

## BOOKS AND REVIEWS

Among the broad selection of publications on plastics are two in particular that have been selected for a detailed response. The oldest, 'The Plastics Architect', was clearly written for architects and designers as something of a primer for understanding the material, 'how to do it' and 'why you should love it'. It is most likely that the book was largely written before the 1973 oil shock, but its publication in March 1974 coincided with the end of the crisis by which time the price of oil had risen 300%. The economic viability of plastics in building was much reduced and there is a palpable disjunction between the content of the book and the world into which it was launched. The most recently published of the selected books, 'Life in Plastic' is a wide collection of articles intended for a contemporary and critical reader that takes in a longer view of the cultural history of plastics. Its various approaches examine our perceptions of the material, the optimistic and pessimistic iterations of plastics and waste, and its shaping of global society in the past and for the future.

### THE PLASTICS ARCHITECT

1974  
ARTHUR QUARMBY

ISBN: 978-0269028250

By the time of publication of *The Plastics Architect* Arthur Quarmby had already spent a decade and a half as a practitioner and educator, immersed in the design and promotion of plastics for buildings. The book was initially reviewed for the *Architects' journal* by Reyner Banham whose position on the formalism of the first machine age is well known, along with his advocacy of the non-architecture of environmental technology, so well expressed in 1965 through the images of Francois Dallegret.

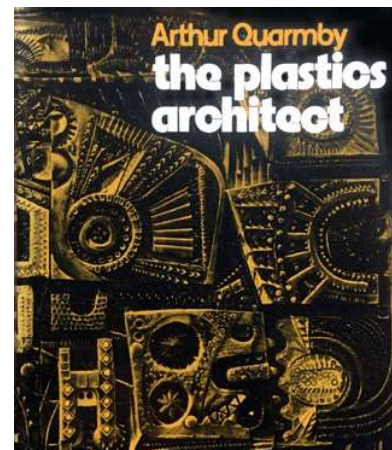
Quarmby offers a fairly comprehensive survey of the experimental and a formal nature of the most exciting early structures in plastics, and this may have suggested that Banham would offer at least a patiently sympathetic and tolerant review. That was not to be the

case. Even Peter Collins's magnificent *Concrete*, which Banham reviewed in 1960 finished with the rather parsimonious, "No one who appreciates good scholarship, good writing and cogent argument could fail to take pleasure in all but a few pages ...". However, *The Plastics Architect* had a much more brutal response. Titled, "For a moulded environment" the review excoriates the book with multiple criticisms: "[un]systematic", "not even a connected narrative", "amiable and informed ruminations", "occasional anecdotal digression" and, damningly, "fire problems get scanty coverage".

Banham ends: "There is a lot of useful information to be found in it, and it will stand in for a general book on the subject until the standard work finally comes along. More than that, however, it is already an unwitting monument to the days of hope when the dream of an instant plastics architecture was still fresh and untarnished, when the millennium was going to be forged out of the white heat of technology; the environment moulded nearer to heart's desire – but

literally moulded." From our current viewpoint it now seems like the 'standard work' never did come along in the first plastics age.

Robert Loader



## LIFE IN PLASTIC

ARTISTIC RESPONSES TO PETROMODERNITY

2021

CAREN IRR, EDITOR

ISBN: 978-1517909888

For some years, plastics have been gathering the attention from many disciplines and various angles, often highlighting one instance of the material's vast applicability, resulting in thoroughly developed, eye-opening conclusions but within a narrow scope. At first glance, one would expect a similar experience from the volume *Life in Plastic*. *Artistic Responses to Petromodernity*, edited by Caren Irr and published in 2021 by the University of Minnesota Press, Minneapolis and London. Featuring contributions by 13 authors, the focus lies on artistic responses to the plastic age without lingering too much on disciplinary boundaries in art, architecture, interiors or design. Nevertheless, we do think this book deserves attention in the *Docomomo Journal* issue on polymers because of the remarkable and overwhelming depth of the contributions. What sets it apart is probably due to most of the authors of these extensive essays being literary specialists who are surveying the broad cultural output surrounding a hundred years' worth of plastics.

Organized in four themes – The Plastic Sensorium, The Plasticity of Genre, Plastic's Capitalism and Postplastic Futures – the book provides a plethora of topics and approaches.

For instance, one theme is the influence of plastics in graphic storytelling. Both plastics and superheroes emerged in the post-war era, both enticed society with the promise of surmounting obstacles and 'to boldly go where no-one has gone before', and both grow out of human control. A graphic novel analyses the effects of plastics, which, by permeating everything cause an apocalypse after which they are the only substance surviving. Another contribution deals with our warped perception of the senses, linking the odourless

plastic to hygiene-obsessed Modernism in an analysis of the failed 'Odorama' film experience. The vinyl album too, still stubbornly among us despite its slow yet inevitable degradation within the digital revolution, is exposed as a symbol of plastics' status in our modern world. One essay convincingly questions the success with which ingenious and profound art installations are communicating references to climate issues in the art scene. Another deals with von Hagens' 'Body Worlds', in which plastination of the human body seems to fluidify the terms of life and death. Even more uncanny are the ways in which plastics appear to be interwoven with the capitalist system and society. The Bakelite promotion documentary 'The Fourth Kingdom' from 1937 and interpretations of the term 'plastick' through writings by Bruno Latour, Walter Benjamin, Jane Bennet, and Marxist or post-phenomenological thinkers, lead to amazing parallels with the underlying systems of human and non-human existence. It is striking how a novel can clarify at the micro and the macro levels the impossibility of understanding our 'petrochemical unconscious', misguided as it is by agents such as advertising. Plastic waste is abundant in this book, luckily accompanied by astounding, complex insights, for instance by coining the terms 'slow violence' or 'hyper object' for the problem of oceanic plastic. Not specific to any jurisdiction and far exceeding human lifespans, oceanic plastic presents itself as no-one's responsibility, and therefore requires a rethinking of the representation of plastics as a form of waste. As waste it is mostly invisible, perhaps it should not be considered waste at all, but an all-encompassing process of self-exploitation. In other words: "In a world mostly peddling neoliberal individualism, what kinds of affective representations might illustrate the interconnectedness of global capitalism as rendered through one of its key waste products, plastic?"

The astonishing transformative effects that plastics propose to humanity blind us to the gloomy future on the horizon. *Life in Plastic* does live up to its title. It convincingly portrays the material(s)

as unflinchingly fulfilling its potential to 'mould' the world through optimism and myth, in sync with capitalism. Both promise rational material progress, mastering nature and global colonization to the far reaches of the Earth, by inextricable creation, extraction and pollution.

Reading these lines, it should not require much effort to recognize the links with the Modern Movement. This is not the usual book for architects, designers or conservationists. Neither a coffee table book. But it is one that provides valuable insight on fundamental questions such as: What is the heritage of the past century? How did it emerge and seduce us? How does it persist and change? And how do we deal with it?

Zsuzsanna Böröcz



## HOME DELIVERY, FABRICATING THE MODERN DWELLING

2008

BARRY BERGDOLL; PETER CHRISTENSEN

ISBN: 978-3764388621

As the world's population swells and the need for sustainable ways of living grows ever more urgent and obvious, prefabricated architecture

has taken center stage. Even before our current predicaments, the mass-produced, factory-made home had a distinguished history, having served as a vital precept in the development of Modern architecture. Today, with the digital revolution reorganizing the relationship between drafting board and factory, it continues to spur innovative manufacturing and design, and its potential has clearly not yet come to fruition. Home Delivery traces the history of prefabrication in architecture, from its early roots in colonial cottages through the work of such figures as Jean Prouvé and Buckminster Fuller, and mass-produced variants such as the Lustron house, to a group of full-scale contemporary houses commissioned specifically for the MoMA exhibition that this book accompanies. In addition to an introductory essay by Barry Bergdoll, Chief Curator in the Museum's Department of Architecture and Design, this volume contains essays on prefabricated housing in Japan and in Nordic countries by Ken Tadashi Oshima and Rasmus Waern, respectively. It also includes focused texts on approximately 40 historical projects and five commissions, as well as a bibliography.



**PREFAB HOUSES**

2010

ARNT COBBERS; OLIVER JAHN

ISBN: 978-3836507530

A Prefab is a mass produced house, constructed in a factory and assembled on site in a few days or weeks. Once regarded as a cheap, easy solution for urgent housing problems, the prefab has evolved to become a synonym for ambitious design and sophisticated detailing solutions.

The amazing history of prefabricated houses started in England in the 1830's with a building kit for emigrants moving to Australia. Even today, prefabricated houses provide a high percentage of living spaces in many countries of the world. This book covers prefabs from the USA via Europe to Asia and Africa, giving insight into the various industrially prefabricated components, the difficulties of delivery to the building site, and the intricacies of assembly and completion. As well as tracing the liaison between modernism and industrialization that evolved to produce the latest prefabricated solutions, it also features a unique compilation of one-off prefabricated houses by well known international architects, as well as successful dwellings manufactured off-site for everyday modern living. Readers will also find contact details for relevant suppliers and manufacturers.



**COLD WAR HOTHOUSES:  
INVENTING POSTWAR CULTURE,  
FROM COCKPIT TO PLAYBOY**

2004

BEATRIZ COLOMINA; ANNEMARIE BRENNAN;  
JEANNIE KIM, EDS.

ISBN: 978-1568983028

The technological innovation and unprecedented physical growth of the cold war era permeated American life in every aspect and at every scale. From the creation of the military-industrial complex and the beginnings of suburban sprawl to the production of the ballpoint pen and the TV dinner, the artifacts of the period are a numerous and diverse as they are familiar. Over the past half-century, our awe at the advances of postwar society has softened to nostalgia, and our affection for its material culture has clouded our memories of

the enormous spatial reorganizations and infrastructural transformations that changed American life forever. Cold War Hot Houses casts a clear, even playful, eye on this pivotal time in history, examining topics as diverse as the creation of the interstate highway system and the shopping center, and the domestication of the national parks as well as the production of such seemingly mundane products as the drive-in theater, aluminum foil, and the king-size bed. The result is a vivid snapshot of American culture that still resonates today. This beautifully illustrated collection of essays is based on a series of seminars focusing on the impact of the Cold War on the built environment, which was recently conducted at Princeton University by Beatriz Colomina. Colomina is editor of Sexuality and Space.



**PLASTICS IN ARCHITECTURE  
AND CONSTRUCTION**

2010

STEPHAN ENGELSMANN; VALERIE SPALDING;  
STEFAN PETERS

ISBN: 978-3034603225

Plastics are high-performance materials of wide use in the built environment. Their versatile technical properties are particularly fascinating. A broad range of form-giving and finishing processes makes plastic especially interesting for complex geometries in combination with digital planning processes. Following the pioneering plastic structures of the 1970s, a number of spectacular buildings have in recent years highlighted the outstanding technical and aesthetic potential of the material.

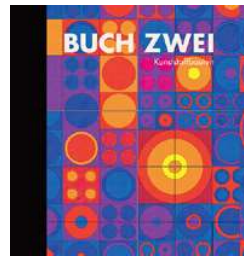


**KUNSTSTOFFBAUTEN:  
TEIL 1 – DIE PIONIERE**  
2005  
ELKE GENZEL; PAMELA VOIGT

ISBN: 978-3860682418

Building with plastics stands for the joy of experimentation, the spirit of research and the search for new ways of living. But was it primarily architects or engineers who provided the decisive impetus for plastics construction? The authors have found a nice way to present and honor the respective achievements of each professional group and their contribution to the further development of the material and its possibilities: by dividing their book into two parts, an “architects’ book” and an “engineers’ book”. In this way, two works (standing side by side) have actually been created, both equally comprehensive, informative, and even exciting. If the reader follows the explanations of architect Pamela Voigt, for example, he will learn something about the influence of the first successes in space travel on the shape of the weekend house Futuro (1968); if, on the other hand, he is mainly interested in the static system, he will rather read the texts of engineer Elke Genzel. In this rather original way, the authors approach a total of ten projects from the years 1954 to 71 that were realized with fiber-reinforced plastic. The middle section of the book also contains large-format color photos taken by three students from the Leipzig Graphic and Book Art Class, documenting the current condition of the buildings that still exist. At the end, a chronologically arranged collection of examples - a kind of catalog raisonné of plastic buildings - lists further projects with photos and basic information. A nice addition that gives the reader

the opportunity for quick orientation and expands the volume into a reference work.



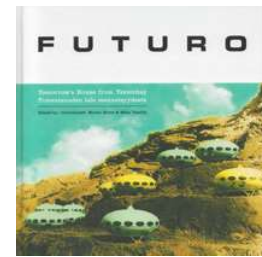
**BUCH ZWEI – LEBEN IN  
KUNSTSTOFFBAUTEN**  
2021  
ELKE GENZEL; PAMELA VOIGT

ISBN: 978-3982132778

How does it feel to live in a UFO?

The children who grew up in such a space capsule-like structure in the 1960s/70s say: quite normal. Her parents, however, had to be almost “naive and brain-drained” to venture such an experiment: living, working and loving in a plastic cave, a single large room or in small capsules. Today, roughly 50 years later, there are hardly any first owners living in their UFO houses. A new generation is just rediscovering these buildings. They find them on the beach, in the woods, or on abandoned industrial grounds and save them. For these new keepers, the UFOs are liberating places of thought.

The authors divided the work for this book into two halves: Elke Genzel visited the old builders and their families, Pamela Voigt visited the young residents and new users who made other people’s dreams their own. Book Two – life in plastic buildings – are not only the stories of family life, but also of guests staying at the beautiful Hotel Ještěd, arriving after an alpine hike at the Polybiwak Refuge, or researching at the Inukshuk Igloolik Research Centre in Antarctica.

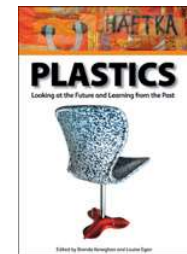


**FUTURO, TOMORROW'S HOUSE  
FROM YESTERDAY**  
2002  
MARKO HOME; MIKA TAAMILA (EDS)

ISBN: 978-9525339130

The Futuro house designed by Finish architect Matti Suuronen was first introduced in 1968. Its flying-saucer-like elliptical shape still retains its appeal even today, reflecting the space-age optimism and utopian vision of the sixties. This book offers a detailed, extensively illustrated history of the Futuro as well as a journey into our recent futuristic past. Also included is an exclusive DVD featuring the 29-minute documentary film FUTURO - A New Stance for Tomorrow (1998) plus 45 minutes of rare amateur film and other archive footage.

Translated with [www.DeepL.com/Translator](http://www.DeepL.com/Translator) (free version)



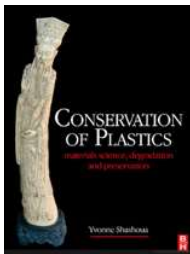
**LOOKING AT THE FUTURE AND LEARNING  
FROM THE PAST**  
2008  
BRENDA KENEGHAN;  
LOUISE EGAN (EDS.)

ISBN: 978-1904982432

This volume of postprints of a conference held at the Victoria and Albert Museum, is intended as a ‘marker in the sand’, a record of current perceptions and considerations of plastics within museum collections.

Artists' concepts of plastic as a medium, and their views of ageing and decay, challenge museum ethics. The dichotomy between an artist's intent and engagement with their contemporary culture and longevity has resulted in many different resolutions - from the display of original (decayed) materials to recording and recreating digital images of the original to the creation of aesthetically interpretable replicas. The balance between using and preserving 'plastic' artwork is a fine and delicate line of compromise.

The complex enigma of how to identify from which (of the many) synthetic polymers, the mass-produced 'plastic objects' within our collections are formed, remains, as yet, unsolved. Instead, through experience, observation and research, museums are developing collecting policies, recording techniques and preservation strategies which take pragmatic and utilitarian approaches, differentiating between stable and unstable plastics on the grounds of age, colour, design etc. Whilst generic understanding of decay mechanisms are becoming more fully understood, there has been limited success in creating the tight environmental controls needed to extend the longevity of plastic-based materials.



**CONSERVATION OF PLASTICS: MATERIAL SCIENCE, DEGRADATION AND PRESERVATION**

2009  
YVONNE SHASHOUA

ISBN: 978-0750664950

Plastic objects are included more than ever in museums and galleries collections these days, but these items can start to deteriorate when they are just a few years old. In this book Yvonne Shashoua provides the essential knowledge

needed to keep plastic pieces in the best possible condition so that they can continue to be enjoyed for many years.

The historical development of plastics, as well as the technology, their physical and chemical properties, identification, degradation and conservation are all clearly and concisely covered within this single volume, making it an invaluable reference for the increasing number of conservators and curators that are encountering plastics in their day to day work.



**POST-WAR BUILDING MATERIALS IN HOUSING IN BRUSSELS 1945-1975**

2015  
STEPHANIE VAN DE VOORDE; INGE BERTELS;  
INE WOUTERS

ISBN: 978-9491912047

In 2013-2015, VUB Architectural Engineering has been working on a research project on post-war housing in Brussels (see projects > retrofit), funded by Innoviris (<http://www.brusselsretrofitxl.be/>). The research has resulted in a trilingual book and website which help to shed light on the development and applications of innovative building materials and techniques in house building in Brussels (and Belgium) in the period 1945-1975. The book and website will assist a broad group of stakeholders in recognizing and valorising typical post-war materials in restoration and retrofit projects.

The book and the website are composed of eight chapters, each dealing with a specific material or building product that was invented or innovative and was commonly applied in residential buildings in the post-war period: light-weight concrete; thermal and acoustical insulation; glass and glazing; prefab floor systems; window frames; cladding

and sandwich panels; precast concrete façade panels; and heavy prefab systems. Along with the characteristics of these materials and building products, common brands and manufacturers are documented and applications in residential buildings in the Brussels Capital Region are illustrated. Moreover, a large collection of product advertisements and applications published in contemporary architectural journals can be accessed from the website by means of easy search tool. The website also provides additional research content, including an index of (obsolete) products and company names, and a trilingual lexicon with most relevant technical terms.

The book and website ([www.post-warbuildingmaterials.be](http://www.post-warbuildingmaterials.be)) were launched on December 10, 2015, in the CIVA in Ixelles. The book is out of print, but it can be downloaded in pdf using the link below.

(<https://www.vub.be/arch/project/post-war>)

**DIE PIONIERPHASE DES BAUENS MIT GLASFASERVERSTÄRKTEM KUNSTSTOFF - 1942 BIS 1980**

2007  
PAMELA VOIGT

<https://e-pub.uni-weimar.de/opus4/frontdoor/index/index/docId/821>

No other material affected the design and the architecture of the 19th century more than the plastics. There is a great variety of different sorts of plastics and therefore as well of architectural projects. That's why this thesis limits itself to the glass-fibre reinforced plastics (GRP). The glass fibres are bounded by the polyester resin. In this way they transfer the arising forces – therefore the GRP are suitable in the best way for load-bearing construction units. The glass-fibre reinforced plastics went through a very short but productive pioneer phase (1942 to 1980). This is a very short periods for a building material. The comprehensive analysis of the three phases consists of the investigation of the economical, political, social and cultural influences. About 260 different GRP units had

been realized world-wide out of self supporting/supporting elements. Those are listed in detail within the catalogue in the appendix. Buildings made of GRP were not alone modern due to the new material, but also due to their free mould ability, translucent facades, remarkable colours and the flexible use, according to an optimistically minded modern democratic society. These projects – some of them are still in use – prove the high developed know-how of the pioneer-constructors. The GRP-pioneers had achieved an enormous variety of forms. The analysis of the predecessors and the Sources of inspiration and the following variety of forms are basis of an objective evaluation of these buildings. Architects and civil engineers searched for ideal operational areas and structural variants for these building material, that until than had been free of associations. The used concepts: House, Second home, Exhibition, Playing equipment and the development of parts of building as Building cover, Roofing, Façade are examined in the general context and following the optimal usefulness. The knowledge about the process of the pioneer phase, the seasons for and against the use of GRP, formulated at that time, and the developed constructions, Connection techniques and structure could be helpful for a renewed use of the GRP. The request of this thesis is to show the GRP as a useful material within architecture. This analysis is to uncover the hidden knowledge, to show the prejudices developed in the 1970s and to present the glass-fibre plastics as an efficient building material for curved and folded constructions.



**PLASTICS IN ART  
2008**

**FRIEDERIKE WAENTIG**

ISBN: 978-3865684059

In this book, the development and manufacture of plastics, since the nineteenth century, is discussed within their economical and cultural context. Various plastic materials are characterized, their ageing Behavior described and conservation examples given. Finally the issue of storage is addressed. The main focus lies in recent experiences in the conservation of plastics in art. Plastic objects are ubiquitous in our daily life, and are found in a myriad of types and forms in design and art works. However, their 'modern' appearance when compared to traditional materials 'like stone, wood or ceramics' can lead to an erroneous perception of 'permanence', with no special need for care or conservation. The reality is different. Plastics age faster than traditional materials, and therefore it is imperative to understand. Their ageing mechanisms and conservation requirements.