

Peripheral Vision: An Interview with Gui Bonsiepe Charting a Lifetime of Commitment to Design Empowerment

James Fathers

Introduction

This article documents an interview with Gui Bonsiepe¹ conducted by James Fathers.² The interview attempts to shed some light on the career of this figure who has been at the heart of the discourse on design in a developmental context, and yet is little known in the mainstream Western design literature. It explores some of the thoughts, methods, and motives behind a career spanning the last forty years, and devoted to addressing the challenges of design in the periphery.³

Bonsiepe was trained at the Hochschule für Gestaltung in Ulm (HfG Ulm)⁴ in the second half of the 1950s. He then went on to teach and design there, from 1960 to 1968, alongside his friend and mentor, Tomás Maldonado. When the institution closed in 1968, he decided to move to Chile. Thus began his thirty-five year odyssey with design in the periphery and, in particular, in Latin America.

The Interview

Q1: You are well known for your writings and experiences designing in developing countries, especially in the 1970s and '80s. Can you describe why you first became interested in the role of design in development?

I studied at the HfG Ulm in the 1950s, when we had a considerable number of foreign students, particularly from Latin America. So this was my first contact because, similar to other Europeans, at least at that time, I didn't know anything about Latin American history or culture. Then, in 1964, I was invited to Argentina by my teacher, friend, and intellectual mentor, Tomás Maldonado, whom I considered one of the most important design theoreticians of the twentieth century—a real giant, though his works weren't widely known outside the Spanish and Italian language context.

I arrived in Buenos Aires, planned to stay for two weeks, and stayed for two months. I was fascinated by the cosmopolitan climate of the city—a city in which you could go to the cinema at any time of

1 Gui Bonsiepe kindly agreed to this interview as part of the program of the *Mind the Map* conference hosted by Istanbul Technical University and Kent Institute of Art & Design in Istanbul, Turkey in July 2002. Gui Bonsiepe, Professor of Information Design Escola Superior de Desenho Industrial (ESDI), Rio de Janeiro, Brazil.

2 James Fathers is a senior lecturer at the University of Wales Institute Cardiff. He has an active research interest in the role of design in the context of development.

3 The term "periphery" in the context of this article refers to those countries commonly termed developing countries. Bonsiepe adopted the term in a paper for the *Design for Need* conference in 1973 as a more appropriate way of describing these geographic areas and peoples. See "Precariousness & Ambiguity: Industrial Design in Dependent Countries 2" in *Design for Need*, J. Bicknell and L. McCriston, eds. (London: Pergamon Press, 1976).

4 Other articles relating to HfG Ulm published by *Design Issues* include Paul Betts, "Science, Semiotics, and Society: The Ulm Hochschule für Gestaltung in Retrospect," *Design Issues* 14: 2 (Summer 1998): 67–82 and Gui Bonsiepe, "The Invisible Facets of the HfG Ulm," *Design Issues* 11: 2 (Summer 1995): 11–20.

the day or night if you wanted! I hadn't found this to be the case in Germany, least of all in Ulm, a very small, provincial town.

This initial contact [with the periphery] was purely personal, without any professional intentions.

In 1966, I again traveled to Argentina in order to teach a course in packaging design and packaging technology. The course was organized by the International Labor Organization (ILO), which had contracted me as a consultant. At that time, the United Nations International Development Organization (UNIDO) did not exist. So, step-by-step, my encounters with the periphery started to get more intensive.

In 1968, I decided to move to Latin America. My move to Chile coincided with the closure of HfG Ulm. However, it was not motivated by this abortion of one of the most influential experiments in design education in the second half of the last century. I had the chance to go to Milan which, at that time, already was a very attractive place to work in design. But I accepted an alternative offer, again by the ILO, to go to Chile; to work there as a designer on a project for the development of small- and medium-size industries. In Chile, I entered the "real world."

A decisive influence on this decision had been my Argentinean wife. When we discussed these options, either to go to Milan or Chile, she told me to opt for adventure. At that time, I didn't know Chile. I didn't even speak Spanish. She said simply, "Look, in Europe, everything already has been done in design. Let's go outside, where there are new challenges."

Q2: In 1973, UNIDO commissioned you to write the report "Development Through Design." How did this come about?

At the beginning of the '70s, ICSID, our international professional organization, became more and more interested in what was happening in developing countries—we didn't yet have the name "peripheral countries." Josine des Cressionières, the Belgian Secretary General of ICSID at that time, approached me to write this report. As far as I remember, there was a draft paper already written by an American designer, Nathan Shapira; but this paper had certain shortcomings, mainly because this colleague didn't have substantial, firsthand experience in a developing country.

The deadline was six weeks—a very short deadline when you consider that the Internet did not exist at that time. I collected whatever materials I could get hold of, from India, Cuba, Chile, Brazil, and Argentina; and presented this as a working paper at a meeting of experts in Vienna where, for the first time, an international organization explicitly dealt with industrial design policy for those countries which were called at that time "developing countries." This draft then was transformed into a guideline paper for the industrial design policy of UNIDO.

Q3: What are your most significant memories of your experiences designing in Chile and Argentina?

This is a very personal question, and I am not particularly keen on getting involved in my own history. But since you asked the question, the most negative memory I still have of my stay in Latin America was of September 11, 1973, when the military coup d'état was implemented with help from outside secret services and covert military support against the democratically elected government of Salvador Allende. As you know, this coup d'état, with its tortures, killings, and "disappearances," was officially legitimized by declaring that the "occidental and Christian values of our culture had to be defended." So much for the values of our society: this was the negative side.

I then moved to Argentina, for obvious reasons. Fortunately, I had a German passport; otherwise, if I had had a Brazilian or Argentinean passport; I probably wouldn't be sitting here talking with you. It took me several months to get over the traumatic Chilean experience and, in nine months, I wrote the book *Theory and Practice of Industrial Design*. Written in German, it was published in Italy in 1975, and later translated into Spanish and Portuguese.

On the positive side, I had the good luck of meeting and getting acquainted with, and later getting to know, a group of very passionate design students who had just finished, or were finishing, their university courses. These courses did not fulfill their promise: to educate industrial designers. Their titles were something like "craftsman in decoration," which was somewhat distant from "industrial design," and still dominated by an interpretation of design as a kind of art—or worse—applied art! Furthermore, I found positive resonance within higher government official circles for the design approach that I practiced. This was, for me, a very fertile environment.

The political experience I had gained in Europe was limited. I was interested, of course, in political issues, which was inevitable in the fervent climate of the 1960s. During my education in Ulm, reading books on critical theory such as Ernst Bloch, Theodor W. Adorno, Walter Benjamin, Herbert Marcuse, and Jürgen Habermas, as part of our seminars, was a must. So, I had some critical consciousness of what was going on, and what makes economies tick, but I did not have any experience of a direct relationship between professional work and the socio-political environment or a socio-political program. In Chile, it was possible to map professional practice to a socio-political program.

Q4: You are quoted in an article in 1976 by S. Newby⁵ as being a “parachutist from Ulm.” This phrase often has been used in a negative way to describe Western intervention in a developing country. What steps did you take to limit any negative influence caused by your “landing” in Chile after your experiences at Ulm?

I do not know Mr. Newby nor his article. I am not sure what motivated him to make this assessment, but if my landing or parachuting into Chile is not to his preference, then it's his problem, not mine. Perhaps he wanted to insinuate a politically motivated disagreement, and would have preferred me to have arrived in a Rolls Royce in 1975 at the palace of Mr. Pinochet, a person with whom I definitely would not share a dinner! I assume it's the Ulmian design approach that irritates the author, and which he wants to disqualify, and not my supposedly parachuting. By the way, I was *invited* to go to Chile and did not—and do not—favor any idea about “intervention.”

Now as to the negative influences, I am not quite sure what these might be. The pragmatic rational “Ulmian” approach that made it possible to draw a profile of the industrial designer, and to consolidate his education, apparently met a latent need. Otherwise, the resonance would not have been as strong as it has been. There seems to exist a hidden romantic notion of the periphery: that it should maintain its status of pristine purity that would be contaminated by any outside contact. It might be advisable to distinguish between influence and influence. I don't see anything negative in the endeavor to contribute to a project of social emancipation. I did not come as a missionary to Latin America. What I did was to provide an operational base for concrete professional design action. People in peripheral countries, and Latin Americans particularly, are not as naive as sometimes is supposed. They are critical and demanding. I offered some operational tools in order to do product design, from agricultural machinery to wooden toys for children and low cost furniture, and get rid of the ballast of art tradition and art theory.

This operational know-how was not provided by the universities at that time because the teachers of those courses often did not have firsthand design experience. I wonder how you can teach design if you don't practice design. For this reason, there was a vacuum and a very fertile breeding ground, and thus receptivity for any relevant information and methodological tools which would help to resolve practical design problems.

5 Sonia Newby, “Ulm in a Peripheral Landscape,” *Design* 332: 40–41.

Q5: In the *Design for Need* conference at the Royal College of Art in 1976, you made the statement:

My summary, “Design for Dependent Countries,” based on eight years of continuous work in peripheral countries, should read “Design in Dependent Countries” or “Design by Dependent Countries.” The center does not possess the universal magic formulae of industrial design which have to be propagated to the inhabitants of the periphery whom the intelligence agencies ideologically conceive as...[the]...“underdeveloped...”⁶

Do you still hold this view?

To a certain degree, yes. I would not move one millimeter from the position or the statement that, according to my opinion, design should be done *in* the periphery and not *for* the periphery as the result of some kind of benevolent paternalistic attitude of the center to these countries. I insist and always have insisted on local design practice. Design problems will only be resolved in the local context, and not by outsiders coming in for a stopover visit. This typifies one of the great disadvantages of short-term consultancy jobs, with people flying in from the central countries with very little knowledge about the local context, and believing that issues can be resolved by remote control. To cite one example, the deep present-day economic and political crisis in Argentina is well known. Now if the International Monetary Fund sends a specialist to Argentina to deal with the question of foreign debt who does not speak Spanish, then this is quite revealing of the ignorance and arrogance with which international institutions often confront local realities that are different from the view from an office window in Washington or New York.

Q6: At this same time, Victor Papanek was writing about similar issues. Design historians have put the two of you together as the key figures in what has become known as the “Design for Need Movement.” Did you discuss your theories together or collaborate on any projects? How do you feel your ideas differ from Papanek?

In 1964, when I spent one semester as guest professor in basic design at Carnegie Mellon University, Victor Papanek invited me to go to North Carolina, where he was teaching industrial design, to show me the design approach he had developed. I had high esteem for Victor Papanek because he dared to swim against the stream, and against the complacency in design practice and design education. For this courage, he was heavily punished. For a number of years, he almost was prohibited from speaking publicly at industrial design

6 Gui Bonsiepe, “The Invisible Facets of the UfG.”

7 Gui Bonsiepe, “Bombast aus Pappé,” *FORM* 61:13–16. Also published under the title “Piruetas del neo-colonialismo” in the Argentinean journal *Summa* 67 (1973): 69–71.

conferences in the U.S. However, my esteem for Papanek did not prevent me from writing a polemical review of his book *Design for the Real World*.⁷

He had attacked a sensitive issue, but his approach and the answers he was ready to give seemed to me not adequate. I would say that he had little understanding of the political economy of design. As is known, he became fascinated by the “do-it-yourself” design approach, and did not have a strong interest in industrialization and the development of economies. He opted for design services outside of the business and industrial enterprise context, which I considered of limited effectiveness—like that of a maverick. For this reason, I did not share his views. But this does not mean that I have underestimated his contribution to the field. The receptivity of his book, which was translated into many languages, shows that he had touched real issues. But in answer to your question, we never developed projects together. We occasionally met at conferences. I also wrote a review of his book *The Green Imperative*.⁸ I think this was his last book. After that, we lost contact.

Q7: The “Design for Need” movement seemed to draw on a collective desire in the design profession to do something about social need. In hindsight, can you offer any suggestions as to why this movement appeared to founder?

I wouldn’t say that it foundered, because it didn’t take off in the first place. It was an attempt to find some answers as a profession to the needs of the majority of the world population, which we felt were left out. This movement, sometimes also called the “Alternative Technology Movement,” changed into the “Appropriate Technology Movement,” and was promoted particularly in Great Britain, where they had an office with consultants offering services in appropriate technology especially to African and some Asian countries. Later in the decade, this activity lost momentum and went into oblivion. I suppose the reason was that the “Appropriate Technology” and “Design for Need” movements could never quite get away from the prejudice (and it is a prejudice really) that it deals only with second-rate and third-rate technology. It seemed to continue with a class distinction between two types of technology: high-tech for the central countries and low-tech, do-it-yourself technology for the periphery. The appropriate technology movement in the ‘80s was influenced by the writings of E.F. Schumacher, who wrote *Small Is Beautiful*. Increasingly, the main protagonists of this movement were coming from the fields of engineering and economics. There hardly were any industrial designers as far as I know. Designers played a marginal role in these efforts to do something about design in what was, at that time, called developing countries.

8 Gui Bonsiepe, “Im Grünen,” *Formdiskurs* (December 1995).

9 Pauline Madge, “Design, Ecology, Technology: A Historiographical Review,” *Journal of Design History*, 6: 149–166.

Q8: In a paper in 1993, Pauline Madge quotes correspondence with you in which you reflect on the design movement in the 1970s:⁹

I consider it a merit of the representatives of the appropriate technology movements to have asked some uneasy questions about industrialization and its effect on the Third World; furthermore, of having shifted attention to the rural (poor) population in the Seventies, there still was the hope that a different social organization would give rise to different products and a different mode of consumption. This hope is today shattered.

The statement that hope is today shattered is a very strong one. Can you explain the thoughts that led to this conclusion?

You see in the 1960s and '70s, and even up into the 1980s, there still was a vague hope called the "third way" between the Eastern block or socialist countries, and the Western block or capitalist countries. With the demise of the former socialist countries of the Eastern block, at this moment there seems to be no alternative outside the general configuration of capitalism. The only alternative nowadays can be found within the system of globalization, which perhaps we will talk about later.

So, taking up the notion of "shattered hope," I am, by temperament and by decision, not a depressive character. Rather, I would characterize myself as a constructive pessimist and, therefore, I don't agree at all with the well-known "TINA" (There Is No Alternative) dictum by Margaret Thatcher. I would claim there always are alternatives.

Q9: In recent years, you have not written very much about the issues relating to role of design in a developmental context. What triggered this apparent shift in focus?

I worked in Brazil from 1981–87 as a consultant to the National Council for Scientific and Technological Development, participating as designer in the formulation of an industrial development policy. While there, however, I had only limited access to computer technology. The technological revolution information/computer technology attracted my interest. I perceived that a radical change was approaching, an enormous challenge for designers. One day, I got a letter with an offer to work as a designer for a software firm in Berkeley. I took this job, and started to work there in this new field of technology, which I felt was of utter importance similar to the invention of movable type for the printing press in the fifteenth century.

If I had had access to computers and software development from a user's perspective in Brazil, I probably would have remained there. But I didn't, and so I moved to the United States and worked

there for three years. The practical work as a designer in a software office permitted me to reinterpret design, getting rid of the traditional topic of form and function, and developing an interpretation of what design is all about, based on language and action theory.

At about the same time, I rediscovered the work of Heidegger. As a German, it was very difficult for me to read Heidegger after the devastating critique by Theodor Adorno, *The Jargon of Authenticity*. However, while in Berkeley, I was fortunate to be able to participate in some philosophical conversations with, among others, Hubert Dreyfus. I got a better understanding of Heidegger through the English translation and interpretation. Taking some ideas from Heidegger and computer science, I developed a reinterpretation of design as the domain of the interface where the interaction between users and tools is structured. I consider this not a minor contribution to design theory.

Having said all this, let me just add one thing. My interest in peripheral countries has not diminished. On the contrary, it has increased due to their economic decline and to what I consider to be the symptoms of the end of a one-dimensional socio-economic model. In my last book available in English,¹⁰ I assess the role of design in the center from the perspective of the periphery and vice versa. In addition to this I have established, created, and coordinated the Masters program in Information Design at the University of the Americas in Cholula, Puebla, Mexico, and continue to work on this program. I live part-time in Brazil, where my main base of operation is located, returning to Latin America whenever my teaching obligations in Germany permit me to do so.¹¹

Q10: It is well known that, in the 1970s and '80s you were a significant influence in the "Design for Need Movement." Despite this prominence, it has been said that you have received little or no recognition as a designer and, in fact in the 1980s, you were quoted as saying this is due in part to a political agenda. Both Er and Langrish and Madge state that, despite Bonsiepe's involvement in the area since 1968, he still is relatively unknown in design circles, and has remained marginal in the design literature. The reasons given are "because the subject itself did not attract any interest within a design world dominated by theoretical underdevelopment and self-centered design discourse"¹² and "because the issue of design in developing countries increasingly has been seen as a political rather than design issue, and associated with the political left."¹³

Could you expand a little on this?

Recognition is a relative issue. It is not one of my major concerns. We might ask: recognition where and by whom? I am not particularly inclined to self-branding and self-promotion in the professional field of design. I cannot complain about an absence of recognition—the

10 Gui Bonsiepe, *INTERFACE: An Approach to Design* (Maastricht, Netherlands: Jan van Eyck Akademie, 1999).

11 Since the interview, Gui Bonsiepe has moved to Brazil permanently, where he is teaching at the ESDI in Rio de Janeiro.

12 Alpay Er and John Langrish, "Industrial Design in Developing Countries: A Review of the Design Literature" (Institute of Advanced Studies, Manchester Metropolitan University, 1992).

Note: Dr. John Langrish recently retired from the Art & Design Post Graduate Centre at Manchester Metropolitan University, and Dr. Alpay Er is an

Associate Professor in the Department of Industrial Product Design at the Istanbul Technical University.

13 Pauline Madge, "Design, Ecology, Technology: A Historiographical Review."

opposite of what might be called the narrow-minded chauvinism of the “center” that dwells in supposed superiority or “development.”

There are universes of language, and if we limit ourselves to the universe of discourse of the English language, by definition, we are cut off from a lot of what is going on in the world. In Latin America where I am teaching, living and writing for a great part of my time, I cannot complain about an absence of recognition.

Q11: What would you say your own contribution has been to the field? What lessons have been learned, and what would you do differently?

These are various questions, so I will take them step-by-step.

I consider my function in Latin America more as a catalyst, simply being there at the right place at the right time with the right kind of people, just by chance, mixed with an ingredient of personal decision because of my general interest in the Latin American culture—the great variety of different cultures which I find very stimulating. I feel at home or at ease when I am in Latin America, be it Brazil, Mexico, Cuba, Argentina, or Chile. I don’t feel like a foreigner there. On the contrary, I find a receptive climate for what I am teaching and writing and doing as a professional. The hospitality and solidarity of Latin Americans is proverbial.

Now, assessing what I have done so far and I tell you that I don’t intend to end my work very soon! I would say that I helped, in a critical moment of industrialization, to define the profile of the industrial designer in Latin America, perhaps even with extrapolation to India and other peripheral countries at that time. Apart from this professional role, I educated or put some students on a track where, on the one hand, they acquired the capacity for critical discourse and, at the same time, became efficient professionals. During our meetings at this conference, the conflictive issue between practitioners versus theoreticians frequently arose. I find this a very damaging tradition. I do not accept this bipolarity that labels you either as theoretician or a practitioner. This either/or proposition has its roots in the origin of our profession, namely vocational training with its deeply ingrained anti-intellectual attitude. However, in university courses you are obliged to think about what you’re doing, and to reflect on your activity and not just on your own activity but what is going on around you. This is typical of the Ulm approach, of which I would consider myself an exponent—an exponent of “critical operability.”

So, in summing up, my approach was to reorientate young people who did not find answers to their questions in their own context; to provide them with design tools and to propagate industrial design as an autonomous activity separated from art and architecture, and engineering. And not only in Argentina, Chile,

and Brazil, but also in other countries such as Cuba, where I spent two months in 1984, again under the contract of a United Nations consultancy job, in order to help get their ambitious project of the National Office for Industrial Design into shape.

Q12: In the field of design for development, what would you think the criteria should be for judging a successful design?

I wouldn't say the criteria have changed, though we cannot talk today anymore about development policies. These have been abandoned. In peripheral countries today, the former development policies have been replaced and dislocated by policies of financing the external debt. Finance-driven policies don't take into account local industrialization, local needs, and local populations. The present imperative is: export or die. Whole countries live only to service their debts, debts that grow and grow and grow, provoking social misery and a potential for conflicts. Banks "*Über alles*" that is the present dogma. In Latin America, we can observe a return to a situation similar to the agrarian feudal economy of the Middle Ages under which the majority of the population lived only to pay tribute to their rulers. Today, whole nations mortgage their future due to the enormous amount of money they have to pay back on international loans, loans of questionable value and outside any democratic control because the local populations that are supposed to "benefit" from these loans are not asked at all. It just happens to them, like a thunderstorm from above. As I said yesterday in my short presentation, the capital flow from the South to the North is bigger than vice versa. So contrary to popular opinion, the North is not "helping" the South at all, but the South is transferring value to the North.

Returning to the question of the criteria, I interpret the role of design professionals as being responsible for the quality of use of artifacts and information. Designers are specialists in the quality use of artifacts material or immaterial. Let me add that the domain of "quality of use" includes the formal-aesthetic dimension that is intrinsic to design and design work, and not simply an add-on that you can dismiss. It also includes environmental criteria. Designers intervene in helping to assimilate the artifacts into our everyday practice. That is for me the main issue about industrial design and graphic design. So one criteria of success could be paraphrased in the words of Brecht: to make the world more habitable, not a bad aim for a profession! Formulated in more general terms, I claim that the most important criteria for successful design is any attempt to contribute towards autonomy, be it the autonomy of the user, the autonomy of the client, or the autonomy of the economy.

Q13: "Design for Need" and "Design for Development" are both terms that have been attached to this area in the past. What terms would be most appropriate today to describe design activity in this area?

The design for need and the appropriate technology movements cannot be removed from their historical context, their time has passed. Today, the general settings, particularly the macro-economic settings, have changed drastically into a situation characterized by the anything-but-clear notion of "globalization."

When I was working as a consultant for different governments and private institutions or companies, the focus was on material production, artifacts, machinery, tools, toys, and furniture. Whatever the products, the industrialization process was linked to hardware. Nowadays, I would say, the hot design questions have shifted from a material culture to an information culture based on information technology.

If I were called on today to assist in some program, I would focus on the importance of information technology and communication, which have not been considered as decisive factors in industrialization policies so far. I don't know of any government plan in peripheral countries that takes into account, and tries to do something about, this sector of communication and information technology from a design perspective that puts people in the center. And I would say that design has a vast new field for activity.

Q14: What message do you have for designers and design educators working in the development context today?

I have always resisted the label of "design-guru," and of having the magic solutions up my sleeve. I don't have any magic solutions. What I do is to go to a particular context and then see what I can do there.

I would divide your question into three parts: professional action, education, and research.

We all know that design is a scandalously under-researched phenomenon, compared with other domains of human life and academic life. As I wrote elsewhere,¹⁴ a profession which does not foster and promote research, and incorporate research intensively, building up a proper knowledge base, has no future. We are confronted today with the challenge of constructing a proper body of knowledge about design issues with the help, of course, from many other disciplines such as sociology, computer sciences, philosophy, and history, among others.

Particularly in peripheral countries, design research is necessary and has a legitimate function because, through this research, the design discourse is promoted and people start to reflect on it. I am, however, aware of a danger related to what we would call esoteric

14 Gui Bonsiepe, "Design as a Cognitive Tool: The Role of Design in the Socialization of Knowledge" in the proceedings of the *Design Plus Research* international conference, Politecnico di Milano (May 2000).

research issues. If we look at some research work, which is very well done of course, obeying all of the rituals of scientific procedures, I sometimes ask myself what is the relevance of the issues that are dealt with? So my recommendation would be to stick to the local context, this is the rich stuff which cannot be substituted, and which is proper. Start from this local ground without, of course, losing the international perspective. I am definitely not advocating a parochial view of design.

Turning now to education, this is a very thorny question not only in peripheral countries but also in central countries. In all the countries of the periphery, we can observe that design is far more rooted in the academic sector than in professional practice. It is an alarming fact that we register a demographic explosion of design courses, some of questionable quality. For example, consider evening courses which last three semesters, and then you become a designer. If you tried to do this in medicine or engineering, they would laugh at you! Design has the image, the unjustified image, of being an easy career. It tends to attract the wrong people.

We also face the problem of the "banalization" and "trivialization" of design during the 1990s under the labels "design for fun," "designer jeans," "designer food," "designer drugs," "designer hotels," "designer...?" I'm not against fun, but I think it's misleading to put exclusive focus on this aspect of design and the designer's intervention. I am definitely against the notion of design as an ancillary function of marketing.

With regard to design education, I recommend (although I know this recommendation is very difficult to implement) that the people in charge of design courses have professional experience. Otherwise, we get into an academic closed and sterile circuit in which no innovation will occur the so-called "title factories." Both design and design education lives from contact with real-world problems, and in searching for and accepting problems from the outside and bringing them into the learning environment. Design education anywhere has to reassess its foundations, that often are taken for granted, and "academized" and "bureaucratized." Breaking with traditional paradigms, addressing the unresolved relationship between design and the sciences, and getting relevant design research done, these are the issues that are relevant to design in general.

Now as to the professional issues, I do not feel authorized or legitimized to tell colleagues what they should and should not do. You probably know the very recommendable book *Advice to a Young Scientist* by the British molecular biologist Peter Medawar. I think every designer should read this very clarifying book. He does not talk about design, fortunately enough, but in a typically British ironic manner gives a good x-ray of what a scientist is, and should and should not do. Scientists do research and write papers. They produce

knowledge, and these papers then are presented at conferences and later published in learned journals or books. He quotes from a manual of the British Society of Electrical Engineering a manual on how to deliver a conference paper and how to prepare a text for a lecture. He states that all persons who are giving a public lecture are under certain amount of stress. The manual recommends that, if you want to feel secure, then you should stand in front of your audience with a 40 cm distance between your feet. Note the fantastic precision: it must be 40cm and not 38! This, of course, illustrates one of the ridiculous aspects of advice on what to do and not to do.

I would recommend that professional designers working in industry or working as professionals in their own design studios or in public institutions never forget what I consider the basic claim of our profession: "design for autonomy."

I would like to end with a quote from an Argentinean writer who lived for a long time. He lived in three centuries and reached the age of 103 years. He wrote books but, more and more, he desisted from publishing these books. He wrote them for his friends. He opted not to live in Buenos Aires, but in a very small, distant provincial town. When he was asked why he preferred to live so far away from the fascinating metropolis of Buenos Aires, he answered with a very hard phrase (and I ask you not to misunderstand me if I paraphrase this assessment, transferring it to design):

"The center knows nothing about the periphery, and the periphery does not know anything about itself." This provocative sentence might serve as a breeding ground for reflections about the dialectic relationship between different discourses and practices of design. After all, we live in different places, but in one world!