

**Molding the Design Canon at 220°C**

**What do tennis courts, gardens and dumpsites all over the world have in common? That's right: the omnipresence of the low-value white plastic garden chair. How did this cheap chair gain notoriety and why have design historians only recently become interested in this object?**

Up until the nineteenth century, only the mightiest of people were afforded the luxury of sitting on a chair.<sup>1</sup> Chairs reflected status and power. When the industrial revolution made production processes easier and cheaper, the chair lost much of its status, which was not regained until the twentieth century, when designers started designing chairs to 'represent their aesthetic credo'.<sup>2</sup> The chair became the embodiment of everything a designer stood for and owning a designer chair became the equivalent of what it used to mean to sit on one.

'Virus' or 'epidemic' are words used to describe the object discussed in this paper: the single-piece plastic chair.<sup>3</sup> The Monobloc, a name derived from the injection moulding technique used to produce it rather than given to it by its author, has none of the appeal a designer chair. It is cheap and overtly present. From

the pristine white courtside version found at Wimbledon to the bright red chair tucked away in the corner of an Indian market, the chair has rapidly spread across the world, presenting itself in numerous colours, shapes, and sizes, but always remaining recognisable (fig. 1).<sup>4</sup>

Like design collectors (who, for reasons that will be explained in this article, are oblivious to the chair), design historians have shown no interest in the Monobloc. That is, until recently. Over the past years, a number of artists have reinterpreted the plastic chair, thus forcing design historians to include the Monobloc in their field of vision. This shift reveals design historians' heavy focus on authorship; an approach taken from the study of art history and which, as I will argue in this article is no longer sustainable within the discipline of design history.

Fig. 1. 'Cook preparing vegetables for dinner, monks on the Tharlam Monastery stage,' 2 November 2007. Accessed through: [www.flickr.com](http://www.flickr.com) on 27 July 2013. (photo: Wonderlane)





Fig. 2. 'Chairs', 12 January 2013. Accessed through: [www.flickr.com](http://www.flickr.com), on 27 July 2013. (photo: Romana Klee)

### Forming a design canon

Design history as an academic discipline has not been around for very long. Although it is difficult to pinpoint a specific moment of origin, a pivotal moment occurred in Great Britain in 1977 when the Design History Society was established by a subgroup of the Association of Art Historians.<sup>5</sup> Perhaps not surprisingly, design historians adopted art historical approaches in order to study design. Although other methods and approaches have since been added to the design historian's toolkit, art history as a discipline remains a strong influence, as becomes apparent when examining the design canon.<sup>6</sup> The canon reveals a focus on aesthetic analysis, i.e. objects are seen as images rather than functional objects,<sup>7</sup> and on so-called avant-garde designers. Like other canons that have been established for literature, music, and art, the design canon consists of well-known designers and their work.<sup>8</sup>

Architecture historian Juan Bonta distinguishes two phases in the construction of a canon: the pre-canonical response and the

canonical interpretation.<sup>9</sup> The pre-canonical response is the construction of an interpretation by an individual, whereas the canonical interpretation consists of pre-canonical responses from which a general opinion, 'shared by an entire community, or at least by an identifiable section of it — the academic and professional sub-cultures, for example, or a group within them', is derived.<sup>10</sup> This implies that an object can only become part of a canon if meaning has been verbalised and if it is part of a discipline's discourse. Once an object is part of that discourse, the meaning of the object becomes attached to the form in an act of social agreement.<sup>11</sup>

There are different factors that effect this process, such as changes within a society, changes in trends or fashion, or changes in the issues for discussions considered most significant to the moment.<sup>12</sup> In his 1986 essay 'The Cultural Biography of Things', cultural anthropologist Igor Kopytoff demonstrates how external influences can cause an object to change commodity spheres, transforming from

a commodity into a singularity or vice versa. These shifts in commodity spheres are important because they can reveal the ever-changing social meanings of objects, and how different meanings are embedded in objects at different times.<sup>13</sup> This type of research could prove a valuable addition or perhaps even an alternative to art historical methods when analysing design objects, whether these are 'anonymous' design products such as the Monobloc or objects designed by well-known designers.

### **The Monobloc**

It is unknown when the first Monobloc was manufactured or who designed it.<sup>14</sup> The first chairs surfaced somewhere between the end of the 1970s and the beginning of the 1980s. The shape of the chair has not changed since. It has four legs, a slightly sloping seat, a backrest with slats or a pattern, and it often features two armrests. The material is a white or coloured polypropylene, which has a smooth and rather shiny finish. Because of the material and the shape, the chair is stackable and easy to clean. The shape of the chair is a result of using as little material as possible but still resulting in a strong, resilient, and stackable product. It is the perfect marriage of material, method of production, and function (fig. 2).

To make a Monobloc, one needs a mould and an injection-moulding machine. An injection-moulding machine can cost up to a million dollars; the solid stainless steel mould costs around 300,000 dollars. After this investment, the mould can be used innumerable times. To start production, the mould is filled with a resin of polypropylene and chemicals that tint and stiffen the plastic. Then, the resin is heated to 220 degrees Celsius which causes the plastic to melt. With 1,000 tons of pressure behind it, it is pushed into the mould. The mould is chilled and the plastic hardens. In less than a minute a new chair is produced.<sup>15</sup>

In order to construct the Monobloc's cultural biography, this analysis will begin with one of its most significant properties: the material. Although synthetic plastics have existed for over a century, it was not until after the Second World War that they were frequently used in furniture design. The first mass-produced chair using injection-moulded propylene was a seating shell designed by

Robin Day (1915-2010) and manufactured by the Hille Furniture Company (UK) in 1963.<sup>16</sup> The new materials and their possibilities were received with great enthusiasm. In 1965, the author Richard Carr described Day's chair (affectionately called the Polyprop) as made from a 'strong and resilient' material that would 'only discolour under extremely strong light', could easily be cleaned, and was also 'warm to the touch and free from the waxy feel associated with a number of other plastics'.<sup>17</sup>

Plastic was considered not only a high quality material; it was the material of the future. The exhibition *PLASTIC and Plastic* at the Museum of Contemporary Crafts in New York (1968) for instance, emphasized the material's endless possibilities.<sup>18</sup> This idea was shared by designers like Joe Colombo (1930-1971) and Vico Magistretti (1920-2006).<sup>19</sup> No longer bound by the restricting properties of traditional materials like wood or metal, designers found themselves freer than ever before. Shapes were no longer informed by the material, but subject only to the designer's wishes.

The utopian idea of the infinite possibilities of plastics is described by Roland Barthes (1915-1980) in 'Plastic'. In this essay he refers to the material as a 'miraculous substance' that is able to replace all other substances, anticipating the descriptions of the Monobloc as a virus.<sup>20</sup> However, because it is a man-made material, he also calls it 'something powerless ever to achieve the triumphant smoothness of Nature'. This conflicting attitude toward plastics was already starting to show in the late 1960's. Society started to develop a more critical attitude toward the material. This was caused, among other things, by the quality of plastic products not living up to expectations. But more importantly, reports appeared about plastics being toxic for people and the environment.<sup>21</sup> Combined with a new ecological awareness, the popularity of plastics declined severely and plastic products came to be considered cheap, toxic, and inferior.

### **Appropriating the Monobloc**

In a 2002 exhibition at Centraal Museum Utrecht called *ideaal! wonen* (ideal! living), the Monobloc was placed next to Gerrit Rietveld's *Red and Blue Chair* (1917).<sup>22</sup> The two chairs also adorned the cover of the exhibition catalogue;

the Monobloc featured on the front and the *Red and Blue Chair* on the back. According to the exhibition's curator Ida van Zijl, these chairs were placed side by side in order to emphasize how the ideology of modernist designers can be traced back to mass-produced products.<sup>23</sup> Connecting the everyday Monobloc with the iconic star designer and architect Gerrit Rietveld lifts the former out of the commodity swamp and places it firmly in design discourse, if only for a moment.

Not only museums have shown interest in the chair: in the last decade, designers have shown increasing interest in the Monobloc. Dutch designer Maarten Baas' *Plastic Chair In Wood* (2008) sees the shape of the Monobloc hand-carved in wood by craftsmen in China (fig. 3).<sup>24</sup> The Monobloc is transformed from a commodity into a singularity. For Baas, *Plastic Chair In Wood* references 'the contrast between disposable, mass-produced goods and treasured, handcrafted objects.'<sup>25</sup> He takes a ubiquitous and cheap product and, by altering the material and production process, and subsequently also the mediation, transforms it into a singular object. The Monobloc then, emerges with an author. *Plastic Chair in Wood* could also, I would argue, be called *Monobloc by Maarten Baas*.

In 2004, the Spanish designer Martí Guixé wrote the text 'Stop discriminating cheap furniture' across ten Monoblocs. The text on the chairs is self-explanatory, and his appreciation for the Monobloc becomes even more evident from a statement on his website: 'The Monobloc plastic chair is actually a good design, cheap, democratic, technically logical, useful and resistant, but with a very bad reputation.'<sup>26</sup> Unlike Baas, Guixé does not alter the design nor the material of the chair, but only adds a handwritten text, inciting people to reflect on what the object stands for by emphasising the singular artwork that is made from a commodity merely through his handwriting — the artist's signature.

Another example of appropriation of the Monobloc is one by the Brazilian designers Humberto and Fernando Campana. An aversion toward the chair informed their project *Transplastic* (2007), in which Monobloc chairs are embedded in, or overgrown by, wicker. As Fernando Campana explains in an interview:



Fig. 3. Maarten Baas, *Plastic chair in wood*, 2008. Produced Pearl Lam Galleries, Shanghai, China/Hong Kong. Courtesy of Maarten Baas.

'Lounge or parlor chairs were originally made of wicker, for ventilation and lightness, but then the wicker was replaced with metal, then braided plastic string, and, finally, cheap and ugly plastic-injection molding. Our project was a counterattack: wicker overtaking everything like a parasite, and trying to regain its place through prostheses, hybridism, and the joining together of the chairs. These are objects that somehow tell their own story, a mutant evolution.'<sup>27</sup>

Despite the variations between the three works, all of the designers use the Monobloc chair to profess something about their aesthetics. What is interesting is that in all three examples, the Monobloc as a design remains recognizable. What influence do these appropriations have on the reception of the 'original' plastic chair?

The designer interpretations have certainly not gone unnoticed among writers and academics. In *Modern Furniture: 150 Years of Design* (2009), Martin Wellner suggests that

most critics still ignore the chair because of the absence of a famous designer name.<sup>28</sup> Guilty of this himself, the author's own review emphasizes the designer editions, once more stressing the importance of authorship. Another book, *220°C Virus Monobloc: The Infamous Chair* (2010), is completely dedicated to the Monobloc and contains five texts, twenty-six designer interpretations, and pictures of the Monobloc in various countries around the world. The title is interesting for a number of reasons: the production process, and with it the 'viral', excessive character of the chair, is emphasized, but so too is its singular status. Furthermore, one could argue that the absence of an author has led to an unusual emphasis on the method of production: technology as designer.<sup>29</sup>

### **Monobloc and the design canon**

It was not until the appropriation of the Monobloc by designers that design historians began to pay attention to the plastic chair.<sup>30</sup> The main reason for this, I believe, is that design historians find the chair difficult, if not impossible, to value without a personified designer. Without this agent, there is no design object, just as without an artist, there is no artwork.

I would argue that this focus on authorship (an approach taken from art history) is inadequate, and that to construct a design canon that is culturally, socially, and aesthetically valuable, there will have to be a shift in focus from authorship to an object's cultural biography.

- 1 Anne Massey, *Chair*, London: Reaktion Books, 2011, pp. 15 and 23.
- 2 *Ibid.*, p. 53.
- 3 Arnd Friedrichs and Kerstin Finger, *220°C Virus Monobloc: The Infamous Chair*, Berlin: Gestalten, 2010, p. 302.
- 4 At first glance it would seem that the consumption of the Monobloc in Northern countries is less decorative and consists mostly of white, green and grey chairs, as opposed to more Southern countries where the chairs consumed are more decorative and colourful.
- 5 Kjetil Fallan, *Design History: Understanding Theory and Method*, Oxford: Berg, 2010, p. 5 and John A. Walker, *Design History and the*

- History of Design*, London: Pluto Press, 1989, p. 17.
- 6 Other methods and theoretical frameworks to analyze design are discussed by John Walker, such as the production-consumption model, the typological approach or the structuralist and semiotic approach: John A. Walker, *Design History and the History of Design*, London: Pluto Press, 1989.
  - 7 Fallan, op. cit. (note 5).
  - 8 Walker, op. cit. (note 5), p. 62.
  - 9 Juan P. Bonta, *Architecture and Its Interpretation: A Study of Expressive Systems in Architecture*, London: Lund Humphries, 1979, p. 139.
  - 10 Ibid., p. 139.
  - 11 Ibid., p. 142.
  - 12 Ibid., pp. 148-149.
  - 13 Igor Kopytoff, 'The Cultural Biography of Things: Commoditization as Process', in: Arjun Appadurai, (ed.), *The Social Life of Things. Commodities in Cultural Perspective*, Cambridge: Cambridge University Press, 1986, pp. 64-91 (p. 90).
  - 14 Mariana Gosnell, 'Everybody take a seat' in: *Smithsonian magazine* (July 2004), § 9.
  - 15 Because the mould can be used so many times and the production process is incredibly efficient, the end product is very affordable. When a company in Western Europe or North America alters the design of a model, it sells the used mould to companies in less prosperous countries for a fraction of the costs of a new mould. As a result, the Monobloc becomes even more affordable and is available worldwide. Mariana Gosnell, 'Everybody take a seat' in: *Smithsonian magazine* (July 2004), § 11-12.
  - 16 Karianne Fogelberg, 'An Unpretentious Icon: Robin Day's Polyprop Chair', in: Andrea Mehlhose and Martin Wellner (eds.), *Modern Furniture — 150 Years of Design*, Königswinter: h.f.ullmann, 2009, pp. 422-25 (p. 422).
  - 17 Richard Carr, 'Design Analysis: Polypropylene chair' in: *Design*, 194:2 (1965), pp. 32-37 (p. 33).
  - 18 Sandra R. Zimmerman, *PLASTIC as Plastic*, New York: Museum of Contemporary Crafts, 1968, exh. cat. Museum of Contemporary Arts, New York, p. 5.
  - 19 Lieven Daenens and Moniek E. Bucquoye, 'Composites and furniture design: From Leo Baekeland to Maarten Van Severen', in: Moniek E. Bucquoye, Femke de Lameillieure and Bernadette Deloouse (eds.), *From bakelite to composite: Design in new materials*, Oostkamp: Stichting Kunstboek, 2002, pp. 132-187 (p. 149).
  - 20 Roland Barthes, 'Plastic' (1957), trans. by Annette Lavers in: *Mythologies*, New York: Hall and Wang, 1994. Cited in: Grace Lees-Maffei and Rebecca Houze (eds.), *The Design History Reader*, Oxford and New York: Berg, 2010, pp. 400-401.
  - 22 Vivien Walsh, 'Plastics products: successful firms, innovation and good design' in: *Design Studies* 4:1 (1983), pp. 3-12 (pp. 5-6).
  - 22 Meta Knol, Ida van Zijl and Kees Ruyter (eds.), *ideaal!wonen*, Utrecht: Centraal Museum Utrecht, 2002, exh. cat. Centraal Museum Utrecht.
  - 23 Ida van Zijl, 'Massaal of ideaal?', in: Meta Knol, Ida van Zijl and Kees Ruyter (eds.), *ideaal!wonen*, Utrecht: Centraal Museum Utrecht, 2002, exh. cat. Centraal Museum Utrecht, pp. 22-28 (p. 28).
  - 24 Arnd Friedrichs and Kerstin Finger, *220°C Virus Monobloc: The Infamous Chair*, Berlin: Gestalten, 2010, p. 50.
  - 25 Rob Ong, 'Maarten Baas at Contrasts Gallery', *Dezeen magazine*, § 4, 23 July 2008, Accessed through: [dezeen.com/2008/07/23/maarten-baas-at-the-contrasts-gallery](http://dezeen.com/2008/07/23/maarten-baas-at-the-contrasts-gallery), on 26 January 2013.
  - 26 Martí Guixé, 'Statement Chairs: Respect Cheap Furniture', *Collect Guixé*, n.p., 2009. Accessed through: [www.collectguixe.com/Helmrinderknecht\\_statement\\_chair\\_respect\\_cheap\\_furniture.html](http://www.collectguixe.com/Helmrinderknecht_statement_chair_respect_cheap_furniture/statement_chair_respect_cheap_furniture.html), on 26 January 2013; And Arnd Friedrichs and Kerstin Finger, *220°C Virus Monobloc: The Infamous Chair*, Berlin: Gestalten, 2010, p. 46.
  - 27 Vik Muniz, 'Campana Brothers' in: *BOMB* 102, Winter 2008, pp. 1-18 (p. 15).
  - 28 Martin Wellner, Martin, 'White and Ubiquitous: Monobloc Chairs', in: Andrea Mehlhose and Martin Wellner (eds.), *Modern Furniture — 150 Years of Design*, Königswinter: h.f.ullmann, 2009, pp. 302-305.
  - 29 In 2010, the BBC produced and broadcasted a five-piece documentary called 'The Genius of Design'. The Monobloc featured in the episode 'Better Living Through Chemistry'. In the documentary, the paradoxical attitude of man to the chair is again stressed: it is presented at once as incredibly functional and very unattractive. The Genius of Design: Better Living Through Chemistry, dir. Peter Sweasry and Chris Rodley, London: BBC 2010, broadcast on 13 July 2010.
  - 30 In retrospective exhibitions and books about plastics and design, more often than not the Monobloc has gone unmentioned: Moniek E. Bucquoye, Femke de Lameillieure and Bernadette Deloouse (eds.), *From bakelite to composite: Design in new materials*, Oostkamp: Stichting Kunstboek, 2002; Susan Mossman, *Fantastic Plastic: Product Design + Consumer Culture*, London: Black Dog, 2008; Charlotte and Peter Fiell, *1000 Chairs* (1997), Cologne: Taschen, 2005 (2nd revised edition); David Raizman, *History of Modern Design* (2003), London: Laurence King, 2010 (2nd revised edition); Jonathan M. Woodham, *Twentieth Century Design*, Oxford and New York, Oxford University Press, 1997.