

1000 chairs

Charlotte & Peter Fiell



TASCHEN



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Cover: Verner Panton, *Panton Chair*, 1959–1960
Verner Panton, Basle

Spine: Till Behrens, *Kreuzschwinger*®, 1983

Page 2/3: Charles & Ray Eames, *Wire Chairs with Birds*, 1952
Lucia Eames dba Eames Office, Venice, California

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"The connections, the connections. It will in the end be these details that give the product its life."
"Eventually everything connects – people, ideas, objects, etc., ... the quality of the connections is the key to quality per se."²

Charles Eames, 1961
1. Frederick S. Wright Gallery, University of California, *Connections: The Work of Charles and Ray Eames*, UCLA Arts Council, Los Angeles 1976, p. 48
2. J. & M. Neuhart & R. Eames, *Eames Design: The Work of the Office of Charles and Ray Eames*, Harry N. Abrams, New York 1989, p. 266

The Chair: Design Diversity and the Nature of Connections

The concept of connections is intrinsic to design and nowhere more so than in the design of chairs. No other type of furniture offers the possibilities of making and facilitating connections in the same way or to the same extent. Because of this, more effort and more resources have been invested in the creation of chairs by more people over a longer period of time than any other type of furniture. Indeed, apart from possibly the automobile, the chair is the most designed, studied, written about and celebrated artefact of the modern era.

The success of a particular chair has always depended on the quality and range of the connections it makes, or which the designer is able to make through it, while addressing a specific need. At the functional level, a chair makes physical and psychological connections with the individual sitting in it through its form and use of materials. At the same time, it may embody meanings and values which connect with the user at an intellectual, emotional, aesthetic, cultural and even spiritual level. On another level again, fundamental connections are made between the structural components inherent to a chair's design. A chair can also connect visually and/or functionally with the context in which it is to be used, including other objects and styles. More broadly, chair design is connected with different ideologies, approaches to making, and economic theory. Farthest reaching of all, however, are the connections which a chair, its designer and, indeed, its manufacturer make with society at large – through the potential universality of the chair's appeal and the environmental impact of its manufacture, use and eventual disposal.

Over the last 150 years, the evolution of the chair has paralleled developments in architecture and technology and reflected the changing needs and concerns of society to such an extent that it can be seen to encapsulate the history of design. As George Nelson pointed out in

1953, “every truly original idea – every innovation in design, every new application of materials, every technical invention for furniture – seems to find its most important expression in a chair”.³ In our times, this is nowhere more apparent than in the development of better performing, more ergonomically refined chairs. The highly competitive office seating market, in particular, demands continual technical advances, as it is increasingly driven by tougher health and safety legislation and corporate specifiers ever more mindful of the welfare of their workforces.

Achieving a good solution to the problems posed by the chair is a complex and challenging proposition, even though, over its long history, its function as an aid to sitting has remained virtually unchanged. Chairs support people of all different shapes and sizes for different lengths of time and for different purposes, whether it be eating, reading, resting, waiting, writing or office tasking. Furthermore, each sitting position is invested with its own degree of social significance and set of conventions, including orthopaedic constraints. In most cases, the chair must adequately support the weight of the sitter at such a height that the legs hang down and the feet touch the floor. In this conventional sitting position, the weight of the head and torso is carried down to the bones of the pelvis and hip. The timeless problem associated with this physical relationship is that however much a chair seat may be softened, the pressure of the bone will eventually be felt on the flesh of the buttocks as uncomfortable. Ultimately, this results in the user having to change position – something which is done on average every ten to fifteen minutes. Indeed, the more exactly a chair is formed to give “ideal” static support and posture to the average human frame, the more it guarantees discomfort and, thereby, psychological stress for people with non-standard anatomies or those who do not wish to assume that particular posture. It is probably safe to say, therefore, that while the facility for correct lumbar support is important, especially in office seating, it is not as crucial as the chair allowing the user to move their legs freely and to make frequent adjustments of posture. For more healthful sitting, a chair should thus facilitate freedom of movement and encourage a variety of postures while providing flexible continuous support.

Beyond the technical considerations of sitting and how well users can physically and psychologically connect with specific forms according to different functional contexts, chairs are also designed and acquired for reasons to do with symbolic content, aesthetics and fashion.

3. **George Nelson**,
Chairs, Whitney
Publications Inc.,
New York 1953, p. 9

*Steel tubes, foam
springs, and covers
have been so devel-
oped technically that
we can create forms
which were unthink-
able just a few years
ago. Personally, I'd
like to design chairs
which exhaust all the
technical possibilities
of the present in
which I also live.*

Verner Panton, 1985
A. L. Morgan, *Con-
temporary Designers*,
St. James Press,
London 1985, p. 471

... the once humble chair has emerged – for the time being, at least – as a thoroughly glamorous object ...

George Nelson, 1953
G. Nelson, *Chairs*,
Whitney Publications Inc.,
New York 1953, p. 7

Of all furniture types, chairs especially serve to bolster egos and demonstrate “taste”, while revealing their owner’s sociopolitical viewpoint and real or would-be social and economic status. To this end comfort, practicality and economy have often been sacrificed in favour of the representation of decorative styles, radical design agendas and/or the self-expressive impulses of designers.

The extraordinary diversity of chairs created since the mid-19th century has largely been due to the fact that, owing to the variety of the intended functions of the chair and the anatomic variability of users, there are no ideal forms. There can be many excellent solutions at any one time to the different contexts of use. While the profusion of designs for a specific function may share numerous similarities, at the outset what fundamentally differentiates one from another is the extent to which the designer has viewed function as either the purpose and goal or the subject of the chair. Whether the preference in approach has been weighted towards utility or aesthetics, the primary object of chair design remains the same – making connections – and over the last 150 years there have been innumerable interpretations of how best to achieve this. More often than not, the creation of a meaningful solution involves a process which not only takes into consideration intended function, appropriate structure (including deployment of materials) and aesthetics, but also method of manufacture, nature of the market, ultimate cost and proposed appeal. Different chairs emphasise different combinations of connections according to the priorities of their designers and the needs and concerns that are being addressed at different times.

As the preoccupations of society change, so too do designers’ and manufacturers’ responses to them. What may be viewed as a rational solution in one period, therefore, may be viewed as exactly the opposite in another. While some designs strive for and achieve an authority which leads to varying degrees of longevity, even those deemed “classic” have a limited functional and aesthetic appeal. Just as tastes change, so too other factors, such as expectations of comfort, vary from period to period and between different cultures. The inherent ephemerality of design, therefore, also accounts for the myriad solutions to the different functional contexts of the chair.

Although there is never one right answer to any given type, some chairs have had an enormous impact on the course of furniture design, for example Marcel Breuer’s B3 Club chair (“Wassily”) of 1925, Alvar

Aalto's "Paimio" No. 41 chair of 1931–1932, Charles and Ray Eames' moulded plywood chairs of 1945–1946, and Joe Colombo's 4860 chair of 1965. These highly innovative designs were born out of the search for better, more effective connections – a search which, more than anything else, has progressed design theory and brought a succession of important advances in technical processes and materials applications, from tubular metal to moulded plywood to injection-moulded thermoplastics. Theoretical and technological progress has, historically, not only invigorated interest in chair design but also fuelled the diversity of alternative solutions.

Architects have always been closely associated with chair design through their abilities to solve problems of structure and to make and exploit connections. In the quest for greater unity of design, architects such as Charles Rennie Mackintosh (1868–1928), Frank Lloyd Wright (1867–1959), Alvar Aalto (1898–1976) and Carlo Mollino (1905–1973) included chairs within their artistic schemes for interiors and buildings. But as the manufacture of chairs moved away from the domain of the craftsman towards that of the industrial process, architects were also ideally positioned, with their background knowledge of engineering, to pioneer innovative chair designs within the constraints of modern manufacturing technology. Chair design has especially appealed to architects, for through it, more easily than with architecture, they have been able to communicate their design philosophies in three dimensions. According to the British architect Peter Smithson, writing in 1986: "It could be said that when we design a chair, we make a society and city in miniature. Certainly this has never been more true than in this century. One has a perfectly clear notion of the sort of city, and the sort of society envisaged by Mies van der Rohe, even though he has never said much about it. It is not an exaggeration to say that the Miesian city is implicit in the 'Mies' chair."⁴ As a potentially mass-produced and thereby more accessible microcosm of the ideological aspirations of the architect, the chair has allowed some architects to make connections with far more people than would ever use or even view their buildings.

Throughout its history, chair design has become increasingly connected with the industrial process. In parallel with this, it has also become an increasingly complex and disparate area of activity. This is the result above all of the introduction of office systems furniture in the late 1960s, such as Herman Miller's revolutionary "Action Office II" of 1968.

A comfortable position, even if it were the most comfortable in the world, would not be so for very long ..., the necessity of changing one's position is an important factor often forgotten in chair design.

Eero Saarinen, 1948
M. Page, Furniture
Designed by Architects, Whitney
Library of Design,
New York 1980,
p. 208

4. A. Bruchhäuser,
Der Kragstuhl,
Stuhlmuseum Burg
Beverungen, Alexander
Verlag, Berlin
1986, p. 86

5. John Pile, *Furniture: Modern & Postmodern/Design & Technology*, John Wiley & Sons, Inc., New York 1990, preface to the second edition p. VIII. Pile has quoted this figure, "according to various (American) statistical studies".

Systems furniture not only transformed the office landscape, but also paved the way for the massive growth of a market which its appearance utterly redefined – contract office seating. Since then, chair design has been sharply divided between the contract market, which is informed by technology, and the domestic market, which is governed by a plurality of tastes and a particular susceptibility to the evanescence of fashion. With more than 50 % of all employed people now working in offices in some countries⁵ and requiring appropriate seat furniture, the office seating market clearly represents the single most important area of chair design. It is dominated by a handful of multinational manufacturing companies which employ sophisticated systems of production resembling those used in the automotive industry. The chairs they produce demand huge investments to develop and must be regarded as highly specialised pieces of ergonomic equipment. Often, these chairs are designed as seating programmes, such as Mario Bellini and Dieter Thiel's "Figura II" of 1994. Here, basic office task chairs can be upgraded through to executive versions with the addition of extra adjustment functions, luxury options and different backrest heights. Office chair programmes not only embrace a wide range of uses, but can also function as a means of conveying status in the workplace.

The contract and especially the domestic seating markets have traditionally consisted, for the large part, of products considered mainstream both in their origin and their intended appeal. Mainstream chair design is conservative in its outlook and driven by cost more than anything else. While chairs that maximise economy above all else may achieve success through providing some functional satisfaction for the user and good sales for the manufacturer, they are usually less successful in other areas such as quality, durability, value for money, flexibility of function, overall performance, and aesthetic value. Mainstream chairs are rarely innovative beyond matters of cost and can be seen historically as largely derivative of the various advances made by the avant-garde.

The work of the avant-garde has traditionally made up only a small percentage of the contract and domestic seating markets, yet its influence over the course of chair design has been enormous. From the mid-19th century and even earlier, the chairs created by the avant-garde for specific domestic interiors had an impact far beyond the realms of the affluent minority who could afford them. Generally, this was achieved through their reproduction in contemporaneous design journals such

as *The Studio*, *Dekorative Kunst* and *Domus* and their inclusion in exhibitions such as the 1902 Turin International Exhibition of Modern Decorative Art, Turin. But the avant-garde historically also designed chairs for public buildings, as did the architect Otto Wagner for his Austrian Post Office Savings Bank of 1904–1906 in Vienna and – from around the turn of the century in particular – for a few progressive manufacturers, such as Jacob and Josef Kohn of Vienna. These chairs, too, were often given wider exposure through publications and design exhibitions, with the result that they, like their avant-garde domestic chair counterparts, were widely imitated. The effect of the avant-garde on mainstream chair design became even more pronounced as elements of the avant-garde moved away from a somewhat elitist outlook on design towards a more democratic viewpoint, nurtured by the possibilities offered by industrial mass production.

In pioneering the vast majority of the most important innovations in chair design, the avant-garde has often, inevitably, been tempered by the realities of the market, especially when working within the industrial process. When the avant-garde has gone too far beyond what is generally agreed to look good or be worth aspiring to at any given time – too far ahead of what the majority of people understand – it has remained on the fringe until, in some instances, more widely held tastes and attitudes catch up with it. Many members of the avant-garde, however, have preferred to work outside of industry and design chairs for an appreciative few. Those who have chosen to operate within the constraints of industry and the demands of the market have generally been driven by the desire to make more and wider ranging connections.

Whether avant-garde or mainstream, all designed objects, and chairs in particular, can be understood as a channel of communication between people. John Pile wrote: “When we consider our awareness of a chair, we realize that a two-way process is involved. The inventor/designer/maker has given it a form that makes it useful, but which will also be seen and thought about by the viewer/user. As viewer and user, we are learning about the object in question, and are also aware that its form is not the consequence of an inevitable evolution, but is the result of conscious, human decisions. We are in touch not only with the object but also with its human creator”.⁶ What mainly distinguishes the avant-garde from the mainstream is that, whatever its motivations – conformist, reformist or contesting – the avant-garde communicates more

The tubular steel chair is surely rational from technical and constructive points of view; it is light, suitable for mass production, and so on. But steel and chromium surfaces are not satisfactory from the human point of view.

Alvar Aalto, 1940
The Museum of Modern Art, Alvar Aalto: Furniture and Glass, The Museum of Modern Art, New York 1984, p. 7

6. Ibid., p. 21

emphatically through design. Its chairs present potent declarations about their designers, not only about their personalities as problem solvers and innovators, but about their personal understanding of the relationship between the chair, the user/consumer, the design process and society. Avant-garde chairs look very different from mainstream chairs because of this: the stronger the assertion communicated through a chair, the stronger its design will appear.

The nature of this type of communication in design has been identified by Richard Buchanan as rhetorical.⁷ As with verbal or political rhetoric, design rhetoric is about the art of persuasive communication – the point being to change attitudes and values and to induce belief or identification in an “audience” through logical, ethical and/or emotional argument. It is argument which connects all the elements of design and becomes an active engagement between designer and user or potential user. What Buchanan has suggested is that, rather than simply making an object such as a chair, a designer (often in direct alliance with a manufacturer) is actually creating a preconceived persuasive argument that is triggered whenever a user considers or uses the object.

According to this theory of rhetoric, a design argument comprises three interrelated elements which provide the substance and form of design communication: technological reasoning; character; and emotion.

The first element, technological reasoning, represents the foundation of a design argument and is based on two premises: an understanding of the natural and scientific principles underlying the construction of objects for use; and a knowledge of the attitudes and values of potential users and the physical conditions of actual use. Technological reasoning is not a remote feature of designed objects, but developed with an audience of potential users very much in mind. The technological reasoning underpinning a chair’s design, for instance, can be conveyed suggestively or directly and is persuasive by appealing practically to the attitudes and values of its potential users.

The second element, character, is a very important aspect of any design argument because it reflects the way designers choose to represent themselves in the objects they create. Character is most persuasive, according to Buchanan, when it provides objects with an authoritative appearance, and this can be achieved through promoting qualities such as intelligence, virtue and trustworthiness. But while character can complement good technological reasoning and enhance the persuasive-

7. For a full discussion of his theory of design rhetoric see: **Richard Buchanan**, *Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice – “Design Discourse: History, Theory, Criticism”*, Victor Margolin (ed.), The University of Chicago Press, Chicago 1989, pp. 91–109