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HOW IS A DEVELOPMENT POSSIBLE?
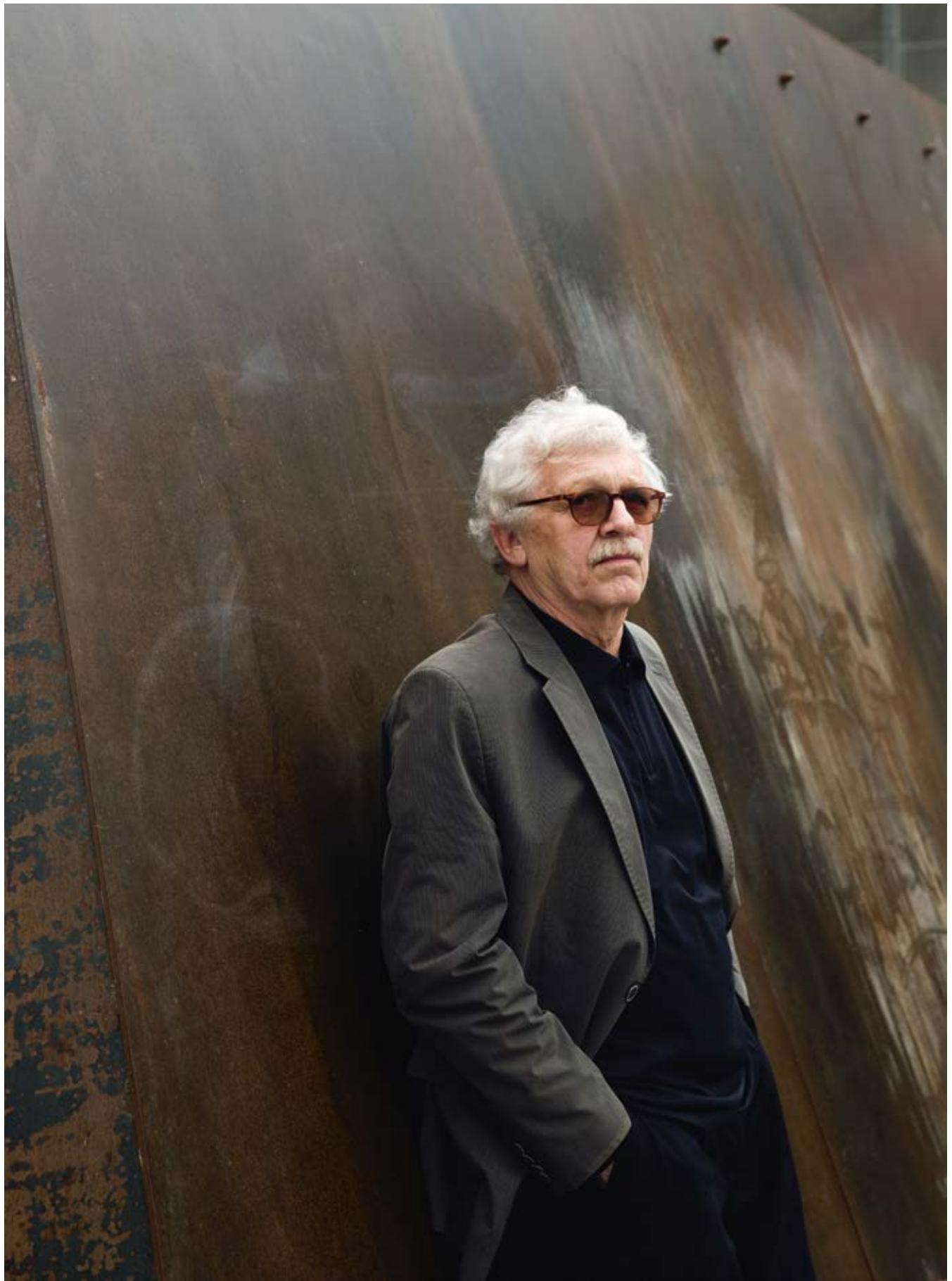
## PROF. DR. BERNHARD E.

# BÜRDEK

ASPECTS OF A MISUNDERSTOOD DISCIPLINE. OR, RESEARCH INTO THE BAUHAUS,
MODERN METHODOLOGY AND THE "POST-CONTEMPORARY" TREND
APPROACHES———NOMAD SPEAKS TO THE RENOWNED PROF. BERNHARD E. BÜRDEK
ON THE SUBJECT OF DESIGN THEORY.

## A WIDE FIELD

Photo *by KATRIN BINNER*
Questions *by FRANK WAGNER*

*You are a designer and design theoretician who is widely respected in the industry, both nationally and internationally. Among your many accomplishments, you have taught at the Design College in Offenbach am Main since the 1970s, you have been on a great many lecture tours, and you have held a series of guest lectureships in various different countries throughout Asia, Europe and Latin America. You have published a series of works on the subject of design and design theory and your publications have been translated into several languages and are regarded as standard literature on the subject. You went into retirement in 2013, although retirement has not been as retiring as anticipated!*

I N T E R V I E W

*Do you believe that sooner or later, the subject becomes boring?*

P R O F .     D R .     B E R N H A R D     E .     B Ü R D E K

**Not necessarily. Since I graduated from the legendary Ulm Design College and the Institute for Environmental Planning at Stuttgart University in Ulm, I have been absorbed by questions of design, design theory and design research. From the rather prescriptive discourses of German functionalism in the 1960s, through the first beginnings of ecological debate in the 1970s and on to modernity, the advent of digitisation in the 1980s, the development of design strategies in the 1990s and the rapid globalisation of the 1990s/2000s, right up to the current evident resolution of design discourses——well, these days, everything is design and design is everything——I remain consistently gripped by the thought of continuing to be involved in the debates on the subject.**

*Our subject for discussion today is design theory. It is not an entirely simple area and as far as I know, it is not regarded as an orthodox science and so research is not so much on a scientific basis, but on interpretation and the convictions of its respective representatives. Do you agree with this?*

P R O F .     D R .     B E R N H A R D     E .     B Ü R D E K

**It is certainly true to say this is, as Günter Grass put it in his novel published in 1955, a wide field. The Bauhaus movement had already made attempts to transform scientific insights into useful elements for design**

purposes. Indeed, the principles of *"essential research"* developed by Walter Gropius remain relevant for today's product design, since items *(products)* do not simply disappear, as French philosophers Jean-François Lyotard and Jacques Derrida would have us believe in the 1980s, but quite the opposite is true: we are being increasingly deluged by a torrent of goods and the ever more extensive product ranges arriving here from Asia in gigantic container ships. The essence of things, their purpose and meaning must be subject to constant critical review and that's where designers come in.

Yet as early as the 1920s, some trends running counter to the status quo were already in evidence: artists such as Johannes Itten, Wassily Kandinsky and Paul Klee were highly interested in things esoteric, where the rational and the irrational are closely linked. Incidentally, the same still holds true for design today.

During the 1960s, efforts were being made at the Design College in Ulm, to develop various sciences for use in design, including semiotics, system theory, cybernetics and mathematical techniques. The prevailing spirit of deconstructivism——which I once described as the *"quarrying mentality"*——was aimed at developing new areas of scientific insight which could be used for conceptualisation and design, and this was often very hard for those of us studying at the time. However, the aim was not to establish design itself as a science, but to place it on a more rational basis, that is, away from the intuitive applied arts mindset and towards the methodologies of modernity, reflecting the developmental stages of technology, which would then be taken into account in design projects.

The Design College in Ulm should perhaps be regarded as a third element of the enlightenment, which was of the utmost importance for design in the post-WW2 world. Today, it is a discontinued model: enlightenment has been superseded by clarification. Zygmunt Bauman *(2016)* speaks of the transition from a fixed to a fluid, even transient, phase of modernity, in whose endphase we now find ourselves. The Utopian idyll is no longer on the agenda and incidentally, this is also a sign that modernity has run its course. In art, the buzzword now is *"post-contemporary"*, a lovely term which nobody can really define, but which just sounds so good.

## *Will design theory ever become a recognised science?*

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That was never the declared aim. It is really about the application of scientific insights in the design processes, so that these are made more applicable and transparent, and more capable of being evaluated and communicated. Design theory itself uses insights from other sciences, such as linguistics, semiotics, system theory, the cultural and social sciences, economics and ecology etc. It always seems to me a bit like quarrying from several sources, but the work is certainly well targeted.

There is a peremptory scattering of words like interdisciplinary, multidisciplinary or even transdisciplinary *(thank you, Wolfgang Welsch)* emanating from designers when they are asked to describe their work, but

apparently, they do not have anything they can call their own, or their own discipline: after all, the word *"inter"* means between, so is this perhaps falling between two stools? It follows that those involved like describing design research as being *"undisciplined"*, which is actually ludicrous. Just imagine any science, for example, medicine, proceeding on an *"undisciplined"* basis and ultimately, all that remains will be the laying on of hands of mediaeval times: bloodletting versus high-tech, and that cannot really be an alternative for design in the 21st century.

Added to this is the fact that to growing degree, people outside the industry are giving opinions on issues of design theory, without ever having worked in the field. Again, it is hard to imagine non-professionals pronouncing and disseminating their views on technical sciences and their theories, such as in physics or chemistry. Nobody would take them seriously and so it seems that it is just design on which anybody can make pronoucements, and that the sole criterion which is entirely adequate for this is good *(or bad)* taste.

Beyond this, the scientific landscape———in which design evidently does not feature———has been undergoing significant change in recent years: in the meantime, we have discovered that all that is produced by the many interdisciplinary projects is hot air, which is why *"disciplining"* is now once again firmly on the agenda. However, designers have not yet realised this, which is why they hardly play a role in the research landscape, and receive no encouragement to do so, meaning that ultimately, they make no progress and simply remain self-referential. Communication researcher, Arne Scheuermann *(2016)*, concluded that *"A superficial glance might even suggest that design research has not even made any original contribution to the discipline at all"* and Frankfurt sociologist, Manfred Fassler *(2010)*, put it more simply: *"there's a great deal of the rubbish talked about interdisciplinarity, transdisciplinarity, etc., etc...researchers are paid for their disciplinary research."*

In fact, many of the PhD design courses which have been introduced, and there are currently 15 in Germany alone, and over 150 worldwide, also suffer from this problem area. What is being researched? The subjects are as disparate as design itself. For an overview, check out *http://www.design-promoviert.de/index.php/design-dissertationen/*. PhDs in the sciences are generally led by the profile of the institute concerned and are aimed at advancing the insights there, but in design, such profiles are extremely rare, so that PhD subjects are very diverse too.

Very early on, the Design College in Offenbach decided in favour of a practice-based PhD model, where the linkage between theory and practice is applied, and this means that dissertations must comprise one scientific-theoretical element *(2/3)* and one practical component *(1/3)*. This ensures that not only elaborate design theoretical castles in the air are produced, but that theory and practice must be closely linked, since it is well known that there is nothing more practical than a good theory *(Kurt Lewin, 1951)*. The first examples show that this can be targeted at a satisfactory conclusion. For instance, the work of Annika Frye *(2015)*, whose work focuses on *"Improvisation in Design"* and who uses new technologies such as 3D print in particular, or Nico Reinhardt *(2016)*, who conducts surveys into materials for use in product design in order to research hard and soft material features using by way of example a textile-coated ceramic pavilion. Or Sandra Groll *(2017)*, who is investigating the aesthetics of serial technology in collaboration with Niklas Luhmann and Dirk Baecker, in particular, in the context of the social function of design, a highly controversial topic, since it poses a number of as yet unanswered questions.

## *Why is the design dialogue so difficult?*

P R O F .   D R .   B E R N H A R D   E .   B Ü R D E K

Up to now, it has not been possible to gain any degree of stability from the theory of design practice to even allow any talk of a discipline. Siegfried Maser *(1972)* has given three categories which are required criteria before an area can be called a discipline from a scientific-theoretical perspective:
*1. Aim*———*2. Object and* ———*3. methods.*

For design, this means the development of technical terminology, questions of form and context or form and meaning *(semantics)* and the application of humanistic scientific methods *(phenomenology and hermeneutics)*.

If we cannot agree or are unwilling to reach agreement, then much today is simply quackery, which has meanwhile validated itself in the form of its own publications. All this is not simply trench warfare or a war of opinions, but a sign of the massive underdevelopment of design theory and design research.

Another example is that for around 2,000 years, architecture has based itself on the principles of the Roman architect, Marcus Vitruvius Pollio———commonly known as Vitruvius———according to whom buildings must satisfy three criteria: *1. fitness for purpose (utilitas)* ———*2. stability (firmitas)* and ———*3. eauty (venustas).*

There is enough room to manoeuvre in these categories for differentiation to endow *(in particular, public)* buildings with diverse semantic-symbolic qualities. However, architecture has a considerably longer history than design. In the Renaissance, Giorgio Vasari coined the word *"disegno"* and by extension, gave shape to *"disegno interno" (the concept)* and *"disegno externo",* the complete work of art *(painting, drawing, sculpture)*. The term *"designare"*———to designate———means designing and at the same time, meaning, so that something indeterminate is transformed into something definite, which is the rather elementary definition of design.

## *How useful is it to search for one unique design theory?*

P R O F .   D R .   B E R N H A R D   E .   B Ü R D E K

Since this would really be dogmatism. In her very useful introduction to the subject, Claudia Mareis *(2014)* quite rightly speaks of the *"theories of design"* in the plural.

All the sciences have different schools, movements and practices, each with their own inherent characteristics. In medicine, for example, there are always a great many different treatments and therapies and the patient must first be carefully assessed before a decision is made as to which would be the most effective. And even the much-debated alternative health sector may well offer an effective treatment in some cases———if the patient believes in it. As media scientist, Hans-Ulrich Reck *(1996)*, remarked, industrial design is today

where medicine was 500 years ago. It was not till the 19th century that medical treatments moved on from the laying on of hands, bloodletting and humoral pathology. Not quite as sceptical was Wolfgang Jonas *(2011)*, when he concluded that design science is today where medicine was 200 years ago. I do not view it quite as critically, because we have certainly moved on in terms of theory, but the mists of alternative healing, to use the medical analogy, are still wafting over design and hordes of self-proclaimed *"healers"* continue to rampage through the lands.

From the perspective of design theory, I can currently identify some relevant and independent colleges. Since the 1960/70s, the *"Theory of product terminology" (Offenbach Design College)* and *"Product Semantics" (Reinhard Butter, Klaus Krippendorff, the McCoys et al)* along with design rhetoric have established themselves. I am of the opinion that all three represent the core discipline of design theory. In the aftermath of the now obsolete tradition which I mentioned above and in particular, the legacy of German functionalism by which *"form follows function"*, in the 1990/2000s, a paradigmatic change has taken place, and that is, the shift: *"from function to meaning" (Bürdek, 2008)*. In many product categories, there are currently many versatile and wide-ranging technical variants. The capability to differentiate between these which this necessitates is a primary and meaningful ———— that is semantic ———— phenomenon.

It follows that there are three discourse worlds which influence design theory: the linguistic-semiotic scientific, the systemic-theoretical and the societal-social. These discourses are fundamentally supported by the increasingly relevant and growing demand for technology, ecology *(sustainability)* and in particular, economy. As if all this is not already complex enough, unsurprisingly, the establishment of highly complex design theory is particularly difficult.

*With a glance at the ongoing discourse, what is your take on the current thinking on design?*

P R O F .   D R .   B E R N H A R D   E .   B Ü R D E K

First of all, I should like to refer to the evident dilemma of design: the way in which it perceives itself and the way in which it is perceived by others. Hardly any other discipline generates as much nonsense about itself as design. That, too, is a sign of its underdevelopment. The sorry state of affairs in global improvement is in an advanced state and it seems to me, that there is no other discipline which can say this of itself to similar degree.

For instance, at the 2014 World Design Congress in Cape Town designers were called upon to design useful and sustainable products for the town, the country of South Africa and even for global application. On being questioned, the shameful answer is that of all the well-intentioned suggestions, virtually none has been realised.

The same is likely to happen at the 2017 World Design Summit in Montreal, where the call is to: *"Share with us your ideas, creativity and knowledge on how we can utilise the many disciplines and elements of design to compose a better future for all…Now is the time to harness the power of design to create real paradigm shifts*

*and positive change. Looking forward to what you have to offer."* It all sounds very good and illustrates the general involvement of many designers, but in reality, it will all come to nothing. A little urban design is not really helpful and what of the current virulent *"Social Design"*?

Certainly, all this would be far too demanding for designers and even architects, who are used to dealing with far more complex subjects, and would be over-stretched. On the other hand, a great deal more realistic is a headline recently posted online by a German news magazine: *"Design, Fashion, Cooking, Lifestyle"*. The real dilemma of design is the striking gulf between its perceptions of itself and how it is perceived by others: whether this is bathroom design, roof design, food design, hair design, nail design or all the other fields, it seems the world will only keep on turning by design. Why is this?

The advanced state of saturation in which Western societies found themselves at the beginning of the 20th century resulted in the increased use of design as an instrument of differentiation. For instance, the Italian furniture industry promotes itself under the slogan *"existential maximum"* versus *"existential minimum"*, while the German automotive industry links its very intelligent high-tech with high design to achieve global success. In similar vein, the Asian electronics companies employ armies of designers to raise the level of desirability of their products. Indeed, it is these objects of desire that are fuelling *"aesthetic capitalism"* *(Gernot Böhme, 2016)*. If these desires can be satisfied, then they, in turn, will create new objects of desire: you simply have to acquire the latest smartphone every six months in order to keep up with contemorary society. In fact, the distinction Karl Marx made between the practical value and the exchange value of goods and products can be extended by the addition of their *"platform presentation value"*. It is true to say that in general terms, the economy is dominated by the principle of the *"aesthetic economics"*.

*<u>Who, in your opinion, is giving the right lead on the subject?</u>*

P R O F .   D R .   B E R N H A R D   E .   B Ü R D E K

I do not wish to name names, but instead, I would like to refer to three areas of particular relevance to the subject of design. In particular, the *"aesthetic economy"* is top of the list in that design is confronted by the social phenomenon of a transformation of product design into lifestyle design. Perhaps the best example of this is the Apple corporation, where, alongside the functional aspects of its products, the Apple *"community"* has become the salient factor: the desire for Apple products is rewarded by membership of this community——which itself is synonymous with a definitive lifestyle, a phenomenon which has meanwhile acquired such a degree of prominence throughout Asia, that it has a significant impact on the success of the company.

Most recently, three areas have moved centre stage to become the new preserves of design: interface/interactive design, strategic design and what are known as the new technologies. Interface/interaction design evolved as a hot topic in the 1980s, when increasing product digitisation demanded much deliberation on functionality and utility *(that is, ease of operation)*, a classic domain of design, and this led to new, and clearer,

forms. Here is a field which developed into an economically important working area, and many design studios jumped right in and made improvements to digital product culture. However, there remains much to do and users are still very confused about the various systemic approaches.

Since the 1960s there have been a number of approaches worthy of serious consideration aimed at establishing design management as an area within the industry. Design strategies of relevance to the corporates have been an issue since the 1990s. For example, Hartmut Esslinger *(2014)* charted how the development of a product language *("snow white")* was promoted as a strategic element of Apple's corporate culture. Strategic and brand design, in particular, shape and promote corporate product culture and endow their technological competence with visual form.

At the start of the 21st century, the new technologies *(Rapid Prototyping, 3D print, Laser technologies, etc.)* developed into an important sector of which design is an essential component. Once again, design studios leapt in, their profile heightened by the adoption of industry standard 4.0. 3D Print technology has a particularly important role to play in product individualisation, an area where designers are especially in demand.

*Why?*

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Quite simply: unlike all the speculative designs which the media are so keen to print for the purposes of fuelling design hype, these three areas have a genuinely relevant remit, which highlights the close linkage between design and economics. Aside from all the art hype, which is even practised by several German design colleges, the spotlight here is on global design issues, which are currently particularly apposite in Asia.

*To help us put it into perspective, what prompted the evolution of this situation? Or, to put it another way, what were the significant interpretations of design over the past decades?*

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Well, I have already touched on that. At the beginning of the 20th century, design split from the art and craft tradition and became an autonomous field in its own right. The pioneers here were the Bauhaus movement and the Design College in Ulm. The areas of growing importance now in the 21st century are the new technological and economic topics. Everything else is just media background buzz, which is doing more damage than good to design.

*Is design theory capable of changing our view of society and lifestyles?*

P R O F .   D R .   B E R N H A R D   E .   B Ü R D E K

I think so. Today, we have a well-grounded understanding of design and the way in which it interacts with social, economic and aesthetic issues. The operating room to manoeuvre has expanded and design decisions have become easier and more well-founded. Design for use as an instrument to shape lifestyle can only be accomplished with the backing of conclusive scientific insights, failing which, all that remains is speculation and pretty pictures.

*If a new dimension can shape our view of a subject, under certain circumstances, this might possibly change our perspective overnight. So what new design perspectives would you like to see in order to change the prevailing view "overnight"?*

P R O F .   D R .   B E R N H A R D   E .   B Ü R D E K

Well, the pronoucements on design theory made by so many mavarick players are simply counter-productive. What's more, many of the statements come from people who have never in their lives had anything to do with the practice of design. It seems, anybody can just string together a few ideas and call it design theory. The immaturity of the discipline is reflected by the permanent trench warfare in the sector and I would repeat, if, for example, the medical profession operated in the same way, many of us would be long dead.

*Prof. Dr. Bürdek, may I express my thanks for this interview.*