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INTRODUCTION

Zsuzsanna Böröcz, Robert Loader & Silvia Naldini

OUR PLASTIC HERITAGE: WHERE ARE WE NOW?

This Docomomo Journal on plastics is the result of collaboration between two Docomomo International Specialist Committees¹ (ISCs): the Committee for Technology (ISC/T) and the recently formed Committee for Interior Design (ISC/ID). The two ISCs hosted, together with the Dutch and Belgium Working parties, successive specialist events in October 2017 (TU Delft) and March 2018 (University of Antwerp) which served as a platform for networking, discussion and, subsequently, for dissemination of knowledge on plastics in Modern Movement architecture and design with in-person visits to relevant buildings, institutions and companies.

The ISC/T is a large and dynamic expert group which boasts a long and fruitful history within Docomomo International. Since 1997 it has issued 14 successive Technology Dossiers that examined the conservation of modern materials and components such as concrete, glass and curtain walls that have assisted in addressing the preservation of important modern buildings. In October 2017 it hosted the seminar, entitled *Plastics in Modern Movement Buildings. Conservation and (Re-)design of Synthetic Building Components* at the TU Delft Faculty of Architecture and the Built Environment in the Netherlands. It focused on the exterior applications of synthetic building materials with contributions from conservation architects, scientific researchers and fabricators and included excursions to Polyproducts (Werkendam), the bus station in Hoofddorp by NIO architects and the extension of the Stedelijk Museum in Amsterdam by BenthemCrouwel Architects. The concern for 'historic' plastics is still, for many, a surprising concept, and it is clear that a difficult situation is developing for many plastic buildings and objects of the twentieth century. In addition, the study of historic polymers must now progress to encompass the multitude of necessary hidden, essential tasks in building physics and construction.

Inaugurated at the 14th Docomomo Council Meeting in Lisbon in 2016 the ISC/ID expressed the wish to expand and deepen the study, discussion and dissemination of interior design² in the Modern Movement, and this joint publication is the result of the first public action of the new committee. The small starting team of the young ISC/ID, which later grew into a substantial and global expert group, inscribed itself in the tradition of the ISCs by organizing the international seminar on *Plastics in Modern Movement Interiors. Conservation and (re-)design of plastic Finishes, Furniture and Products* which

¹ Registers, Technology, Urbanism+Landscape, Education+Training, Interior Design, Publications.
<https://docomomo.com/iscs/>

² The term 'interior design' was chosen amongst others mainly for two reasons. Firstly, and most importantly, to avoid the binary or supplementary position of the interior in relation to architecture, and secondly to stress the emphasis on the design attitude, which is of primary concern in understanding the modern interior, especially from the perspective of the heritage professional. Moreover, the modern movement architect's demands for a new aesthetics in response to new technology and for a total work (of art) that embraces all expressions into a unitary (and also utopian) environment for humanity also seems to validate the term 'interior design'. See also Els De Vos and Inge Somers, 'With the Other, Beyond Confusion. A Critical Analysis of the Anglo-Saxon Academic Discourses Concerning Identity and Position of the Interior Discipline', in *International Journal of Interior Architecture + Spatial Design*, eds., Meg Jackson and Jonathon Anderson, vol 1: autonomous identities, 2013, pp. 22 – 32.



01 Antwerp Plastic Seminar participants Excursion to Brussels.
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took place at the University of Antwerp Faculty of Design Sciences in March 2018, and received participants from Belgium, the Netherlands, Germany and Spain. It was dedicated to the field of polymers as one of the hot topics of (mainly) the post-WWII period. The seminars were followed by a day of visits starting with the Brussels Design Museum with director Arnaud Bozzini, the headquarters of the Centre Démocrate Humaniste (the first Belgian building with a reinforced polyester façade: archs. René Aerts and Paul Ramon, 1964-66) and to ROTOR in Anderlecht who practice the deconstruction of buildings where elements are sorted, stored and re-used in new constructions. It is clear that the 'polymer era' has left a heritage, for good and for worse, that deserves consideration and care. The conference, excursion and workshops, therefore, aimed to raise the sensibility of young researchers, designers and restoration and heritage professionals towards the use, conservation and recycling of polymers in the context of circular economy approaches.

The ISC/ID wishes to create a discourse that transcends traditional boundaries and develops multiple perspectives with different approaches – e.g. thematic, chronologic, geographic – and their synergies. Increasing interest in interior design from all parts of the world shows that interiors relate to a wide range of disciplines and touch upon aspects such as comfort, privacy, beauty, effectiveness and many more. The identity of the modern interior is not only the result of the integrated approach toward architecture, furniture, design, decorative arts, utilitarian objects, equipment, textiles and light, but it also derives from the social commitment to improve the quality of (everyday) life starting from the (material and immaterial) needs of every human being.

The seminar programs provided a theoretical, historical and practical contribution to an interdisciplinary field which was important for three reasons: in bringing together expert networks from different disciplines, in combining different methodological approaches and in disclosing the results in a single publication. This was not only new within Docomomo International, but it underlined the plural perspective essential to every scientific discipline. This Docomomo Journal addresses the concerns of historical evaluation in the past decennia and the immediate and pressing challenges of the conservation of plastics in architecture. Articles have therefore been selected for their relevance from topics originating in both seminars and from further afield.

Carola Hein introduces the positive and exciting image of plastics as clean, functional and fun, which spread in the post-war years, but then developed into an uncontrolled and negatively perceived mass-produced plastic world. She also describes the fully plastic house that embodied the dream of the early plastic period when this material was used by architects for design products.

The negative campaign against plastics that followed the first period of enthusiasm is addressed by Zsuzsanna Böröcz to explain why the recognition of plastics as heritage objects only started in the 1990s. Until then, plastic objects were not considered suitable for museum collections. The effects of that situation are still seen in the lack of experience in conservation, restoration and preservation of plastic objects, and illustrate the importance of the Brussels Design Museum (founded in 2015), which hosts a large collection of plastics and develops important conservation policies.

The study carried out by Nina Serulus concerns the history of the plastic furniture manufactured from 1958 to 1980 by the Belgian company, Meurop which exemplified a belief in the utility of plastics for everyday life. Established on the principle of good design at affordable prices, Meurop can, in many ways, be considered an exemplary company. The format was a huge success domestically and in the emerging European market. The manufacturer boasted an in-house design studio and plastics department, working primarily with high-impact polystyrene. The production came to an end due to the impact of the oil crisis and rising ecological concerns.

Based on the examination of two specialized Belgian journals, Nick Serneels presents an overview of synthetic materials (plastics) and finishes dating from the 1960s that were used in the interior of office buildings. The inspection of selected buildings, in which the original presence of plastics could be established, shows that the plastic elements of listed monuments have often been removed and do not receive a similar level of protection to other materials. Plastic materials used in buildings should be assigned an equal status and treated with the necessary care and respect.

Five of the eleven articles in this publication are dedicated to *Futuro* houses – a set of buildings that were produced within a limited time period and to a similar design with only small variations in specification. They are now found around the world under different ownerships and with different histories. For these reasons the global collection of *Futuro* houses forms compelling comparative case studies.

Pamela Voigt has made extensive contributions to the history and conservation of plastics buildings. Her paper describes the detailed survey work that illustrates the gaps between the built reality and the design literature for the licensed American version of the *Futuro* house.

The *Futuro* house that is described by Wayne Donaldson constitutes an architect's personal investment in many years of rescue and resurrection of a neglected *Futuro* that had been unwanted except for its eventual sale value.

The travels and interventions of another *Futuro* in private ownership is documented by Stamatopoulou, Karoglou and Bakolas. This *Futuro* experienced the very different environments of Belgium, France and Greece with repair by boat specialists in both France and Greece. As problems with the building continue to be unresolved, the authors are now undertaking scientific analyses of the environmental conditions and physical deterioration.

Lydia Beerkens's paper describes the careful research and decision-making that informed the conservation of the *Futuro* that is now owned by the Museum Boijmans van Beuningen in Rotterdam. This building also has extensive periods



02 Detail of the plastic collection at Design Museum Brussels.
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of unknown history and the inevitable and typical damage common to other *Futuros* that have travelled. However, as a museum object and also, importantly, as the prototype of all *Futuros*, rather than a production model, this particular example has a unique status that has led it only to be exhibited indoors.

Pulling all the studies on the *Futuros* together is the paper by Tyurkay and Pottgiesser, which synthesizes the many approaches towards conservation of plastic buildings. It highlights the importance of understanding the life-cycle of polymers in order to inform Conservation Management Plans, maintenance and monitoring.

The article by Robert Loader deals with architecturally applied, large-scale external elements, which both enclose and characterize a building. The examples treated are from the UK, with a focus on GRP. The construction methods applied for architectural plastics during the 1960s-70s vary greatly, which reflects the experimental and innovative nature of this technology. This type of heritage will be at risk in the UK until a comprehensive catalogue of relevant buildings is completed, and more awareness and expertise are developed as a basis for their conservation.

Christina Malathouni deals with the recent history of the Preston Bus Station in Lancashire, built in 1969 by the Building Design Partnership (BDP) and in recent years threatened with demolition. It is an extraordinary example of almost lost Brutalist heritage that won the World Monuments Fund/Knoll Prize in 2021 thanks to thoughtful refurbishment. The key to understanding the overall character of the architecture is the conscious decision to design and build with two main materials – concrete and glass reinforced polyester (GRP). Even though little has survived of the plastics used in the project, the ‘integrated design’ ethos of BDP and the suitability of GRP for building applications remain convincing and now underpin a new life-cycle.

Zsuzsanna Böröcz is an art and architecture historian (Ph.D. KU Leuven 2004). She is guest professor at the KU Leuven Faculty of Architecture and affiliated to both the KU Leuven Department of Architecture A2I research group Architecture Interiority Inhabitation and the University of Antwerp Faculty of Design Sciences Henry van de Velde Research Group. She is also President of Docomomo Belgium and co-chair, together with Bárbara Coutinho, of the Docomomo International Scientific Committee on Interior Design.

Silvia Naldini is senior researcher and lecturer at the Faculty of Architecture of Delft University of Technology and has been active in the field of Conservation and Maintenance of Monuments for more than thirty years. She works in (EU) international and national research projects and transfers scientific knowledge into practice (Monumentenwacht). Recent research concerns Professionalism in Monuments Conservation and Integral Transformation of Museums. She is editor of the Rondeltappe book series on Conservation and Transformation and of the DOCOMOMO International journal.

Robert Loader is an architect based in London with extensive experience in repairing and upgrading historic buildings and neighbourhoods. Current research focuses on the materials and conservation of building facade components developed in the twentieth century. He is Secretary of Docomomo UK and Chair of the Docomomo International Specialist Committee on Technology.