicable circumstances of the past, or naively transfer it into imagined projections of the future, Woods advocates confronting the consequences of destruction in space in all their layered complexity.

What makes his approach radical, according to the author himself, is that there are no established models or anticipated outcomes of such spatial strategies.20 In other words, radical is in this case equated with leaving the comfort zone and venturing into the strategically and operationally unknown terrain. Another distinguishing feature of Woods' perspective is that, in contrast to authoritarian and top-down modernist methods, the chosen spatial strategies should emerge from below, directly initiated by their end users.²¹ Finally, it is necessary to point out the implied temporary, unstable, transformable character of the proposed interventions. This, precisely, is the reason why they were considered avant-garde decades ago, and for the same reason it makes them highly applicable in today's radically dynamic world.

Specifically, to build on urban fabric wounded by some sort of destruction, Woods develops a system comprising a series of design procedures that, invoking medical terminology, he calls *injections, scabs, scars,* and *new tissue* (Woods, 1994: 21, 24, 31, 36). Ultimately, this system can be called *interventionist architecture* (Modrcin et al., 2001: 1). At the same time, Woods pragmatically observes that the growth and decline of every

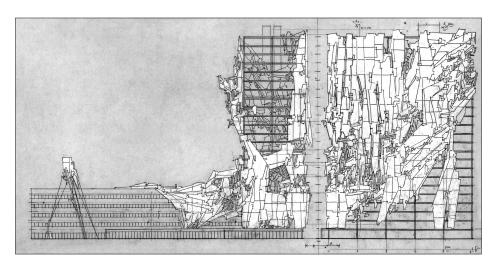


Fig. 7 Lebbeus Woods, Sarajevo Wall Segment Elevation (site of the former Assembly and Parliament Buildings), from War and Architecture, 1993 © Estate of Lebbeus Woods

city are determined, to a large extent, by legal regulations and planning guidelines (Woods, 1997: 20). Thereby, a belief is implicitly expressed in the importance of designing systems and strategies, and not merely singular buildings and structures.

Although Woods' drawings build on his written ideas to a significant extent, the nature of his proposed procedures is still somewhat open to speculation, as are the resulting, novel spatial relationships in the cities where they could be implemented.²² In an 2001 interview for Oris magazine²³, Woods reexamined the elusive dimension of his work, which he himself occasionally perceived as dreamlike, but identified and justified a certain amount of naivety as necessary for such radical projects (Fig. 7).24 Nevertheless, his work demonstrates a strong belief in the power of architecture as a medium capable of generating positive change by responding to our time's most challenging spatial and social circumstances. According to Woods (1997: 22), it is precisely through confronting those circumstances and acting in unstable spatial contexts, such as those of destruction and decay, that architects are able to elevate their work to a level that would otherwise be impossible to accomplish by practicing only within (seemingly) stable conditions.

A GREEN ARCHIPELAGO AND THE PLANNED NATURAL TAKEOVER OF URBAN FABRIC

Another progressive perspective on decaying buildings, as well as the entire parts of cities in a state of decay, was introduced by Oswald Mathias Ungers and Rem Koolhaas in their manifesto study *The City in the City, Berlin: A Green Archipelago*, dating back to the end of the 1970s. The authors' work directly responded to the perceived challenges of depopulation and unplanned city shrinkage. Those processes were generally identified as

having a negative impact on the contemporary city's social as well as physical structures, therefore posing a threat to its overall urbanity (Hertweck, Marot, 2013: 12). As a result, the authors recognized the need to develop new spatial strategies that could mitigate these undesirable effects.

Through a series of urban analyses, Ungers and Koolhaas distinguish two main categories of spaces in the city. The first category encompasses the well-developed, less problematic spaces that continue to maintain their planned image and level of urbanity. The second category is comprised of substandard layers of the urban fabric, damaged by negative social and spatial processes, thus further deteriorating the state of the city as a whole. Instead of attempting to return those layers to a better, previous state, the authors somewhat radically propose their gradual weeding out or unbuilding into nature (Hertweck, Marot, 2013: 16).

In this way, they believe, the importance and urbanity of the first category and its areas are emphasized. Moreover, they propose an additional intensification of urbanity in those areas through design procedures that carefully manipulate construction and population densities, aiming to achieve the ambience of a humane metropolis. In some cases, these procedures follow additive principles of constructing new buildings and landmarks, while elsewhere the methodology is subtractive and includes the thinning of overcrowded zones by means of new urban voids — squares, parks, and other open public spaces (Hertweck, Marot, 2013: 14).

In the end, the resulting image of the city becomes exactly what the title *Green Archipelago* illustratively implies — preserved city enclaves of enhanced urbanity stay as numerous *islands* in the remaining greenery, among the layers of nature that have taken over the formerly substandard city areas (Fig. 8). It is important to note that, in the framework of this project, Ungers and Koolhaas think of nature as a designed system that, when com-

²² Woods, 1997: 20 "The new, reconstructed cities demand an architecture that arises from and sinks back into fluidity, into the turbulence of a continually changing matrix of conditions, into an eternal, ceaseless flux."

²³ See: https://www.oris.hr/hr/casopis/clanak/[69] intervju-lebbeus-woods,958.html [accessed 27.8.2023.]
24 Modrcin et al., 2001: 1 "Sometimes I think that what we did in Zagreb in 1991 was to indulge in fantasy. I thought then that architecture could generate change, a revolution, a transformation. I think now that was naïve, but I think that it takes a certain kind of naïveté to plunge into radical projects, to think that architecture can make a difference in a political crisis."

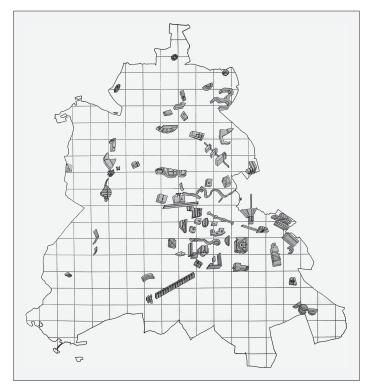
bined with the opposing (also designed) system of urban structure, "(...) intensifies rather than diminishes the sense of a Metropolis" (Hertweck, Marot, 2013: 18). Hence, for the authors, the contemporary city or Metropolis becomes "(...) an environment completely invented by man." (Hertweck, Marot, 2013: 18).

CRONOCAOS AND CRITICAL CONSERVATION

Based on the insight into Ungers' and Koolhaas' study, one of the key questions that logically emerges is: how to determine which deteriorated layers of the city are really substandard and can be replaced by a novel layer (in the case of Green Archipelago, nature itself), and which layers are truly valuable and need to be preserved? Which criteria are used to make this distinction and why? To look further into this complex matter, it is interesting to refer to the Critical Conservation study program, recently introduced at the Harvard Graduate School of Design. According to the program's co-director Susan Snyder (Lowenthal, 2014: 1), the program has its origins in Rem Koolhaas' and AMO's 2010 Cronocaos exhibition, shown at the 12th Venice Architecture Biennale.

The exhibition looks into the relationship of *transformation* versus *preservation*, and builds its arguments on the fact that an ever-growing percentage of the globe²⁵ is being placed under various preservation regimes that "we don't know, have not thought through, cannot influence" (Koolhaas, 2011: 119). This results in those large areas often spatially stalling, in stark contrast with others that are rapidly developing – and what is considered especially problematic is the selection criteria determining whether a space will face one scenario or the other (Koolhaas, 2011: 122).

Rather than simply provoking novel discussion on spatial layers worthy of preservation, Koolhaas addresses the other side of the spectrum as well, speculating on buildings and sites worthy of demolition. For instance: with a visible amount of cynicism, AMO's re-



action to the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage is exhibited as a paraphrased print titled Convention Concerning the Demolition of World Cultural Junk (Koolhaas, 2011: 121). The exhibition also openly criticized the absence of contemporary conservation theories (Koolhaas, 2011: 119), which may be seen as an early announcement of the GSD's new study program.

The Critical Conservation program provides research methodologies and theoretical insights required for a fuller understanding of historic sites, places, or narratives, by acknowledging that a number of social circumstances or constructs inherently influence our perception and opinions on these topics. In this sense, the program's theoretical starting point is that spatial and social conditions are never neutral, nor is it possible to hold a completely objective point of view on them.²⁶ In this context "to conserve means to question, revise, and subvert dominant versions of the past rather than its passive and complicit perpetuation. This practice is what we refer to as Critical Conservation." (cited from the program's website). Therefore, according to the GSD, only by having a multi-faceted, interdisciplinary, and critical view of the relationship between existing and newly planned urban layers will we be able to professionally and responsibly approach the issues of continuing transformations of our contemporary cities and territories.

FIG. 8 PETER RIEMANN, FINAL PLAN OF *THE CITY IN THE CITY* FROM THE 1ST CORNELL SUMMER ACADEMY WITH OSWALD MATHIAS UNGERS AND REM KOOLHAAS, BERLIN, 1977

²⁵ At the time of the exhibition, this was stated to amount to around 12% of the Earth's surface (Koolhaas, 2011; 119).

²⁶ See: http://www.criticalconservation.com/about [accessed 22.08.2023.]: "(...) there is no neutral historic site, place, or narrative. Historians cannot attain an objective point of view external to their historic moment, and neither can conservation architects. Rather, history is a contested, dynamic, and incommensurable process, and its representations are always partial, exclusionist, and ideologically tainted. Under this paradigm, claims of total objectivity or neutrality in one's actions signify complicity with existing power hierarchies embedded in systems and places. Conservation architects have the opportunity and responsibility to renegotiate history and power relationships through design."

SUBTRACTION AND DROSSCAPE AS STRATEGIC SHIFTS

Continuing on the topic of intentionally tearing down parts of the city's urban fabric, highlighted in Ungers' and Koolhaas' Green Archipelago, it is imperative to look at the work of the architect and theoretician Keller Easterling from Yale University. Easterling argues that *unbuilding* or demolishing, that is, essentially subtracting mass from space, is one of urban and architectural strategies with great potential to bring about positive spatial changes in our world of hyperproduction and excess. In her series of lectures, articles, and publications titled Subtraction. planned as well as informal types of demolition and dismantling are observed. The author elaborates on the generative power of those processes in the transformation of the spatial as well as social structure of the city. When a structure is degraded and in a state of decay, the removal of its parts represents an opportunity to establish new, healthier systems (Easterling, 2014: 34). At the same time, she emphasizes the importance of designing the entire process of dismantling, including the circular cycles of all elements involved in it - for example, planning the further utilization of construction waste resulting from the demolition of a building (Easterling, 2014: 52). In such a system, the contemporary architect is thus concerned not only with designing objects and forms, but, much more significantly, with creating strategies for the development of the built and unbuilt environment of the 21st century.

Numerous other contemporary design theories advocate for the significance of introducing developing or designing strategies. Another one that should not be overlooked in the context of the theme of decay in architecture is based on the concept of drosscape, introduced by Alan Berger, professor of urban design at MIT (Drosscape: Wasting Land in Urban America, 2007). While the previously mentioned strategies offer, to a greater or lesser extent, some type of urban transformation, drosscape presents a shift of perspective. It fully accepts the appearance of urban fabric decay without trying to undo or "fix" it. Rather, it aims to fit the disused and derelict layers as efficiently as possible into the systems of circulation of matter in the city, through reprogramming or repurposing (Berger, 2007: 12). The goal of such integration is the pursuit of new forms of productivity based on the principles of circular management of all resources, including the spatial ones.

The linguistic origin of the term *drosscape* lies in the English word *dross*, which denotes a kind of waste or impure substance, and the

suffix -scape, often used in urban-planning and architecture-related literature to signify an image or a view of a certain scene.27 According to this definition, it is clear that buildings in a state of decay are actually only one segment of a much wider field of spatial phenomena that *Drosscape* studies (Berger, 2007: 236). Its perspective is founded on the idea of waste or dross being a natural component of every developing urban environment, created in quantities proportional to the (high) rate of the cities' expansion. Just like a living organism, the city is subject to a continuous exchange of matter that needs to be controlled and managed as effectively as possible (Berger, 2007: 44). The author thus categorizes this matter into three groups: waste in the classical sense of the word (e.g., domestic waste), wasted places such as abandoned and polluted brownfield zones, and, finally, wasteful places such as large, unused parking lots and other arevfield zones (Berger, 2007: 14), which essentially represent a form of irrational management of space as a resource. The emergence of all these categories is further brought into close connection with the socio-economic processes of deindustrialization, post-Fordism, and technological innovation (Berger, 2007: 239).

It is also necessary to comment on the way in which Berger positions the role of the contemporary architect in relation to the degraded layers of drosscape. He insists on a crucial shift from the authoritarian position of the heroic modernist master-planner to the architect as a mediator of interdisciplinary dialogue and cooperation (Berger, 2007: 241). As with Easterling, this implies that architects should primarily become strategists and designers of processes, and only secondarily designers of buildings. In order to justify the great responsibility that this position carries, their actions should always be guided by thorough social, economic, and environmental considerations. In return, such a point of view will provide them with the ability to notice real spatial potentials, frequently hidden in seemingly problematic, degraded, decaying zones (Berger, 2007: 241). The creation of new opportunities and resources from such disreputable spatial situations represents one of the great urban and architectural potentials and challenges of the contemporary moment (Easterling, 2021: 94).

CONCLUDING REMARKS

As a result of a complex mix of natural, demographic, economic, or political processes, buildings and building complexes are left today in diverse states and stages of decay in

²⁷ As is the case, for example, in the terms *cityscape*, *soundscape*, or *walkscape*. See: Marić and Bojanić Obad-Šcitaroci, 2012.

their surrounding space. In that way, they constitute a spatial challenge to which contemporary theoretical and design approaches must be articulated and discussed. The aim of this paper was to examine such potent strategic approaches. Through researching and contextualizing the wider theoretical discourse on the phenomenon of decay in architecture, some key perspectives were located and identified, invariably formulated by prominent architects and architectural theoreticians. The choice of such approaches was based on the criteria of continuous presence of the selected theory in contemporary architectural and urban planning discourse, as well as on a clearly exhibited potential to further inform contemporary architectural and urban design strategies addressing the spatial challenges of urban decay. All of the selected examples belong to the period after World War II, as an undeniable turning point in global political and socio-cultural circumstances, with testimonies of mass destruction that provoked novel approaches to damaged and derelict urban landscapes.

The selected key approaches, along with the architects and architectural theoreticians that can be put into relation to them, are: seeking authenticity in decay (The Independent Group), superimposing the new onto the decaved (Peter and Alison Smithson), form transcending function (Aldo Rossi), ruins as postfunctional spaces (Louis Kahn), commercial redevelopment and adaptive reuse of the decaying and obsolete (Daniel Abramson), radical reconstruction (Lebbeus Woods), planned natural takeover of urban fabric (Oswald Mathias Ungers and Rem Koolhaas), critical conservation practices (Rem Koolhaas), subtraction as a design strategy (Keller Easterling) and drosscape (Alan Berger). In presenting the reviewed material, priority was not given exclusively to chronological order, but rather to establishing meaningful links between relevant arguments from the analyzed perspectives.

In an attempt at a critical synthesis of these different perspectives, it is interesting to first identify causal relationships between these approaches and to establish how the earlier ones productively informed the more recent theories, or else, some other contemporary design approaches. For instance, the Smithsons' superposition or overlay of the new onto the old, with both layers contributing to the overall result, is a design strategy frequently implemented today, but on a vastly different scale. In the Golden Lane project, namely, it is envisioned to function on the scale of a whole neighbourhood, while today the strategy is mostly implemented on the scale of a singular building, especially in contemporary built heritage restoration projects. Other examples of such indicative causal relationships might be

detected in how Rossi's theory of *form transcending function* provides an excellent theoretical framework for later *adaptive reuse* design practices, or how Ungers' and Koolhaas' *Green Archipelago* encompasses *unbuilding* themes that would subsequently be expanded upon in Easterling's *subtraction*.

Further on, it is important to look into common denominators found in some of the examined approaches, most notably those from the 1990s onward, in an attempt to identify shared contemporary concerns and themes in relation to urban decay. In a number of reviewed perspectives, the importance of a critical, interdisciplinary overview of the spatial relationship between the existing (decayed) and any newly planned urban layers is underlined. This, in turn, results in a redefinition of the architects' traditional role, where they are now primarily considered spatial strategists and process designers, and only secondarily designers of buildings and other visible spatial relationships. This new position also marks a shift from the architects' historic, exclusive task of top-down planning, to creation of systems of softer and more flexible hierarchies within which productive combinations of topdown and bottom-up approaches are possible. Furthermore, in most recent perspectives, the previously present need to *heal* or *repair* decaying layers with new and better construction is manifestly absent. More so, numerous approaches emphasize the relevance of undeveloped or unbuilt spatial layers as equally important parts of the contemporary urban environment, and strategies of urban subtraction are opposed to the established, additive design operations. Most of the approaches also include the environmentally conscious theme of *circular management* of elements in the specified process (Fig. 9).

Along with these common themes registered in contemporary viewpoints, there are, of course, also a number of quite specific issues present in different approaches and theories, which reflect the complexity of the addressed problematic. Ultimately, all this results in appraising a rich repertoire of theoretical and design tools that are available in confronting and managing the glaring phenomenon of decay in architecture today. It is one of the major tasks of the 21st-century architects to fully assess this complex field and carefully identify the appropriate strategies, techniques, and tools for each given spatial situation, along with its intricate broader context. With the right creative modifications and, in fact, adequate shift in the understanding of their role, architects can, in turn, release new spatial potentials and initiate positive urbanarchitectural and social changes.

[Proofread by: Aleksandra Žmegač-Horvat]

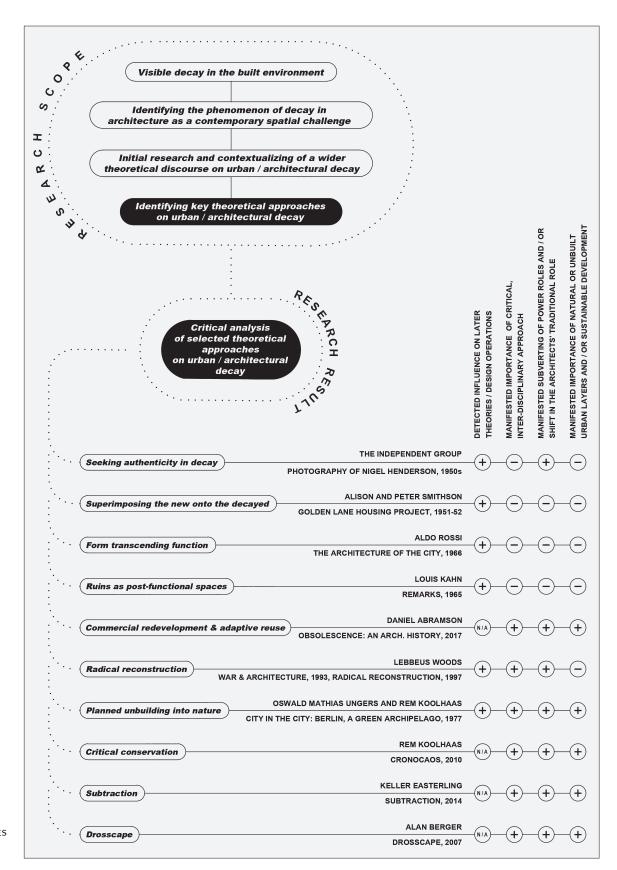


FIG. 9 DIAGRAM OF RESEARCH SCOPE AND ANALYSIS OF SELECTED THEORETICAL APPROACHES TO THE PHENOMENON OF DECAY IN ARCHITECTURE

BIBLIOGRAPHY AND SOURCES

- 1. ABRAMSON, D. (2017) Obsolescence: An Architectural History, Chicago: The University of Chicago Press. https://doi.org/10.7208/chicago/9780226313597.001.0001
- 2. ACCORDINO, J.; JOHNSON, G.T. (2000) 'Addressing the Vacant and Abandoned Property Problem'. Journal of Urban Affairs, 22/3, pp. 301-315. https://doi.org/10.1111/0735-2166.00058
- 3. BERGER, A. (2007) Drosscape: Wasting Land in Urban America, New York: Princeton Architectural Press.
- 4. EASTERLING, K. (2014) 'Subtraction'. In: HIRCH, N. and Miessen, M. (eds.) Critical Spatial Practice 4, Berlin: Sternberg Press.
- 5. Frampton, K. (1985) Modern Architecture: A *Critical History*, London: Thames and Hudson.
- 6. GIEDION, S. (1959) Space, Time and Architecture (Third, enlarged edition), Cambridge: Harvard University Press.
- 7. HERTWECK, F.; MAROT, S. (eds.) (2013) The City in the City, Berlin: A Green Archipelago, A Manifesto (1977) by Oswald Mathias Ungers and Rem Koolhaas, Zürich: Lars Müller Publishers.
- 8. HILL, J. (2020) 'Architecture in the Dark'. In: BUTCHER, M. and O'SHEA, M. (eds.) Expanding Fields of Architectural Discourse and Practice: Curated Works from the P.E.A.R. Journal. London: UCL Press.
- 9. HOLLANDER, J.; KIRKWOOD, N.; GOLD, J. (2010) Principles of brownfield regeneration: cleanup, design, and reuse of derelict land, Washington: Island Press.
- 10. JOKILEHTO, J. (2006) A History of Architectural Conservation, Oxford: Butterworth-Heinemann. https://doi.org/10.4324/9780080523118
- 11. Jukić, T.; Smode Cvitanović, M. (2011) Zagreb gradski projekti u postupku planiranja grada, Zagreb: Arhitektonski fakultet Sveučilišta u Zagrebu i Gradski ured za strategijsko planiranje i razvoj Grada.
- 12. KAHN, L. (1965) 'Remarks', Perspecta, 9/10, pp. 330-331. https://doi.org/10.2307/1566926
- 13. KOOLHAAS, R. (2011) "Cronocaos", Log, 21, pp. 119-23.
- 14. LONČAR, S.; PAVIĆ, D. (2020) 'Areas with Abandoned and Vacant Properties in Croatia. A Plea for Recognition, Research, Policies and the Development of Regeneration Strategies', Etnološka tribina, 50(43), pp. 197-237. https://doi. org/10.15378/1848-9540.2020.43.09
- 15. Lowe, S. (2012) 'Abandonment'. In: International Encyclopedia of Housing and Home, Sмітн, S.J. (ed.) Amsterdam, Oxford, Waltham: Elsevier. https://doi.org/10.1016/B978-0-08-0471 63-1.00511-7
- 16. LOWENTHAL, D. (2014) "Conservation Past and Present", Sylvester Baxter Lecture at the Harvard GSD [Online]. Available at: https://issuu. com/criticalconservation-harvardgsd/docs/ cc_lowenthal_transcript [accessed: 7 October 2023].
- 17. Lyons, S. (2018) Ruin Porn and the Obsession with Decay, London: Palgrave Macmillan Cham. https://doi.org/10.1007/978-3-319-93390-0

- 18. MARIĆ, T.; BOJANIĆ OBAD-ŠĆITAROCI, B. (2012) 'Walkspace; Linearno povezivanje prostora na primjeru Splita'. Prostor, 20 (1/43/), pp. 118-131.
- 19. MATKOVIĆ, I.; JAKOVČIĆ, M. (2019) 'Brownfield prostori i njihova regeneracija: Definicije i pristupi', *Prostor*, 27(2/58/), pp. 348-359. https: //doi.org/10.31522/p.27.2(58).13
- 20. Modrčin, L.; Bilić, A.N.; Rupnik, I.; Woods, L. (2001) Interviu: Lebbeus Woods, Oris 9 [Online]. Available at: http://www.oris.hr/hr/casopis/clanak/[69]intervju-lebbeus-woods,958. html [accessed: 23 November 2022].
- 21. MODRČIN, L.; PRPIĆ, L.; WAGNER, A. (2021) Lebbeus Woods: Zagreb Free Zone Revisited, Zagreb: University of Zagreb Faculty of Architecture and Oris House of Architecture.
- 22. MUMFORD, E. (2002) The CIAM Discourse on Urbanism, 1928-1960, Cambridge: The MIT Press.
- 23. NEWTON, P.W. (2010) 'Beyond Greenfield and Brownfield: The Challenge of Regenerating Australia's Greyfield Suburbs', Built Environment, 36(1), pp. 81-104. https://doi.org/10. 2148/benv.36.1.81
- 24. PALICH, N. et al. (2011) 'Glossary of Environmentally Sustainable Design', Environment Design Guide, 70, pp. 1-24.
- 25. Rossi, A. (1984) The Architecture of the City (translated by Ghirardo, D. and Ockman, J.), Cambridge: The MIT Press.
- 26. Ruskin, J. (1903) The Seven Lamps of Architecture. In: Cook, E.T and Wedderburn, A. (eds.) The Complete Works of John Ruskin, London: George Allen.
- 27. ŠPIKIĆ, M. (ed.) (2018) Gustavo Giovannoni: Spomenici i ambijenti, Zagreb: Matica hrvatska.
- 28. VITRUVIUS, M.; MORGAN, M.H. (1960) Vitruvius: The Ten Books on Architecture. New York: Dover Publications.
- 29. Woods, L. (1993) War and Architecture, New York: Princeton Architectural Press.
- 30. Woods, L. (1997) Radical Reconstruction, New York: Princeton Architectural Press.
- 31. *** Commodity, firmness, and delight: the ultimate synthesis [Online]. Available at: https:// www.britannica.com/topic/architecture/Commodity-firmness-and-delight-the-ultimate-synthesis [accessed: 11 May 2023.].
- 32. *** Critical Conservation Program, Harvard University Graduate School of Design [Online]. Available at: http://blogs.gsd.harvard.edu/ critical-conservation/ [accessed: 8 February 2023].
- 33. *** "Never demolish. Always transform, with and for the inhabitants": Anne Lacaton delivers inaugural Jaqueline Tyrwhitt Urban Design Lecture [Online]. Available at: https://www. gsd.harvard.edu/2022/04/never-demolish-always-transform-with-and-for-the-inhabitantsanne-lacaton-on-urban-design-and-architectu re/[accessed: 8 September 2023].

Sources of Illustrations

- Fig. 1 Authors, 2023
- Fig. 2 Sir John Soane's Museum, London
- Fig. 3 Nigel Henderson Estate, Tate Archive, CC-BY -NC-ND 3.0 Unported. Available at: https:// www.tate.org.uk/art/archive/items/tga-92 11-9-6-69/henderson-photograph-of-a-demolished-building [accessed 30.8.2023.].
- Fig. 4 Alison and Peter Smithson Archive, Frances Loeb Library, Harvard University Graduate School of Design
- Fig. 5 "Il Libro Azzurro Aldo Rossi" by Iliazd, CC BY-SA 2.0, via Openverse. Available at: https://openverse.org/image/o84764a2-5342-4d95-a5f1-2518aooe6853?q=aldo rossi [accessed 29.09.2023.]
- Fig. 6 Authors, 2023
- Fig. 7 Estate of Lebbeus Woods
- Fig. 8 Peter Christian Riemann, CC BY-SA 4.0, via Wikimedia Commons. Available at: https: //commons.wikimedia.org/wiki/File:Die_ Stadt_in_der_Stadt,_Riemann_1977.1.jpg [accessed 11.9.2023.].
- Fig. 9 Authors, 2023

AUTHORS' BIOGRAPHIES AND CONTRIBUTIONS

JANA HORVAT, Ph.D. candidate and teaching assistant at the University of Zagreb Faculty of Architecture. Her areas of scientific interest include housing and urban transformation, analyzed both through classical and design-driven research methodologies.

KARIN ŠERMAN, MDes, Ph.D., Professor of Architectural Theory at the Department of History and Theory of Architecture, University of Zagreb Faculty of Architecture. Her work focuses on modern and contemporary architecture and culture, and current theoretical research.

Conceptualization: J.H. and K.Š.; methodology: J.H. and K.S.; formal analysis: J.H. and K.S.; investigation: J.H.; writing – original draft preparation: J.H.; writing – review and editing: J.H. and K.Š.; supervision: K.S. Both authors have read and agreed to the published version of the manuscript.

