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**THE FUTURE OF AUSTRIA:  
A TWENTY-YEAR DIALOG**

by

**Ernst Eugen Veselsky and Robert B. Textor**

**EDITOR'S NOTE**

*This article is designed to capture the essence of a highly unusual “before and after” approach to the exercise of foresight. In 1982, a substantial piece of futures research was carried out in Vienna by Stanford Anthropology Professor Robert B. Textor, assisted by an interviewing team of American undergraduate students at Stanford in Austria, and Austrian graduate students from the University of*

*Vienna. This research led to the 1983 publication in German and English, of **Austria 2005: Projected Sociocultural Effects of the Microelectronic Revolution.***

*The 1983 book was a summary and analysis of scenarios elicited by these interviewers from a carefully selected sample of 32 Austrian national leaders who had earlier shown a serious interest in futures research. The horizon year for the scenarios was 2005, or 23 years into the then-future.*

*In 2006, a sequel book was published that both (1) looked back on the 1982-2005 period to learn from the robustness, or lack thereof, of the original scenarios; and (2) looked forward to apply what was learned, to the building of robust scenarios for Austria over the next 20 years—until 2025. This new book, titled **Die Zukunft Österreichs: Chancen und Risiken im nanotechnischen Zeitalter, or The Future of Austria: Opportunities and Dangers in***

**the Age of Nanotechnology**, was edited by state secretary Dr. Ernst Eugen Veselsky

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*The chance to review the 1983 effort, and to learn from its misses as well as its hits, gives an extraordinary depth to the 2006 book, as does the opportunity to download the complete English versions of both books at the Stanford University Web site indicated on page 6. Such systematic “before and after” undertakings are relatively rare in futures studies.*

*The format of this article is somewhat unusual in that, while it is officially a co-authored piece, it in fact consists of two separate sections with separate authors. This is further complicated by the fact that these authors are themselves summarizing the ideas of others, working in the first case with scenarios obtained from interviewees, and in the second with essays submitted by a range of co-authors. While this article summarizes the complete work, I have attempted to keep the voices of Dr's. Textor and Veselsky separate. And, because of space limitations, I have in one instance included only the (rather descriptive) titles of the detailed scenarios included in the second book.*

—Timothy C. Mack

## **ROBERT B. TEXTOR**

The 2006 book is best understood as a kind of “second edition” of the 1983 book, of which I was the primary co-author. The history of the second edition

began in December 2004, just days before year 2005 was about to become “the present,” when I journeyed to Austria to see whether there was sentiment in favor of producing a solid second edition of the first book. To my delight, there was. I asked Dr. Ernst Eugen Veselsky, one of Austria’s leading futurists, whether he would serve as editor. To my relief, he agreed to take on this challenging task.

The second edition seeks to answer two fundamental questions:

1. In 1983, in predicting and designing the Austrian future, what did our sample of Austrian national leaders get right, and what did they get wrong?
2. In 2005, what lessons can we learn from the experience of visioning for the 1983 to 2005 period, which will result in better visioning for Austria’s future during the next twenty years, from

2005 to 2025?

For the reader to fully deal with these two questions, it is of course necessary to examine the complete texts of both editions. Fortunately, thanks to the generosity of the publisher, the complete English texts of both books are now freely available to the public at my Stanford University Web site, <http://www.stanford.edu/~rbtextor> (as is the German text of the first edition). Readers are encouraged to print out and examine both editions.

### **THE “FIRST EDITION”: AN ETHNOGRAPHIC APPROACH**

The discipline that guided the research that produced the first edition was cultural anthropology, which typically focuses on whole sociocultural systems—in this case the entire sociocultural system of Austria. Thus, when I initiated this project in 1982, I saw my team’s goal to be an investigation of how the overall Austrian sociocultural system (including

its technology) could and should serve the overall future well-being of the Austrian people—as they defined “well-being.” The original book thus covers not only selected economic and political issues, but also issues in such diverse areas as ethics, aesthetics, and cultural identity.

This approach was unusual. Relatively few futures researchers—then or now—have used a holistic anthropological approach. The great majority of them scope their work more narrowly. Often they focus on just a single aspect of a national system, such as economics, politics, etc. Sometimes they focus on just a single sub-aspect of economics, politics, etc., such as national income projections, political participation rates, etc.

The interviewing method used to produce *Austria 2005*, namely “ethnographic futures research” (EFR), was borrowed from conventional ethnography, which is the principal methodology of cultural anthropology.

I invented EFR in 1976 and have been teaching, using and developing it ever since. EFR is both (1) a special form of futures research, and at the same time (2) a special way of doing ethnographic research. Like traditional ethnography, EFR can be applied to any sociocultural system, whether that of a semi-nomadic tribe in Africa, or of a peasant society in Asia, or of a modern industrial nation such as Austria. In all cases, the aim is to ascertain the facts about, and gain an understanding of, the entire sociocultural system—in this case the overall Austrian way of life.

Conventional ethnographic research focuses on the “present” state of a culture, and/or on how that culture has evolved from the way it was 20, 50, or 100 years earlier.

Ethnographic futures research is different. Although it builds upon the general tradition and spirit of ethnography, it asks the interviewee to describe the form and structure of his/her culture (or

sociocultural system) in the future. While the conventional ethnographer asks people for facts about present and past versions of his/her culture, the EFR researcher cannot do that, because there are no future facts. So, investigators using EFR must be satisfied with asking people about their presently-held *images* of their culture as of some future horizon year. Such images do have factual status, and indeed (as history demonstrates) sometimes exert a powerful influence on the actual events that subsequently transpire in a society.

While all types of futures research necessarily involve at least some prediction, the most important goal of EFR is not just to predict the future but, more importantly, to *design* it so that it will more satisfactorily meet human needs and improve the lives of people in succeeding generations. Instead of simply asking “What do you believe is going to happen?”, EFR asks: “Within the context of overall trends and possibilities as you perceive them, what potential

changes in your sociocultural system do you (1) want, (2) fear, and (3) expect?”

To obtain robust answers to these questions, EFR uses a scenarios approach. The ethnographer elicits three scenarios from the interviewee.

1. First, an “Optimistic Scenario” is elicited, to learn what the interviewee wants his/her future sociocultural system to become, assuming a) good leadership, b) good support, c) a favorable international climate, d) good luck, etc.

2. Next, a “Pessimistic Scenario” is elicited, to learn what he/she fears that sociocultural system might become, assuming a) inadequate leadership, b) inadequate support, c) an unfavorable international climate, d) bad luck, etc.

3. Finally, a “Most Probable Scenario” is elicited, to learn what the interviewee actually expects (whether he/she wants it or fears it).

The EFR interview method is designed to stimulate the interviewee to speak freely and creatively. EFR is a confidential, one-on-one, interactive, non-directive, semi-structured, open-ended elicitation approach in which the interviewer listens actively and asks frequent non-directive probe questions in order to elicit from the interviewee a clear, comprehensive, contextualized and coherent scenario. The interview is recorded on an audio-recorder, from which a written summary is prepared. This summary is then submitted to the interviewee for editing and approval. The robustness and value of an EFR interview summary depends primarily on how well informed and imaginative the interviewee is, and how informed, skillful, and empathic the ethnographer is. For further information on EFR, see the Methodological Appendix to the Thailand publication available on the

Stanford Web site mentioned above, or go to  
[www.EFRsource.com](http://www.EFRsource.com).

The 1983 book was based mainly on summaries of EFR interviews with the aforementioned 32 Austrian national leaders. These interviews were conducted by my students under my supervision in the spring of 1982, when I was teaching at the Stanford Overseas Studies Program in Vienna. My students and I then did the initial work of summarizing and analyzing the scenarios. Thereafter I spent many weeks integrating and editing this material into book form.

### **“THE “SECOND EDITION”: A CO-AUTHORS’ ESSAY APPROACH**

Our 2006 book, by contrast, involved no interviewees. Rather, we invited all of our earlier interviewees to be our *co-authors*, and also invited an equal number of younger scholars to join the writing team.

Of the 32 national leaders who had served as interviewees for the 1983 book, 28 were still alive in 2005. We contacted all 28, and invited them to join our team. Eleven agreed to do so. Several others indicated support for the project, but pleaded ill health, etc. We also invited eleven additional Austrian leaders to join the team—mostly mid-career scholars with expertise in technological forecasting.

Each co-author was invited to submit ideas and an essay embodying his optimistic, pessimistic, and most probable scenarios—which most did with alacrity. The result of was a nice balance of input, between the ideas of the “old” eleven, who were especially adept at “looking back” to 1982—and the ideas of the “new” eleven, who were more expert in “looking forward” to 2025.

My own role was limited to that of methodological advisor. I played no part in shaping the actual content of the book, which is thus totally a product of

Austrian values, scholarship and expertise.

The driving force and guiding spirit behind the second book was Dr. Veselsky, who worked tirelessly to digest and integrate the robust and diverse essays he received from his 22 Austrian colleagues. I admire him for the leadership and expertise he provided. I also admire his 22 co-authors, who contributed richly to the final product, each typically in the form of a thoughtful, searching essay responding to the challenges of (1) learning from the past, and (2) shaping a desirable 2005-to-2025 future for Austria. All of these essays (mostly written in German) are available to the public in their complete original form on the Stanford website mentioned above.

These 22 co-authors include many of the most respected leaders and thinkers in Austria. They are listed in the Appendix, with the eleven who also served as interviewees for the 1983 book indicated by asterisks.

**PRINCIPAL FINDING: PERVASIVE  
PESSIMISM**

As Dr. Veselsky makes clear, portions of the 1982-83 “optimistic scenarios” have now been realized and integrated into the Austrian sociocultural system. However, in his and his co-authors’ opinions, the Austrian reality in 2005 was judged to be, in an overall sense, much closer to their earlier pessimistic scenarios—especially in areas such as social fairness, cultural integrity, and environmental practice.

Furthermore, and more disturbing, the prevailing position of the co-authors, in looking forward to 2025, also proved to be pessimistic. Indeed, only five of the 22 co-authors even went so far as to outline a comprehensive optimistic scenario—and even they judged their optimistic scenarios to be “long shots” with a low level of probability.

Personally, I was not totally surprised by the fact that the prevailing attitude was pessimistic. However, what did surprise me was the extent and pervasiveness of this pessimism.

Even so, I regard our “look back, learn; look forward, apply” approach as having fully justified the considerable amount of labor that went into producing the two books. After all, the ultimate value of a well articulated EFR summary is to alert people to look actively for ways to make the optimistic scenario more probable, and the pessimistic scenario less probable. This Dr. Veselsky undertakes below, especially in his section on “In Further Quest of Optimism.” One hopes that all of this work by all these scholars will, at least in some small way, be useful in helping the Austrian people achieve the kind of future they truly want.

**ERNST EUGEN VESELSKY**

## **Reflections on The 1983-2005 Scenarios**

In viewing the composite scenarios in the 1983 book, which resulted from the EFR process, a certain continuity or pattern may readily be seen. To begin with, there was the basic notion that microelectronics could change society and culture. At least one interviewee went so far as to state explicitly that the Microelectronic Revolution would add a fourth sector to the traditional three sectors of the economy—agriculture, industry and services—namely information processing.

Regarding non-renewable energy resources and ecology, it was optimistically projected that the new technologies would create energy-saving potentials as well as additional sources of energy—but it was felt that ecological challenges were more important. The predominating pessimistic scenarios expressed the fear that the Northern industrial states would not be prepared to limit their energy consumption and their

waste of resources. Unfortunately, in 2005 we note that this pessimistic prediction has since proven to be true all over the world.

Regarding developments in the domains of work, working hours, productivity and wages, the statements were two-fold: microelectronics would make work less strenuous, shorter and more productive—but problems would increase concerning qualifications and jobs. In Austria especially, international competition would put downward pressure on wage levels. The pessimistic scenarios expressed the fear that entrepreneurial interests would win in foreseeable disputes with the labor unions, and that even people's personal activities would be meticulously monitored by means of machines. In their most probable scenario, interviewees foresaw an increase in the already-existing economic inequalities.

Important optimistic scenarios have been confirmed by the developments that have since taken

place, not only in view of their quantity, but above all in view of their social relevance. In three main areas the optimistic scenarios have been validated by subsequent reality: specifically, the optimistic predictions about health, communication, and leisure have been verified in a most convincing manner.

The positive influences of new microelectronic tools on medical diagnosis and therapy were prognosticated correctly. The same is true for the organization of the health system as such; thanks to microelectronics, medical and health standards have been raised in such a manner that not only has life expectancy increased, but also old people are now spending their old age in better health. However, the actual development of central medical data storage, and the availability of such data (“this will make treatment in an emergency possible and will be highly advantageous if a person’s regular doctor were unavailable”) have not kept up with the optimistic predictions. At any rate, the discussions being heard

in Austria in 2005, about the need to create such a storage system, confirm the accuracy of the original statements, which thus were ahead of reality by about 25 years.

**Scenarios for Austria 2005-2025: Austria and the European Union**

- Growing instability
- Further miniaturization
- Software design as an opportunity
- A society of the elderly
- A globalized youth culture
- A nation of unemployed
- More work for less pay
- Farewell, social partnership

**AUSTRIA 2005-2025: MINEFIELDS ALONG THE WAY**

Conspicuously, one area that appears to be missing among the many minefields that are opening up in front of us for 2025 is the Microelectronic Revolution

(MER) itself. As compared with the huge number of changes that the MER has stimulated globally since 1983, there appears to be a smaller number of such MER-specific problems along the way ahead of us. Microelectronics (and increasingly nanotechnology) will certainly and powerfully influence important processes of political, economic, sociocultural change. However, we do not seem to be dealing here with an unsolvable “problem area,” but rather with a catalyst with an immense overall acceleration effect.

The future problem areas described below have a very special quality: they are all inter-linked in such a manner (1) that each one is caused by the other; (2) that they are mutually dependent; or (3) that they at least aggravate each other. The term “vicious circles” might be used to describe this phenomenon. This suggests that what one really hopes for is to find means for a breakthrough toward the opposite kind of circle—the so-called “gentle circles.” Many key problem areas that Austria faces, which threaten to be

part of a long-lasting vicious circle, are closely linked with what is referred to as globalized capitalism; and their remedy would be to renounce global capitalism more or less decisively—which is a rather challenging solution.

In looking forward to 2025, the accents of 1983 shift noticeably. The scenarios for the future are no longer dominated by freedom gains but rather by freedom losses, because the Microelectronic Revolution (MER) not only facilitates and accelerates the realization of one's hopes and expectations, but also invites abuse and manipulation.

It may be that the further acceleration of all future economic and social processes caused by the MER lies beyond the limits of our co-authors' imagination. They wrote: the acceleration which has been caused by the MER up until now is only the beginning; we are only at the start of the microelectronic revolution. If this is correct, probably no stone will remain

untuned, by one interest group or another, to take advantage of the MER in the two decades ahead of us—with numerous implications that we should try to anticipate, and to deal with. For example, we note that, by means of MER-based modern logistics, “just-in-time delivery” has become the global norm today, making expensive storage redundant. This has obvious economic advantages, but it also has wider social and ecological implications. Now that goods are no longer kept in storage, but are moved along transportation routes, the result has been an exponentially increased consumption of energy, and a collapse of road traffic. To deal with these wider consequences, new technologies will be used to master vehicular traffic. Traffic control systems will become indispensable for road, rail and air traffic. Virtual scenarios will help in planning future traffic routes.

A further kind of virtualization is seen in today’s fun-and-games society. The computer is used not only

for work, but also for play. Not just children and adolescents, but also many adults, have now become addicted to computer games. One reason for this is that, in the world of games, many traditional social and moral taboos no longer exist (sex and crime); even children can kill as many “bad guys” as they want in simulated fights for survival on the PC. Pornographic and sexual contacts can be maintained anonymously. Office people can compensate for their professional failures by killing moorhens. What is more, such games provide training for brutal competition, meaning for the aggressive society of the year 2025. Given these realities, no one should be surprised by the propensity for brutality we notice among many young people today. It is no wonder that strategy games are used in the instructing and training of managers and army officers; ancient Roman gladiators who were needed for the propagandistic circuses were also well instructed and trained. Today, such training can be achieved virtually. Due to the fact that an increasing number of people will have

little or no part in the economic success, many will find it especially rewarding to indulge in fake optimism by means of an ever-increasing number of games of chance.

War games, war preparations and war training, as well as actual reports on real wars, are now virtualized, so that reality and virtuality tend to become indistinguishable. (Hopefully, future American generals will be happy with only virtually planning their campaigns.) In Austria, by 2025, opinion polls will have replaced elections to a large extent, and opinion research and democratic development of an informed public opinion will have become virtualized. Audiovisual monitoring not only reflects realities, but makes them virtually changeable. Parts of the stock exchange activities (especially as far as the “derivatives” are concerned) not only resemble games of chance more and more (bulls and bears), but they, too, have become increasingly virtualized (hedge funds). The power of

the media over virtual images leads to the attainment of real power (“campaigning”).

The Internet, a seemingly egalitarian medium, appears at first glance to be a counterbalance—but in fact is not. It is the organizational power of the large enterprises (and of the political parties?) that turns virtual images into real power. Only by means of a comparable organizational capability could an egalitarian Internet become a real counterbalance.

The media portray a virtual world which their audiences take for real; but to quote a well-known social scientist: “How can someone who has never dug a hole in the ground himself, appreciate the benefits of an excavator machine?” One needs to understand what is virtually shown. One needs the experience (of digging?) in order to understand what is conveyed virtually. Lacking this experience, one misses the main ideas. The virtual truth is taken all

too easily for the real truth, and the consumer is manipulated.

The media owners determine the line of the media, the manipulation. In 2025 the Austrian media will be primarily owned by foreign investors. Being apologists for boundless capitalism, they will be the manipulators according to the spirit of the times.

Primarily German subjects, and subjects in American English, the language of the dominating global power, will be communicated to the Austrian media audience. Uniquely Austrian characteristics will hardly be taken into account. What will remain Austrian will be information about local events, weather forecasts and local news, folklore, the Austrian cultural heritage, and its Federal States—which will have survived despite all reforms. In Austria, only the Federal States and the stopgaps (Provisorien) will last forever. On the occasion of the peace treaty of St. Germain in 1919, which turned

Austria from the superpower Austria-Hungary into the small state of “Deutsch-Österreich,” Clemenceau said: “And what remains is Austria.”

Although Austria, as a nation committed to neutrality, will fortunately have been spared any military conflicts, it will nevertheless be drawn into the whirlpool of the general fight against terrorism. This means that, although we will not have gained real security for ourselves, we will have to pay the costs that accrue out of the hysterical international fight against terrorism. Numerous basic rights and liberties will have been curtailed here, as in other countries. In 1948 George Orwell warned in his horror vision, “*1984*,” of a state known as Big Brother, which would dominate and control the individual. Fortunately, these fears did not come true. The horrible phantoms of totalitarian fascism and bolshevism were successfully thwarted by the democracies and their civil societies.

However, we have known since the end of the 20th century that such threats now tend to come rather from *private* enterprises. At first, one thought that one could neglect them, because private enterprises, in contrast to states, do not have sovereign rights and therefore do not seem as dangerous. The experiences since September 11, 2001, however, speak another language. Everywhere, important sovereign tasks in the domain of public security have been turned over to private enterprises; in Iraq and Afghanistan, the US is employing private security forces to act for them, meaning that they kill and torture. In Austria and other countries, private sheriffs control airports and public areas, where they also carry out sovereign tasks.

Similar things have happened globally *pari passu* in the course of privatizations in the social domain, in infrastructure, traffic and telecommunication. Because private enterprises are not bound by the same restrictions and controls as bind the state, the creation

of such private combatants, private sheriffs, et al., brings Orwell's "Big Brother" ghost to life again—not as the state, but as private enterprises. In Austria as well, governments—especially those of neo-liberal persuasion favoring concepts of unrestricted private capitalism—have been tempted to proceed in a comparable manner, and to privatize sovereign tasks, disregarding people's human rights.

This will lead to especially negative consequences as more and more people become "transparent," and more easily controllable and guidable. (Somewhat allaying one's worries in this respect, though, is the fact that by 2025 there will have been at least four different Austrian governments.) In any case, lip service will be paid to data protection and respect for personal rights. For Austria, having once been a global pioneer in data protection in the service of basic rights and liberties, the projected outcome of these developments is indeed very disappointing.

## **THE PREDOMINANCE OF PESSIMISM**

Though *Austria 2005* was based on a blending of optimistic, pessimistic and most probable scenarios provided by experts and decision makers in 1983, it is mostly the pessimistic scenarios that have since emerged into reality in the intervening 20-odd years. And now, as we look ahead to 2025, this pessimism *persists*, with only five of our 22 co-authors providing explicitly optimistic scenarios. All this is a reflection of a fundamental change in the spirit of the times: in 1983, the basic mood in Austria was optimistic and future-oriented. Our original sample of 32 national leaders shared this optimism, in the context of the reality of the Austria of that time, with its remarkable economic growth, its social progress, and the international respect that it then commanded.

Back in 1983, it seemed to those who do scenarios not only possible, but highly probable, that Austria's existing problems would be solved. But today, looking back, it seems that their statements were, to

use Textor's term, "tempocentric," or "unduly centered in an inappropriate time frame." Textor's "Ethnographic Futures Research" method encouraged those Austrians who did scenarios to speak freely and spontaneously about their perspectives on the future, in order to help them transcend their tempocentrism. However, these efforts were only partly successful: for the picture they drew for the period 1983-2005 was that of an essentially ideal world of harmony brought about by Social Partnership, which would be a model for the rest of the world. Textor admired the Austrian system to a great extent but, with his undeniably American ethnocentric leanings, he warned that many of the interviewees did not realize the importance and the benefits of the microelectronic revolution, which was already raging in America at that time.

Looking back critically upon the actual developments between 1983 and 2005, most of our co-authors agreed that it is the pessimistic scenarios

that have tended to come true, and that, if we were to use just these pessimistic projections as the basis of our evaluation of what was predicted correctly and what was not, the 1983 study did very well, with a high score for accuracy.

As we project forward to 2025, it would be wise to regard experience of this kind as a warning. The spirit of the times has notably changed since 1983. World politics and globalization have led to growing insecurities. Much of the international respect that Austria once enjoyed has since been lost, as has its inner stability and its social partnership. Rising unemployment and growing income differences characterize the 2005 political scene of EU member Austria, which is becoming increasingly vulnerable to external influences, and which can hardly keep up with the rapid changes needed in education, economy and science.

Thus, it is reasonable to ask whether our co-authors, who were asked for their personal projections for Austria over the *next* 20 years, are being unduly influenced by this current pessimism. In other words, are their predominantly pessimistic projections tempocentric? Have our co-authors simply transferred the present into the future in accordance with an almost naïve technique of prognosis?

And there is a related question we should ask: If our co-authors consider almost all evil as coming from the US, are they, as Austrians, caught up in ethnocentrism (being unduly centered in one's own culture), as the American citizen Textor was in 1983?

Asking these questions does not mean that one expects a positive answer. As noted above, to supplement our older co-authors, we purposely chose several younger co-authors as well, who perhaps have experienced fewer disappointments and who, above all, are perhaps now at the peak of their lives and feel

a need to shape their personal futures in a positive manner. One would expect that at least some of these younger co-authors might turn out to be optimistic. What is significant, though, is that even they are not very optimistic. Indeed, emblematic of the general feeling of bleakness is the fact that none of our co-authors, older or younger, felt a realistic glimmer of hope worth reporting. (This leads one to believe that only small social units with distinctly alternative values and behavioral patterns, or else fundamental system-wide changes in politics, economics and society, could possibly bring about a genuine turning point.)

Even granting that our sample size is too small to be representative, and even granting that most of our co-authors do not profess to be experts in long-term prognoses, this overwhelmingly pessimistic consensus is indeed remarkable. Still, intellectual honesty forced us to ask further questions about methodology. What would change if the sample were extended to reach

the size normally used for public opinion surveys?

What would change if one found “experts” who were really “competent” to develop long-term prognoses of this kind? And how many such experts could one find, especially in Austria?

These additional questions were asked and answered. And the answers take on added credibility due to the fact that our project was rare among futures research studies in that it was carried out by many of the *same* individuals who served as interviewees in producing the 1983 book—this time serving as co-authors rather than interviewees—plus an equal number of carefully selected younger scientists. Furthermore, it is noteworthy that our new scenario was developed with methodological advice from the same social scientist who had been in charge of the 1983 research, and that it reflects the views of a variety of Austrian intellectuals: economists, sociologists, technologists, historians, managers, opinion pollsters, journalists, politicians (plus a senior

anthropologist who had contributed to the 1983 study as a student interviewer). These co-authors duly provided their written contributions, subdivided into optimistic, pessimistic and most probable scenarios. Overall, then, we consider the pessimism of our co-authors to be persuasive.

### **A FEW OPTIMISTIC SCENARIOS**

As noted above, only five of our 22 co-authors provided basically optimistic scenarios for the 2005-2025 period—scenarios that they themselves confessed they did not consider probable in any overall sense.

Extrapolating from the present trends, these five co-authors expected a further increase in technical possibilities in the domains of micro- and nano-technologies, especially in the field of public administration (“Citizens’ Identification Cards,” or “Bürgerkarten”); in the field of human medicine (genetic engineering and stem-cell technology); and

in the form of further price reductions for industrial products.

They also projected that, as a consequence of a foreseeable energy crisis and a resulting increase in energy costs, new alternative methods for energy saving and energy generation (organic substances, wind- and solar-power stations) will be sought and partly found; the remaining water power reserves will be expanded (hydroelectric power stations along the Danube, east of Vienna); and the peaceful use of nuclear energy will be re-discussed (hopes for fusion energy).

Continuing their projection: as a reliable “presupposition for prognosis,” it is assumed on the basis of the demographic trends that the current unemployment will be followed by a scarcity of workers, which will necessitate a further reduction of public transfer services. There will be a continuing decrease in the number of physically strenuous jobs,

and these will be held by migrants from Eastern Europe. One-man firms will offer services quickly and at low cost, and Austria will do well in competition with low-wage countries as far as qualifications are concerned. A longer life expectancy will be regarded as a challenge, and older workers will once again be highly esteemed.

One analyst saw such developments optimistically only if there were to be fundamental changes in the social fabric; if Austrian society were somehow to succeed in forming a new type of person socio-ethically, one who would think and act in solidarity with others, and not egotistically and individually in a Machiavellian manner. Here, above all, is where small alternative social groups could help.

Another co-author expressed his hope that the three monotheistic religions will no longer view themselves as missionaries, and that they will give up their

intolerance. Peace among the world's religions would be a solid basis for overcoming famines and wars.

Only one co-author dealt with the macro-economic changes which could, with appropriate political and administrative action, bring Austria onto a course for success, similar to Finland's, and thus enable Austria to become a vanguard nation in the Barcelona-Lisbon convoy as soon as 2010. To make this possible, however, several more or less fundamental changes would have to be carried out, such as:

- an increase in research funding to 3 percent of our GDP;
- the establishment of internationally respected centers of competence;
- more attention to expert councils;
- selection of elites on the basis of educational policies;
- development of an "Austrian way to becoming a leading nation in economics and society"—

which of course must be endorsed by the majority.

Obviously, this optimism, based as it is upon rather traditional instruments, would not be possible without considerable changes in policy and society.

One of the most optimistic essayists found the roots of his optimism for the future in his very pessimistic analysis of the present and recent past. For him, the vicious circles of globalization, and the increased power of the military-economic systems, have become a threat: “There is enough time still for the global system, which is based on the Microelectronic Revolution, to mitigate its vicious circle of collateral damage by itself, gradually and by technological means, and to reduce it, in order to prevent imminent catastrophes.”

He projects that alternative social groups that are microelectronically interconnected globally will be

the starting point. They will use the latest technologies of knowledge, and will initiate a permanent democratic learning process. The new values will be “increased well-being rather than economic growth, quality of life rather than mass consumption, empowerment rather than mood-repair,” and these values will make it possible to fend off the latent fear of catastrophes.

This essayist felt that a new Kondratiev-cycle (a long-term technological wave of change) will begin before the end phase of the Microelectronic Revolution (MER) and will gain power. This new upswing will be, for the first time, global in scope, and accompanied by a tolerant multi-religious humanitarian ethics. This cycle promises to be of long duration after it has prevented the Third World War, has gradually reduced terrorism, and has mitigated pollution and the waste of resources. Austria will even have a chance to achieve a leading position within this new cultural competition.

All five optimistic scenarios called for more or less dramatic changes. No enduring improvement is seen to be possible without such widespread changes. Only a whole new trend will give us hope. The acceleration of all economic and social processes caused by the MER will also offer the opportunity to realize hopes. “Also, sheer chance has become part of the game, and casts a series of events which support each other and might win the jackpot, might be just a lucky throw, or might be a catastrophe.”

Surveying all five optimistic scenarios, one does not find a very clear answer to the question of where the change for the better is to come from. Will it come from high up, namely from politics, and here again from the US? Will it come from the European Union? Will it come from Austria? From the Vatican? Or will it come from below, that is, from alternative groups? A change of politics would change the behavior of the

people themselves, and these changes would then in turn further change the nature of politics, etc.

Here we encounter an apparent logical lapse. On the one hand, our co-authors present a generally pessimistic view of the future that seems, at least implicitly, to be based on assumptions of continuity in global politics and economics. On the other hand, they tend to take the overt position that global politics and world economics are unstable, and that more or less dramatic system changes are therefore probable.

In particular, two contributions deal with this aspect, and one of them explicitly assumes a change in the year 2020. Starting from the most pessimistic of all scenarios, this essayist innovatively analyzes correlations and remedies, and in the end arrives at a positive judgment of the chances. From the vantage point of 2025, he “looks back,” as it were, and states:

That the situation in Europe has become worse than that in the NAFTA region and the Far East. After the opening up of the former socialist countries, cheap labor flooded into the neighboring states. More and more jobs were lost to the East, and those that remained paid less than before.... Unemployment was high everywhere, although a reduction had been expected for demographic reasons. Every further cyclic economic crisis aggravated unemployment; every increase in unemployment meant the beginning of a new crisis. This led to a fatal vicious circle with the result that one out of three workers is without a job.

From the year 2020 onwards, intellectuals used group networks to start a counter-movement, which used the newest technologies (quantum computers on a nanotechnical basis) to influence strategic services (communication, coordination and information). They acted out of their realization that it was not sufficient

to rely on the postmodernistic myth of self-organization, but that a concrete basis of stimuli and assistance was necessary. A special “entrepreneur group” was created in order to deal with alienation on the job. A “peer group care” program was installed to deal with social security problems. A special study circle was to deal with the information explosion. And an industrial medicine group was to deal with job-related health hazards.

This essayist optimistically projects that the EU will have instituted appropriate legislation by 2017, and arrives at this final projection:

As the examples of Targeted Intelligence Networks show, it is indeed possible to re-orient the welfare state. And something else is worth mentioning: People who have also had direct experiences with the negative aspects of life can no longer close their eyes to some of the destructive tendencies of social change, as they

experience them personally thousands of times within their group networks. They base their choices more upon their personal experiences than upon the illusions which they get from spin doctors.”

These hesitantly offered optimistic scenarios all require drastic changes in social behavior and value systems, and in world politics. If these changes occur, they can bring about positive changes in society, and there will be less room for pessimism as Austrians in 2025 contemplate their future in 2045.

### **IN FURTHER QUEST OF OPTIMISM**

As we have seen, only five out of our 22 co-authors were prepared to provide optimistic scenarios for the 2005-2025 period. What is even more discouraging is that even they did not believe that these scenarios could be realized. Nonetheless, it would be inconsistent with the general spirit of our entire

project if we did not give sufficient room to positive aspects as well.

## **SEEKING HISTORICAL GROUNDS FOR OPTIMISM**

Being responsible for the summary and the coordination, I am fully aware that I am overstepping the framework laid out by the contributions at hand. But I am buoyed by the historical record, which shows that often there have been warnings of crises, even of collapses, which in fact never materialized in subsequent reality. For example, there was the perilous Cuba missile crisis of 1962, and the threat of nuclear war between the two superpowers, the US and the USSR. Thanks to the wisdom of one of the two conflicting parties, the catastrophe was avoided at the last moment. There was also the fear of a general collapse of the world economy in connection with the oil crisis of the 1970s. In the end, this catastrophe was avoided as well.

And let us bear in mind that Josef Schumpeter, probably the leading economist of the 20th century, warned that the private capital industry and the economic giants might collapse, because they, similar to tanker-convoys, would have become too inflexible in competition with large publicly administered organizations. In the end, however, the private organizations survived by increasing their economic efficiency and competitiveness to a hitherto unknown degree by means of outsourcing and other new organizational techniques.

If it is true that predicted revolutions and crises often do not materialize—or, as the late Chancellor Bruno Kreisky used to say, that many prognoses die a sudden death—this does not necessarily mean that the fear of certain future developments was unfounded. Rather, it might well mean that because people felt motivated by their perceptions of imminent disaster, they took the trouble to adopt certain rules and, in extreme cases, to change their own behavior—with

the result that the disaster was avoided. If one considers our social and economic coexistence as a number of correlated and interconnected processes, it becomes clear that imminent dangers can lead to preventive adjustments and to real changes, which might be limited yet still sufficient. Should the dangers be so great as to threaten the very existence of a whole social system, these adjustments will, of course, need to be more fundamental.

## **THE GLOBAL SETTING**

There are indeed dangers ahead of us that threaten our very existence. They concern not only us Austrians, but the entire community of nations; therefore they challenge not only us, but all people from all nations and continents. All of us are, after all, interested in maintaining world peace. Likewise, all of us want to preserve a livable environment, a successful economy, and respect for human rights and social standards. Our common interests provide the motivation for our common efforts within the

framework of the community of nations. Though some might deprecate the United Nations and its organs as weak, the inescapable fact is that the UN is still invaluable; indeed, it is almost our only hope for a positive future. If the United Nations did not already exist, we would have to invent it.

Now, taking the role of the starry-eyed optimist, I here project that the UN will not only continue to exist in the years until 2025, but that it will actually have gained importance—and that, on the other hand, the supporters of unilateral world domination (for example, G.W. Bush) will have reached not only the limits of their own morale, but even those of society, and they will have been voted out of office. This process will be painful at first for the US and for the large corporations, because they will be the first to be affected by a loss of power, and they will no longer be able to act arbitrarily in world politics and economics. These short-term losses will, however, lead to huge long-term gains in overall social well-being, which

can and will be profitable—not only for the world as such, but especially for the US and the large corporations.

Under such basic conditions, the uncontrolled international cash flows may have been successfully directed into riverbeds with flood control areas, so to speak. People will have realized at long last that it is better to give up the inflated degree of liberalization of the financial markets, rather than the effective functioning of global economics. All optimistic scenarios project that there will be neither a general collapse of the financial markets, nor a global economic crisis, between now and 2025.

Nonetheless, the way to get there will be hard, because whole herds of “sacred cows” of neo-liberal ideas will have to be slaughtered. Even if these herds are left unslaughtered in the interest of share-holders and their managers, their advocates in business schools and in the media must be steered toward a

more adequate understanding and behavior. All this will not be possible until an ideological orientation toward effective macro-economics has replaced the ideological orientation toward class struggle from above.

Although the efforts toward the prevention of a global economic collapse may involve difficulties, it is essential, in the interest of all of us, that these efforts be successful. And there is indeed a good chance for success, if one bears in mind that it will not be necessary to change ironclad economic behavior, but only that which was introduced by organizations of international economic policy (GATT, WTO, IMF, World Bank, OECD) at the end of the 20th century, preceding globalization. One of the aims of these needed international reforms should be to put an end to the use of these international organizations in an imperialistic manner. Would it not be marvelous if the WTO and the World Bank, instead of paying mere lip service to development aid,

would actually take a genuine interest in the developing nations, and would thus no longer force these nations to follow the dictatorship of multinational corporations and capital? (See above all, Joseph E. Stiglitz, *Globalization and its Discontents*, 2002.)

The considerable changes required to cope with these threats from now until 2025 presuppose a global process, which will start not only from above (meaning from well-intentioned politicians and leaders) but also from below, and will be more or less imposed. The explosiveness of today's growing social problems—historically comparable perhaps to those leading up to the French Revolution—makes the need for such changes very clear. The longer these problems are simply pushed ahead of us, the more dramatic and violent the imposed adjustments will be in the long run, and the more victims they will claim. Timely reforms prevent later revolutions.

Even if we succeed in avoiding both a world war and a global economic crisis between now and 2025, nothing will have changed fundamentally in the realm of global poverty and global starvation. The community of nations will repeatedly, and at regular intervals, announce well-intended but useless development targets. The destruction of the environment will have reached a new climax, although this will occur more slowly. The Kyoto standards will be accepted by the US as well, but they will be put into force too late and too reluctantly. The energy shortage will become dramatic, and will prompt politicians to take more or less drastic means, and to go far beyond adjustments to the market economy. Apart from saving energy and developing sources of alternative renewable energy, a reasonable aim of such interventions will be to guarantee to less affluent customers a minimal supply of energy. The consequences of such interventions for world politics, world economy, and world society will be huge in any case. Global unemployment will always be with us,

unless the global economic system undergoes a fundamental re-orientation.

## **THE EUROPEAN SETTING**

The European Union, which will still exist in 2025, will find itself functioning within this global framework. Despite all the grumblers and critics, the EU will have mastered numerous crises and will have matured. The question of its ultimate structure—confederation or federal state—will remain pragmatically unanswered. Out of necessity, certain elements of a common foreign policy will have been developed. As far as economic policy is concerned, the EU will have initiated projects of its own to expand the European infrastructure, apart from championing agriculture and the three liberties. Entrepreneurial taxation and economic law will have been harmonized. After a clear turn away from neo-liberal ideologies, social law will also have undergone a minimal harmonization. Slowly, gradually, the conviction will spread, that the European Union—

contrary to its earlier inclinations—must make important domains of economic and social policy the responsibility of the European community as a whole.

In 2025, the euro will be well established as the common currency within the EU, and the new member states will have been fully integrated, after initial difficulties. In power politics, the EU will remain far behind the US, but in practical policy matters it will be recognized as an important player. The euro will not replace the dollar as the world's leading currency, but will have begun to function as a clearing unit, serving non-EU countries as well. In the competition between the US and East Asia, the EU will still not figure as a major actor, but nonetheless as a considerable factor.

Does Austria as EU member have no choice other than to lean back and wait for things to happen, or is there some scope for action? Of course Austria has duties to the EU, but it also has rights—and therefore

considerable scope for action. Above all, Austria will hopefully take an active part in the formulation of common EU goals. Austria will not be very relevant on issues of how much any individual nation manages to get out of the common financial pot, but it will be relevant on issues of how the EU can and should play a role within the common area and abroad. Austria will have given up its parochialism. It will—especially as a small member state—be effective in helping to strengthen common approaches to common tasks, and to minimize national egoism.

A main concern for Austria must be those political tasks that can no longer be handled by the individual nation-state members—whose scope for action has, of course, been narrowed by their very EU membership. Such tasks must become the main responsibility of the European Union as a whole—and not be left pending, or left to private enterprise. This is especially true for the so-called “magic targets” of growth, which previously had been vitally important issues for each

member nation's economic policies—namely, full employment, price stability, equitable income distribution, and settlement of the trade balance. From the end of the 20th century until 2005, integrated goods- and finance-markets have no longer permitted the use of public economic policy instruments to realize these targets, or else they have rendered such use ineffective. This must change.

These magic targets have not, of course, become irrelevant; only neo-liberal egoism would call them redundant, and would prefer to leave everything to private enterprise and the so-called “free play of market forces.” These ideological recipes are known to have failed. Therefore, it is clear that Austria will have to do everything in its power, not only to appeal verbally to the EU's sense of responsibility, but also to see to it that the EU embodies this responsibility institutionally. Due to the size of its economic area, the EU in fact has at its disposal the totality of the possibilities of previous national economic policies—

even if those possibilities may be restricted internationally, as was the case with the individual nations before.

In both its own interest and that of the Community, Austria's EU policy must support all measures that promote the realization of these targets. Our support must not stop at the *status quo*, but must aim at expanding the EU's competence and responsibilities. The basic idea of a European Free Trade Zone has long been economically and socially obsolete. Only a European Union that is ready and able to meet the new economic and social demands of the present has a right to exist. On the basis of this obligation, Austria should fight for the realization of the blueprints for such an EU—against all neo-liberal objections.

This promising battle for a bright future is therefore a challenge for Austrian politics, both nationally and on the EU level. The free play of market forces will lead to a desirable future in Austria and in the EU

only if further actions are taken. To let this free play of market forces simply run its course, without any regulation, would mean positive future expectations for the local entrepreneurs—but not for the local population as a whole.

### **KEY ECONOMIC ISSUES**

From the typical entrepreneur's perspective, economic and national areas degenerate to mere economic locations, which are used or avoided by enterprises exclusively for cost reasons. In the eyes of many entrepreneurs, "Old Europe," and Austria with its cost-intensive social and environmental standards, easily disqualify themselves as being too expensive, and are given a wide berth for this reason. The same is true of Europeans and Austrians who, as employees, are simply seen as being unduly expensive "cost factors." Indeed, from the business person's point of view, our people are of interest only as consumers, primarily because of our purchasing power, and they expect competitive department stores

to emerge from the free play of market forces.

Without governmental action, Austrians will profit from the economy only as consumers, and the question will remain whether we are manageable and inexpensive enough to be given jobs. It is not easy to predict how manageable and how inexpensive we would have to be. Perhaps the wage costs of Eastern Europe will be the standard initially, and then soon perhaps Asian standards. The bottom line of wages has not been reached yet.

Austrian politicians are indeed challenged. As far as the economy is concerned, the vital question is: what can Austria, as a small EU member state, do in a globalized world? The answer from a traditional economic liberal would be: see to it that law and order are maintained. A neo-liberal would say: see to it that the conditions of the location are ideal. The translation from the economic jargon would be: don't put off enterprises, but rather convince them to stay in

Austria, or even to move here. From such a viewpoint, matters of national economic policy become the special realm of representatives of entrepreneurs. Recent Austrian economic history shows that this characterization is hardly an exaggeration. It is no coincidence that, before becoming active in politics, Federal Chancellor Dr. W. Schüssel was General Secretary of the Austrian Economic Association (Wirtschaftsbund) of the Austrian People's Party, which is the political representative of the interests of the entrepreneurs. And the previous Federal Ministers for Economy, and for Labor, were former General Secretaries of the Federal Chambers of Economics, and Industry, respectively.

In the neo-liberal philosophy, location policy is a restricted part of economic policy. This philosophy considers all procedures, and the fundamentals of an economic system, to be fixed data, and restricts itself to influencing entrepreneurial decisions in a positive

manner within such a fixed framework. Governmental measures designed to improve infrastructure, vocational training and mobility, etc., are disregarded. But the historical fact is that such broader governmental measures were once commonplace in Austria. An example is seen in the special program for a small industrialized region in the province of Styria in the 1970s (the Aichfeld-Murboden Program).

This concentration of Austrian economic policy merely upon location policy has led to a minimization of the scope of governmental action, meaning that more fundamental macro-economic measures have not been taken. However, following neo-liberal models, there have indeed been certain special pro-business kinds of intervention, which have changed important structures. For example, there has been privatization and, as a consequence, a transition from stake-holder-value to share-holder-value strategies, which—according to empirical studies—have actually

led to a decrease in growth and employment.

The very modest success of the most recent economic policies suggests another change—this time in the opposite direction. It cannot suffice just to create a climate that favors entrepreneurs. It cannot be enough to exempt entrepreneurial gains from taxation—without seeing to it that these gains are invested in Austria. Only those gains that are invested for productive purposes should be tax-exempt. Tax allowances for entrepreneurial losses abroad must be abolished—unless we want to use Austrian tax money to support the transfer of Austrian enterprises abroad, and thus subsidize a further loss of Austrian jobs.

Important as it is to rectify the major errors of recent Austrian economic policy, unfortunately it is also true that some of the lost terrain cannot be regained, because it is essential for our future that investors have confidence that there will be a constant

economic and tax policy in our country, regardless of which political party is in power.

A change toward the investive and innovative promotion of economic development would also be an important contribution to the creation of new jobs. We can learn from Austrian economic history that full employment and tax-privileged investments have in fact coexisted, which proves that a high level of employment can indeed be a consequence of tax-privileged investments.

The grave mistake of privileging the distribution of profits and the transfer of enterprises abroad, plus the criminal neglect of public investments, have been responsible for the deterioration of our labor market situation. Here too, the effects of an erroneous neo-liberal ideology are clear: budget “cosmetics” and an irrational orientation toward balances should never have led to the drying up of public investments. The net effects of these neo-liberal policies on the budget

have been negative, because increased unemployment has meant increased expenditure in the social domain, as well as diminished tax revenue.

## **INFRASTRUCTURE, TECHNOLOGY AND EDUCATION**

Many fields of Austrian infrastructure are in need of renovation and expansion; therefore, public investment in the main fields needs to be increased. Such investment will also contribute to reducing unemployment. With respect to investments in the infrastructure of transportation, attention must be paid, above all, to the expansion of the international traffic routes to our neighboring countries to the north and the east. The tunnels through the Brenner-Pass (Italy), the Semmering (between Lower Austria and Styria), and the Koralm (Carinthia) will be in use by then, and important adjustments in the area of railways and shipping (Danube) will have become essential, especially for freight traffic.

The building and expansion of industrial clusters must be one of our main tasks, which should be achieved in cooperation with universities, specialized colleges (Fachhochschulen) and technical colleges (Höhere Technische Lehranstalten). The cooperation between Stanford University and the high-tech firms of Silicon Valley could serve as a suggestive model. The kind of enormous financial support for newly established enterprises and for product development, which Stanford University offers from its foundation assets, or which come from generous donations by private sponsors, would have to be contributed, or at least organized, by the public sector in Austria, because such private resources are not available here. The scarce public resources in Austria will have to be used with special care, because Austria will not engage in an arms industry like that of the US, and because the state will not finance comparable gigantic research programs.

Austria's endeavors with regard to education hinge

heavily upon future-oriented investment funding. Clearly, in its own interest, Austria must improve the quality of its education, and must redirect the funding of its research. The Austrian education system must offer as high a general educational standard as possible, but must also see to it that top talents are supported, and that the number of our university graduates is adjusted to the European level. In order to reach the European standard, the funding of research in Austria will have to be doubled and strategically repositioned. Above all, competence centers must be established—centers which can offer instruction in subjects of practical relevance, and that can cooperate successfully with industrial clusters. In these efforts, it will be important to emphasize software development, where Austria, even though a small nation, would have chances for success in international competition—as Finland and Ireland have shown to be possible.

## **GIVING PRIORITY TO SOCIETY'S STAKEHOLDERS**

Privatization has caused the Austrian government to lose practically all influence on the big national industrial enterprises, because no serious Austrian core shareholder has appeared as a stakeholder. This has permanently changed leadership strategies. Internationally, shareholder strategies are in demand and are being widely copied. Such strategies are naturally applied by the managers of privatized enterprises as well, whose contracts entail shares of profit. Reliable international empirical studies show that this is accompanied by a business policy that is less interested in growth and investment than in dividends and shares. While in past years the nationalized enterprises sometimes aimed for an exaggerated number of employees, this is no longer the case today. Empirical studies show that the change in leadership strategies since the 1990s, from an emphasis on stake-holder-value to share-holder-value, has considerably contributed to unemployment, which

in fact has risen enormously. Privatization has also contributed to a high overall unemployment rate in Austria. The remaining nationalized enterprises should therefore be merged, and should become the crystallization point for a holding company, which would be market-oriented, yet also follow stakeholder principles.

Labor market policy must no longer be synonymous with the mere administration of huge numbers of unemployed, but should seek to qualify and mobilize them. Additional new dimensions can be opened by cooperating with educational policy and regional policy because, after all, professional qualification begins at the school level. Lifelong learning and relearning, in tandem with work, are the basis for permanent improvement of a person's qualification, and the institutional and organizational prerequisites for this must be provided at long last.

We must also adopt policies to reduce obstacles to regional mobility. In Scandinavia, for example,

mobility-friendly, low-cost apartments have been available for a long time; they can be passed on and used without expensive adaptations. Unfortunately this problem has yet to be addressed in Austria.

Only a harmony between supranational and Austrian policies can guarantee the highest possible employment rate. Above all, the European Union must give up its abstention from addressing economic policy matters and must pursue an autonomous full employment policy in keeping with the possibilities of its huge economic area. This means not only giving up the irrational Maastricht Criteria, but also taking responsibility for tasks of Community-wide importance, such as the development of transportation infrastructure, and the provision of adequate research funding. From the geopolitical point of view it would be strategically important for the EU to insist on a surveillance of international finance flows, so as to prevent developments that could threaten the entire system. The European Union should make the

taxation of financial transactions a main aim.

The disastrous competition among nations to offer the lowest possible taxation rate should be brought to an end by a European harmonization of the taxation of enterprises. Environmental and social interests must not become the victim of the principle of free traffic of commodities, goods and services. In this respect, Austria must use its power of conviction within the European Union.

On the national level, steps must be taken toward the funding of innovations, the establishment of industrial clusters, the creation of a holding company consisting of public enterprises and serving the interests of all Austrians, the creation of federal ministries for science and construction, and a repositioning of labor market policy.

In Austrian social policy, money will play a lesser role than human warmth. It is no longer sufficient to

meet Austrians' social needs with sums of money only. Putting the entire social system on a monetary basis has deprived it of its human warmth, and has been counterproductive to a large extent. Additional stimuli, both positive and negative, will be required to reach certain social targets. All this will help to curb the inevitable explosion of social spending.

The complexity of the tasks ahead of us calls for more than specialized expertise. Due to an overabundance of electronic data processing, specialization may be the rule nowadays, but it has led to the neglect of more general social concerns of great importance. The same is true of lobbying for individual and group interests. It is, after all, possible that unsatisfactory social and macroeconomic decisions can sometimes be made despite intensive use of specialized information and aids for decision-making.

In the light of Austrian historical experience, society should avail itself once again of policy counseling of a scope that reaches beyond the interests of any one group—such as, for example, the kind of counseling that the Social and Economic Advisory Board formerly supplied, and could supply again. Indeed, as a general principle, it will be of great importance to make knowledge and science widely available for the mastering of future social tasks.

The profound structural change of society here envisioned will reduce the legitimacy of the representations of various interest and professional groups. There will also be economic and social policies aimed at a social balance, policies that will seek to obtain as much consensus as possible, and thus to mitigate the consequences of accelerated structural changes and their associated adjustment problems.

The battle for personal security and data protection

is not lost, either. Although the international fight against terrorism may be a pretext for violating national data protection, not every nation needs to follow suit in an exaggerated manner. Austria, once a pioneer in this field, should do everything in its power to stop public and private misuse. Above all, the expansion of private security services should be watched with great care. Existing data protection institutions should be respected, and protected against attempts to evade or counteract them. The Data Protection Commission, not the law courts, should be responsible for the private sector as well. For an appellant, the proceedings at this Commission are far less costly than at the law courts. Concerns about the protection of human rights should always come before the concerns about the fight against terrorism.

Finally, it should be noted that the best means of protection from the propaganda and manipulation exerted by the media will be to offer better education, so that people will be enabled to identify

manipulation for what it is. Through education, individuals will learn how to discover commonalities and themes in the numerous reports they receive from the media, and thus gain a good grasp of public affairs. The school system has a preparatory function in this respect: this is yet another argument for offering more than just narrow professional training.

## **FINAL THOUGHTS**

A person who predicts the future is a prophet, a clairvoyant or a charlatan. Nobody has ever lived the future; therefore, most predictions come close to charlatanism. And yet one does speak of futures research. Jules Verne never would have done that, although many of his visions were so realistic that they became reality; yet he was a novelist and no scientist. The same is true for many a self-appointed “futures researcher.”

Still, it is not only understandable but also important to think about what lies ahead of us, unless

we want to walk ahead without a compass. For this purpose one can proceed systematically, even scientifically. One can “extrapolate” time series; use more or less well-founded mathematical models; or assemble representative and expert opinions and scenarios. Whatever procedure one may choose, the statements of one’s results and conclusions will always be “conditional” statements; their value depends on the choice of conditions, or assumptions. However, nowhere else is there so much carelessness—even swindling—as in the case of predictions. For example, barely comprehensible and perhaps even barely practicable mathematical models pretend to be accurate to the decimal point, although their assumed conditions might be ambiguous, imprecise or even incorrect.

Our study restricts itself to the presentation of the opinions of a group of co-authors, concerning possible future developments in Austria. Of course, a group can be wrong, as any individual can be wrong.

But at least there is the safeguard that the conception or misconception of one co-author can be compared to, and balanced with, the conception or misconception of another. As far as our study is concerned, we hope that this is true. We asked for optimistic, pessimistic and most probable scenarios. It was left to each co-author to judge for himself whether a given projection was desirable or undesirable, optimistic or pessimistic, and the subject was unrestricted in a sociocultural sense.

An American scientist, namely the inventor of the chosen Ethnographic Futures Research method, was the initiator of our study, and Austrian technologists, economists, social scientists, natural scientists, journalists, managers, an anthropologist, and myself served as co-authors. We found the work so exciting that we became active out of our own accord, and without outside financial support. Our joint product consists of subjective scenarios developed by people, eleven of whom had been very successfully engaged

in a similar endeavor 23 years earlier. They are not prophets, clairvoyants or charlatans. They are motivated today, as they were then, by the key question: what dangers and opportunities lie ahead of us, and what can be done to avoid the first and turn the latter into reality?

Of course it is best to avoid assuming that one and only one future exists; it is better to assume that a variety of futures are possible. Unlike the Club of Rome, we are not so conceited or self-assured as to believe that the future is exclusively in our hands—Austria, and even Europe, are far too small and far too insignificant, and our influence upon “Uncle Sam” and his global corporations is negligible. However, we are indeed part of the international community and, as voters and participants in economic and social life, we are not mere passive pawns in world history. We are victims, yes, but we are also agents. We are therefore co-responsible for that which will be our future in the long run.

In writing this article, the main conclusion we came to is that Austria has long since stopped being an “island of the blessed.” Nevertheless, we must not allow the dark aspects of what could come upon us from the outside, or from homemade trials and tribulations, to be cause for resignation. He who resigns gives up and becomes a loser. If we remain active, as we must, there is only one guiding principle to follow: dangers must be regarded as a challenge to work harder, and thus also as opportunities.

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\* Co-authors with an asterisk before their names were also interviewees in the preparation of the 1983 book. Co-authors without an asterisk before their names participated in the 2006 book only.