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I Dealing with Modern Heritage in Times of Crisis

ABSTRACT

Dealing with modern heritage in times of crisis is addressing the global and local challenges that designers and planners and organizations like DOCOMOMO International have to recognize and analyze on different levels. When moving its headquarters back to TU Delft in 2022 the International Secretariat formulated three main areas of action for the running programmatic period until 2025: sustainability, digitalization and education. Those themes are inherently connected to each other and are at the core of DOCOMOMO's mission. But the organization is also challenged by divergent global shifts between the Global North and South. Documentation and conservation of modern heritage are understood not as luxurious intellectual goods but as a direct contribution to sustainability within the scope of the United Nations Sustainable Development Goals (SDGs): saving resources, making cities better and providing education are main contributions. The current 79 national working parties are dealing with different challenges and priorities related to the documentation and conservation of modern heritage in each region that need to be addressed differently. In a comparative approach the International Secretariat is analyzing the strenghts, weaknesses, opportunities and challenges of the national working parties in order to draw conclusions for the future workprogram. It can be noticed that the open accessed to many materials and research during the last two decades has already made a difference and allows for a smoother knowledge transfer, in particular among the younger generation. We also notice the diversity in the composition of the national working parties, coming from academia, professional or activists background. This diversity in expression and the local character of each national working party guarantee for the development of individual and suitable approaches. A priority on DOCOMOMO International's agenda will be the provision of further material, including the digitization of old documents and the creation of new documents, webinars or online-courses related to historical, technological or societal aspects of modern heritage and aiming at the improvement of our built and lived environment. Of particular interest is to provide accessed to affordable housing, food and water.

Keywords: Global challenges, population growth, climate crisis, conflicts, natural disasters, alterations, conservation approaches, educational concepts

INTRODUCTION

We generally acknowledge that European cities as they exist today were given their shape first in the 19th century and later underwent significant change and growth in the inter- and postwar periods of the 20th century. Their legacy was a huge building stock often based on social ideas providing housing, health care and educational facilities to an extent that was not known in the centuries before. It has contributed significantly to the growth of cities in the Northern hemisphere in the late 19th and early 20th centuries. Built according different stylistic and aesthetic principles and with innovative materials and technologies this legacy was only identified as heritage when attributing the social ideas of Modern Movement to them and thus extending the traditional value-framework of the heritage discourse. Organizations such as DOCOMOMO International played a crucial role in raising awareness and safeguarding original and iconic buildings in the late 1980s, and from there developed a global platform that today cooperates with 79 national working parties that engage in their countries and regions with and for this modern heritage.¹ During the more than 30 years of its existence DOCOMOMO International has contributed to increasing awareness and knowledge about documenting and conserving modern heritage worldwide, also made visible by the DOCOMOMO Rehabilitation Awards (DRAW) presented in 2021.²

Next to the academic and practical discussions on documentation and conservation further diversification of evaluation criteria have extended the discourse on modern heritage and its categorization, summarized in The Twentieth-Century Historic Thematic Framework.³ In parallel cities in the late 20th century evolved into megacities (cities with more than 10 million people) with uncontrolled growth and no planning – different from many developments in the early 20th century.⁴ Today globalization is characterized not only by the population growth a projected 9.8 billion in 2050 of which 70% will in cities.⁵ In its key findings The Ecological Threat Report 2022 identifies '27 hotspot countries have been identified that face catastrophic ecological threat with extremely low societal resilience' which are 'clustered in three regions: Sub-Saharan Africa (SSA), Middle East and North Africa (MENA), and South Asia.'⁶ These regions and countries face further ecological and societal challenges, 'highlighting the significant impact of high population growth, ecological collapses, weak societal resilience and their relationship to conflict'.⁷

¹ Altintas Kaptan, M., Ünlü, A., & Pottgiesser, U. (2023). Connecting the dots: A global exploration of local Docomomo inventories. *Docomomo Journal*, 69, 76–85. <https://doi.org/10.52200/docomomo.69.09>

² Tostões, A. (Ed.). (2022). *Modern heritage: Reuse, renovation, restoration*. Birkhäuser.

³ Marsden, S., et al. (2021). *The twentieth-century historic thematic framework: A tool for assessing heritage places*. Getty Conservation Institute. https://hdl.handle.net/10020/gci_pubs_historic_thematic_framework_tool

⁴ Akkar Ercan, M., & Pottgiesser, U. (2023). Introduction: Public policies on middle-class mass housing in Europe and leveraging contemporary architecture interventions. In M. Akkar Ercan & U. Pottgiesser (Eds.), *Public policies on middle-class mass housing in Europe and leveraging contemporary architecture interventions: Working Group 3 MCMH Atlas* (1st ed.). Iscte-IUL.

⁵ Institute for Economics & Peace. (2022). *Ecological threat report 2022: Analysing ecological threats, resilience & peace*. Institute for Economics & Peace, p. 3.

⁶ Institute for Economics & Peace. (2022). *Ecological threat report 2022: Analysing ecological threats, resilience & peace*. Institute for Economics & Peace, pp. 4–7.

⁷ Institute for Economics & Peace. (2022). *Ecological threat report 2022: Analysing ecological threats, resilience & peace*. Institute for Economics & Peace, p. 2.



Fig. 1. Manhattan, New York, 2016 (source: Pixabay, Wiggijo, 2016, <https://pixabay.com/pl/photos/usa-manchattan-kontrasynowy-jork-1777986/>).

These developments illustrate the very diverse challenges that our modern built environment and heritage is confronted with globally, separating again the Global North and South, that are at the same time interdependent economically and using the same natural resources. But everywhere housing in metropolitan areas has become increasingly expensive due to the continuing influx into cities and the inability and incompetence of governments and communities to provide publicly financed housing versus return-driven private investments. As a result, concepts of space-optimized designs are becoming more important again, aiming to combine maximum quality of life in minimal space. They might be implemented into the historic and heritage layers of 20th century cities by adaptation and reuse of non-housing typologies. (Fig. 1)

GLOBAL CHALLENGES AND PERSPECTIVES

Looking again at the global hotspot regions and countries it becomes obvious that to a larger extent space-optimized designs need to be newly built in line with current requirements of sustainability on ecological, social-cultural and economic levels. These conditions call for a new Modern Movement aligned with the SDGs, aiming for diversified neighbourhoods, implementing Nature Based Solutions (NBS), local economies and digital services, as well as fostering public transport and linked mobilities. The Global North might be a test bed for those new solutions – as supported by funding initiatives

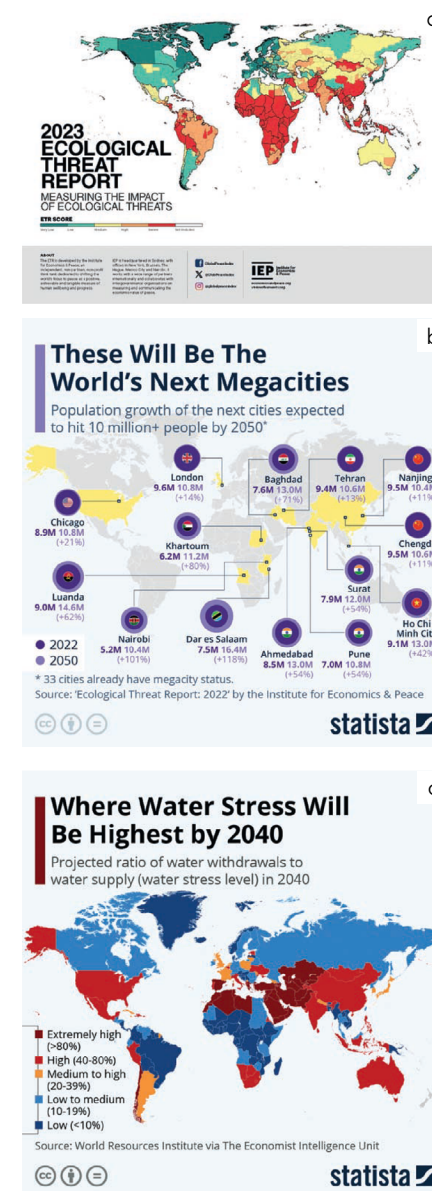


Fig. 2. Ecological Threat Report scores of ecological threats taking into account: a) natural disasters; b) demographic pressure; c) water risks (source: Institute for Economics & Peace (IEP), 2023, p. 10-11).

of the European Union and the New European Bauhaus, but the urgent need of their implementation is the in the Global South.

The Ecological Threat Reports 2022 and 2023 describe clear scores of ecological threats taking into account food Insecurity, natural disasters, demographic pressure, and water risks. All of them ask for a new and different way of building and holistic town planning taking into account traditional and innovative principles. (Fig. 2).

New solutions can nevertheless learn from their modern ancestors dating from the 1930s-1970s in Sub-Saharan Africa (SSA), Middle East and North Africa (MENA), or South Asia as they were often role models in the implementation of climate-adaptive and low-tech strategies. The achievements of this so-called Tropical Modernism were well documented in the 1940s and 1950s and led to the first schools of architecture in the 1960s to educate 'a first generation of qualified African architects'⁸ as post-colonial architects involved into educational, governmental and residential buildings being part of the nation building after many African countries gained independence.⁹ Erected from the 1930s until the 1970s in many countries of the Global South, these modern remnants have been documented and described by architecture historians and experts and heritage organizations. We can see regional differences, and have some countries with a very active academic community, e.g. in some South American countries, but in general they have not received as much attention and care as their Northern counterparts. This is expressed in dispersed documentations, reduced public awareness, and the absence of maintenance and care. Only few examples have been systematically investigated, many of them supported by the Keeping it Modern Initiative (KIM) of the Getty Conservation Institute (GCI) since 2014, among them the many projects in Ghana, Nigeria, Uganda, India, Cuba and Brazil.¹⁰ Still, the conservation approaches and experiences cannot simply be transferred one to one, but specific and suitable structures and procedures have to be established, based on adequate modern architectural heritage education and programs.¹¹

Next to demographic pressure and accelerated real estate developments, natural disasters and man-made conflicts – and in particular if they occur simultaneously – are a huge threat to the built and lived environment, including infrastructure and cultivated landscapes that in consequence also can lead to food Insecurity. Facing so many disasters and conflicts during this last decades of the 21st century, it is difficult to imagine how the protection, maintenance and conservation of modern heritage can be organised properly. This challenge becomes all the greater when considering the sheer scale/size of the modern building stock that accounts for anywhere from 50% to

⁸ e-flux Architecture. (2024). *Tropical modernism: Architecture and power in West Africa*. <https://www.e-flux.com/announcements/535520/tropical-modernism-architecture-and-power-in-west-africa/>

⁹ Kwabi, P. C. (2023). A tropical modern architect: Prof. John Owusu Addo. *Docomomo Journal*, 69, pp. 29–34. <https://doi.org/10.52200/docomomo.69.03>. See also: La Biennale di Venezia. (n.d.). *Applied Arts Pavilion*. Retrieved February 3, 2024, from <https://www.labiennale.org/en/architecture/2023/applied-arts-pavilion>

¹⁰ Getty Conservation Institute. (2024). *Keeping it Modern*. <https://www.getty.edu/projects/keeping-it-modern/>

¹¹ Pedroni, M., et al. (2020). *A global survey on education and training for the conservation of twentieth-century built heritage: Research report*. Getty Conservation Institute; DOCOMOMO International. https://hdl.handle.net/10020/gci_pubs_global_survey_education



Fig. 4. Destroyed cinema in Kabul, Afghanistan, c. 2012 (source: Jean Molitor_highres, 2012).

It seems today that these kinds of initiatives reflected the long-lasting influence of World War II and its aftermath, when intergovernmental initiatives and organizations as the United Nations (UN) and their agency United Nations Educational, Scientific and Cultural Organization (UNESCO) were still in its early years and ambitious to present joint results. More than seventy-five years after their implementation, their management and impact has become more difficult due to diversified international power structures and stakeholders, and ongoing conflicts in several regions, in particular in Middle East and North Africa (MENA). Many modern ruins bear witness to ongoing destruction and neglect, in Afghanistan, Syria, Turkey, and also in Ukraine.¹³ (Fig. 4).

With regard to specific conservation issues, we observe an increasing body of knowledge related to modern materials and assemblies and their construction principles since the early 1990s.¹⁴ These first publications are still valuable today and have been made accessible online by different organisations to be further disseminated for educational



and professional purposes. Since then, many more specific technological and in-depth-cases have been published, in particular related to concrete, metals, glass and compound materials. 'Concrete is arguably the most commonly used building material of the modern era.'¹⁵ and current ambitions are to promote the mostly academic knowledge to practitioners in the field, such as architects, engineers, craftsmen, and also to administrative bodies and laymen. The same counts for interventions related to the modern light-weight building envelope as a significant part of modern heritage.¹⁶ It is important to systematically present intervention typologies and strategies and to cluster the single-case approaches into comprehensive and applicable manuals. (Fig. 5).

A further challenge is to raise awareness of the specificities of modern building construction among the public and users who often interfere into them without respecting construction principles or materiality. This might be due to inadequate knowledge, a DIY-mentality, or in order to save costs.¹⁷ In many places the holistic, functional and aesthetic character of modern ensembles is at risk of being lost, and as a result is even less likely to be acknowledged. (Fig. 7(a-c)).

¹⁷ Korobar, V., & Siljanoska, J. (2023). The Skopje City Wall housing complex. *Docomomo Journal*, 68, p. 94. <https://doi.org/10.52200/docomomo.68.09>



¹⁴ Jester, T. C. (Ed.). (2014). *Twentieth-century building materials: History and conservation*. Getty Conservation Institute. <https://www.getty.edu/publications/resources/virtuallibrary/9781606063255.pdf>; Docomomo International. (2024). *Preservation technology dossiers*. <https://docomomo.com/dossiers-isc-t-2/>



Fig. 7. a–c. Alterations carried out by the dwellers, including sloped roof cover, enclosing parts of the terraces, adding new balconies, turning bay windows into balconies and other changes and additions to the facades. © Vlatko P. Korobar, 2023.

EDUCATIONAL APPROACHES AND THEIR IMPLEMENTATION

Finally, we are challenged to include the knowledge about existing buildings and about modern heritage into the educational curriculum.¹⁸ Today the traditional architectural education is not focused on dealing with the already-built, despite increasing efforts to include conservation and design courses into architectural programs. The global survey executed by the Getty Conservation Institute and the DOCOMOMO Specialist Committee on Education & Training (ISC/E&T) show that the majority of higher education institutions are not dealing with preservation issues, in particular not with those of modern heritage.¹⁹

Increasing the lifespan of buildings is an efficient way to reduce the carbon footprint of the building sector and thus contribute to sustainability and the resource conservation.²⁰ Educational initiatives should expand the academic horizons to equip graduates to handle complex decision making taking into account a variety of interventions ranging from repair, to rehabilitation and to the replacement of material, components and entire buildings.²¹ A one-size- fits-all approach does not seem suitable anymore. It should also be mentioned that next to technological knowledge, historical and archival research in combination with social research is crucial to any intervention to preserve modern heritage – aiming to reinstall the societal and innovative character of buildings, sites and neighbourhoods shaped by the Modern Movement. DOCOMOMO International has fostered its outreach on a global scale through Open Accessed publications that



Fig. 8. Covers of educational books published by DOCOMOMO/Getty and TU Delft (source: DOCOMOMO/Getty, 2021, TU Delft, 2019, 2021).

helps to make knowledge available in those parts of the world that have less accessed to printed publications, archives and programs.²² (Fig. 8).

SUMMARY AND CONCLUSIONS

As a global organization, originally founded in the Netherlands and partnering with a large number of European national working parties DOCOMOMO International offers a platform that allows for knowledge exchange between different disciplines, professions, countries and regions worldwide. Being a community of interdisciplinary nature, it has grown to more than 79 national working parties in 2023 dealing with different challenges and priorities related to the documentation and conservation of modern heritage in each region. Since DOCOMOMO International’s founding in 1990 the digitalization of communication and knowledge has significantly changed the possibilities of outreach and dissemination, and hopefully it has increased its visibility, as well. Nevertheless, the organizations’ principle of low threshold personal relationship and networking has been maintained and serves as a basis for discussion and exchange. Originally based in academia, its goal is to extend the network further into the professional and educational domain by providing additional material and guidelines related to documentation and conservation beyond scientific publications by making use of digital formats with the aim of being accessible to all.

Dealing with modern heritage in times of crisis is addresses the global and local challenges that designers and planners and organizations such as DOCOMOMO International recognize and analyze on different levels. When moving its headquarters back to TU Delft in 2022, the International Secretariat formulated three main areas of action for the programmatic period hat would run until 2025: sustainability, digitalization and education. Those themes are inherently connected to each other and are at the core

¹⁸ Pottgiesser, U., Dragutinovic, A., & Loddo, M. (Eds.). (2021). *MoMove: Modern movement and infrastructure*. Technische Hochschule Ostwestfalen-Lippe. https://www.th-owl.de/elsa/download/5491/5492/090421_MIAD-MID_C5ConferenceandCommunication.pdf

¹⁹ Pedroni, M., Bagues Ballester, C., Canziani, A., de Jonge, W., & McCoy, C. (2020). *A global survey on education and training for the conservation of twentieth-century built heritage: Research report*. Getty Conservation Institute. https://www.getty.edu/conservation/publications_resources/pdf_publications/global_survey_on_education_and_training.html

²⁰ Pottgiesser, U. (2022). Cultural heritage as a key resource for resilience and sustainability. In *Industrielles Welterbe: Chance und Verantwortung = Industrial world heritage: Opportunity and responsibility* (pp. 35–39). UNESCO. https://www.unesco.de/sites/default/files/2022-04/Industrielles_Welterbe_Online.pdf. See also: Abu Raed, A., Pottgiesser, U., & Quist, W. (2021). Sustainable development of high-rise residential architecture from 1970–2014: Dubai case study on modern heritage. In *LDE Heritage Conference on Heritage and the Sustainable Development Goals* (pp. 268–278). TU Delft Open. <https://books.bk.tudelft.nl/press/catalog/book/781>

²¹ Pottgiesser, U. (2022). Documentation and conservation of Modern Movement architecture in education. In *Modern heritage: Reuse, renovation, restoration* (pp. 40–45). Birkhäuser.

²² Pottgiesser, U., & Quist, W. (2023). Shared heritage Africa: Rediscovering masterpieces. *Docomomo Journal*, 69, pp. 2–3. <https://doi.org/10.52200/docomomo.69.ed>

of DOCOMOMO’s mission. But the organization is also challenged by divergent global shifts between the Global North and South. Documentation and conservation of modern heritage are understood not as luxurious intellectual goods but as a direct contribution to sustainability within the scope of the United Nations Sustainable Development Goals (SDGs): conserving resources, making cities better and providing education are major contributions.

In each region, the more than 79 national working parties mentioned above are dealing with different challenges and priorities related to the documentation and conservation of modern heritage. Each challenge needs to be addressed differently, each priority entails its own approach. It can be noticed that the open accessed to many materials and research during the last two decades has already made a difference and allows for smoother knowledge transfer, in particular among the younger generation. We also notice the diversity in the composition of the national working parties, coming from academic, professional and activist backgrounds. This diversity in expression and the local character of each national working party helps ensure the development of appropriately individualized, ideal and suitable approaches.

A priority on DOCOMOMO International’s agenda will be the provision of further material, including the digitization of old documents and the creation of new documents, webinars and online–courses related to the historical, technological or and societal aspects of modern heritage and aiming at the improvement of our built and lived environment. Of particular interest is to provide accessed affordable housing, food and water.

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