

Shlomo Shoham
Future Intelligence

The 2nd edition is dedicated to the loving memory of:
Hedva and Yehuda Shoham
Shmuel Shoham
Nadav Meir Shoham
May their souls rest in peace

Shlomo Shoham

Future Intelligence

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Endorsements

From David Passig:

The Commission for Future Generations was a kind of gateway to the cosmic continuum that opened for the extraordinary group, headed by Judge Shoham, linking Israeli society's present and past with its future. The opportunity that presented itself enabled us to spin a special, unified web of legislation that would give significance to our existence in this region so ancient and saturated with history and creative flowering. The threads were the laws that the Commission initiated or for which they composed a true behind-the-scenes coalition. But the creation was a sketch of a mosaic of the future in which our children will live and from which they will view us when the time will come ...

The book in front of the reader is the key to other similar gateways. One who knows how to read it will be able—if only he so wishes—to open new gates for anything he desires, gates that will enable many cultures to connect their past with their future with clear links and values that they acquire from the eternity of the cosmos.

Prof. David Passig, Futurist, Head of the Graduate Program in Information and Communication Technology and Head of the Virtual Reality Lab, Bar-Ilan University

Acknowledgments and Dedication

First and foremost, I would like to express my thanks to my mother, Hedva Shoham, may her memory be a blessing, and to my father, Yehuda Shoham, may he be granted a long life. In my writings on basic values and openheartedness, and in my writings on our obligation to future generations, my parents stand always before me as the ones who imprinted my soul.

Special thanks go to my wife, Orit, who has walked alongside me on the way these many years. To my children and grandchildren and to the children of the universe, I dedicate this book.

Exceptional thanks are reserved for the late Minister of Justice and Member of the Knesset Yosef Tommy Lapid for successfully looking far ahead and committing to our future. The Commission for Future Generations in the Knesset is entirely the fruit of his vision.

There are many excellent members of the Knesset and government ministers who had a deep understanding of the significance of the Commission for Future Generations and helped to empower it within parliament. To all of them, I extend a big thank you. I will mention the few who stand out in my mind at this moment and ask forgiveness of the many others: Knesset Chair “Ruby” Reuven Rivlin, a close friend and a man of truth, former Members of the Knesset and Ministers Shaul Yahalom and Eliezer “Moodi” Sandberg, Ministers Raleb Maja-dele and Gideon Ezra, Members of the Knesset Omri Sharon, Lea Nass, Dov Khenin, Michael Melchior and Yuri Shtern, Z’L.

From the bottom of my heart, I extend thanks to the staff of the Commission for Future Generations, which accompanied our wan-

derings through the wilderness and helped to establish this unique body: Yonat Marraton, Adv. Nira Lamay, Adv. Vered Kiro, Iris Zur, Aviad Oren, Dotan Simchovitz, Ran Haklai, Dr. Shai Pintov and Lilach Yaish.

A special thanks goes to Professor David Passig, my methodology consultant for all my years of service in the Commission, who inspired this book as well.

I wish also to express my gratitude to all of the people who helped in the writing of this book—to Yonat Marraton, Dotan Simchovitz, Aviad Oren, Ran Haklai, Yael Mei-Ora and Keren Kolan. This book would not have been written if it weren't for the exceptional and brilliant Johannes Meier, a close friend and a former member of the board of the Bertelsmann Stiftung, who supported, encouraged and, above all, helped me to put my ideas to the test of reality and action.

This is also the opportunity to thank the Bertelsmann Stiftung, its vice-chair, Liz Mohn, and her daughter, Brigitte Mohn, for the support that made possible the unhurried, relaxed writing of this book. I thank as well Mr. Vincent Menken, Ms. Anita Janzohn and Ms. Ingrid Eimer, who make up a wonderful, loving, supportive and esteemed team.

I extend as well my heartfelt appreciation to Hadar Cohen, my faithful assistant, for her assistance in writing, her faith and for being who she is. Much praise is also in order for my supportive assistants, Adv. Meyrav Kenyon and Haya Mosak, and for Rochelle Treister, whose translations succeeded in capturing the feelings and the magic even in the transition to another language.

Last but not least, I wish to thank Barbara Serfozo, the editor of this book, for facilitating a wonderful intellectual and emotional experience with German-Jewish collaboration in letting go of the past and committing to the future. And, at the end of the day, I thank her for writing it down in a professional and readable way.

*This book is dedicated to my children, Benny, Moria, Ofra, Ori and Noa,
To my grandchildren, Nitsan, Stav, Yael, Tamar, Smadar Hedva, Eyal,
Inbar and Meshi,
And to the children of the universe,*

*You who have come from the infinite
And are en route to the infinite,*

*Whose wings are spread wide,
Whose essence is liberty,
love and freedom,*

*To the children of the universe,
Which awaits you—with its mysteries
As a beloved mother,
Open to enclose,
Yearning to expose its secrets,*

*To the children of the universe,
Who are born whole and full of light,
Loved exactly as you are
Tuned to play your unique melody in the world,*

*To you this book is dedicated,
Fruit of love.
All that I ask,*

*As sages of generations before me have asked,
As the wisdom of the world asks,*

*Open your hearts to know that
there is in the world, a place
ready and ripe to enfold you
just as you are,
Your dreams,
Your passions,
Your longings.*

*Your arrival in this world and your existence in it
is connected by its very being
with the space to include you in your entirety,*

*With all the unique shades in your souls,
With all of your strengths and uniqueness,
Without your having to diminish yourselves
an iota,*

*Without your having to lessen your joy of life
In order to conform to rules
created out of fear ...*

*The whole world is your playground,
The entire universe awaits you,
The cosmos blesses you,*

Welcome home.

Shlomo Shoham, 2010

“... the moment one definitely commits oneself, then Providence moves too. All sorts of things occur to help one that would never otherwise have occurred. A whole stream of events issues from the decision, raising in one’s favor all manner of unforeseen incidents and meetings and material assistance, which no man could have dreamed would have come his way. Whatever you can do, or dream you can do, begin it. Boldness has genius, power and magic in it. Begin it now.”

William Hutchinson Murray
The Scottish Himalayan Expedition, 1951

Preface Bertelsmann Stiftung

In 2001, the Israeli Knesset took a radical step outside the short-term thinking processes too often endemic to parliamentary bodies by establishing its Commission for Future Generations. Under the leadership of its first commissioner, former judge Shlomo Shoham, this organization was tasked with representing the interests of those not yet born in the rough and tumble of present-day politics.

Like any experiment, the success of this venture was mixed. Over time, Shoham and his coterie of expert staffers developed real influence across a wide policy spectrum, though they in some cases saw their proposals rejected. They brought an unusual and often controversial perspective—the claims of intergenerational justice—to debates ordinarily shaped by rival ideologies, conflicting data sets or competing political interest groups.

At a time when climate change fears are intensifying, financial systems are tottering, when pension programs are flirting with bankruptcy and education systems with failure, the Knesset Commission's experience is increasingly relevant worldwide. But politics is ultimately a practical endeavor. How, policymakers might justifiably ask, can the interests of an unknown future be quantified and protected?

Shoham addresses this question in a distinctive and compelling manner. He develops the theory of “Future Intelligence,” a means of creative policy development aimed at distilling visions of a desired future into blueprints for practical activity. Too often, he writes, policymakers let the endless succession of short-term emergencies blind them to long-term consequences. In this “survival mode,” horizons of

thought and empathetic feeling shrink to encompass the smallest possible time frames. The only way out of this trap, Shoham argues, is a deliberate and systematic attempt to develop, critique and ultimately realize our ideas of a better future.

Shoham's ideas are grounded in the sustainable development movement, which has achieved substantial influence in environmental policy circles. However, he goes beyond this idea's traditional norms, arguing not only that tomorrow's needs must be weighted equally with today's, but that today's leaders must take a more active approach to conceptualizing a positive future. He explains, on both a theoretical and a practical level, how his commission was able to instrumentalize this idea in education, health care and other policy areas.

To be sure, few policymakers today would dismiss the need to preserve national resources—environmental, economic or social—for future use. But this is too often lip service, with future generations' interests lost in the noise of day-to-day politics. By contrast, Shoham offers a tested approach, drawing lessons from his real-world experience in Israel's Knesset that can be applied around the world.

This is a book for policymakers, legislators, business leaders, civil society and the general public alike. It is for anyone concerned that globalization, the increasing complexities of economic and political governance, or the unknowns of environmental change threaten our future. It will be viewed as radical by some readers, and as common sense by others. We hope that it inspires many.

The Bertelsman Stiftung takes pride in promoting activities that offer the broadest possible perspective on what successful governance entails. We are pleased to add Shoham's work to this list. We hope it will spark discussion on how best to protect generations yet unborn, who have no lobbyists, contribute no funds to campaigns and vote in no elections, but whose interests are as vital as our own.

Andreas Esche

Director

Program Thinking Global Future

Bertelsmann Stiftung

Preface Shlomo Shoham

This book is writing itself.

I serve simply as its mouthpiece.

I can support it, enable it and invent language with which it can find its way into people's hearts.

But its essence it writes independently.

The very moment the book started to be written is engraved in my soul, precisely and clearly.

And if you were to ask me how I know for sure, I would answer you as a child would: I know because my mother told me.

It is February 2007. Days of downpour with weeping skies and earth.

My mother is dying.

What a great privilege I received in this intimacy with her—when I could take care of her and nurse her body, already showing signs of approaching death.

We talked—a conversation that emerged from eternity and returned to it, a conversation that touched our innermost being, engraving itself on my soul. Forever.

Because speaking was difficult for her, each word she spoke was precise, considered, etched in stone.

The three sentences she uttered will be with me always—

Expressions of unalloyed, unending intimacy between a mother and her first-born son.

I'll share two with you.

One was: "Shlomik, you are my mirror."

And the second: "You were already with me there."

You were already with me there ... There. Clearly, "there" was a code word for all the "theres" in the world, all that is threatening, terrifying, incomprehensible, unmentionable.

Three transformative concepts were conveyed in these sentences.

One was that there, in the depths of horror, at the climax of the struggle for survival, is where the creation of myself and the future of our family were born.

The second—that for the rest of my life, my mother will be with me—as a mirror, clear, yet supportive. My intention is that this book, too, will serve the reader and the writer as a mirror, clear and precise.

The third—that this book began to be written long before I was born. The choice, awesome in its majesty, that mother made in Auschwitz at the peak of the Holocaust, and her knowledge that I was already there with her, these constitute the primeval motive power of this book.

The choice—to focus on creating the future; to create the reality that rescued her from hell; to focus on her ability to create a desired future for herself, for her family and for the Jewish people. The insight that she succeeded in bringing into that awful present in which she was immersed; the foresight of the future that she would succeed in creating and that she perceived with the vision of her spirit; knowledge that the present enfolds the entire future and that intention can create the future even in the worst of all realms of survival.

An existential anxiety is etched in my flesh. I imbibed it with my mother's milk, and it permeates each and every cell of my body. This threat is healed by the absolute knowledge that, in each moment of anxiety, in each place or deed, we have been granted the privilege of free choice to transform the present and change it into a purposeful opportunity for creating the future.

Terror is based on our experience of the past, on the traumas we've endured. Creating future is based on a future expanse that dares to forget past patterns, that dares to forget the fear born of trauma and failure, and that dares to create possibility even in the face of failure and trauma.

Now, as the year since my mother's death completes its cycle, I can say with certainty that this book is an expression of the essence of her life, of the power of her choice, an illustrative lesson from which we can all recog-

nize and acknowledge our ability to form the future we desire and the responsibility that emerges from this ability.

So, this is the personal and emotional insight from which I start. This book, which oversteps the known bounds of linear time, deals with the understanding that the present is the only assured time and that every present enfolds within itself the entire past and the entire future.

We stand on the threshold of a new age, of a sensed but unknown world. In it, we will understand that, even on the scientific basis of futures research, our ability today to foresee the future offers only the barest glimpse of that human intellectual development that will change many of the fundamental concepts by which we live today.

This book is not being written in a vacuum. It is being written out of the recognition of an obligation to create a better future for the universe that embraces nature, life and humanity. This book calls out to all people on the face of this planet to wake up, to dare to gaze beyond the horizon to the light and darkness awaiting us somewhere in the depths of the future, and to find within ourselves the insight and the strength to create our desired future.

This writing is based on the recognition that each one of us is responsible for the chaos we have created on this planet and that each of us can wield intent and influence to change the threatening direction in which we are heading, eyes wide open, into the abyss.

This book is based on the internal "I" of each one of us and on infinite faith in people's abilities and core values.

In addition, this book has within it the lessons learned from practical experience influencing decision makers in Israel's parliament. The book links heaven and earth as Jacob's ladder does. It connects basic values and faith in the abilities of people with detailed, practical, in-depth activities taken to endow the complex expanse of Israel's parliament, the Knesset, with these basic principles.

It connects building the concept of future thinking in its abstract sense with the attempts to attach it to the practical world, in a place under the constant threat of imminent obliteration.

The book is intended for the world's decision-makers, state leaders, leaders of society, religious leaders, educational leaders and business leaders. I

especially direct the words in this book to the young people who seek to create their personal futures, and that of society and the world, and aspire to be influential and effective in the process of creating the future.

I hope that this book will serve each of you as a practical tool; that you will be able to learn from my experience and from the experience of the Commission for Future Generations in the Israeli Parliament (Knesset); and, chiefly, that you will be able to draw from this book the strength to go out and make a difference by empowering within yourself the faith that it is possible.

This book tells the story of the Commission for Future Generations in the Knesset from the time it was established by legislation in 2002. The book contains past, present and future. The experiences of the present are anchored in the past, yet the essence of this book looks forward to a new awareness. It calls us to leave behind the narrow perspective of survival for the expansiveness of creating the future. From my experience with thousands of individuals in lectures and workshops that I've both attended and led in recent years, I can say that, at the end of the day, the essence of our desired future is common to us all. Yet, each and every one of us is unique in the way we choose to articulate and create those dreams in the practical world.

In the book before you, next to the scientific material and the material on worldview, you will also find drops from the ocean that comprise my personal story. It is not possible to separate the personal from the social, and the social from the global. And, so, I concluded that this book would be incomplete if I could not show how its insights corresponded with constructive events in my life, with the personal lessons I learned, the misgivings, the failures and successes, as they touch on the theory of Future Intelligence.

Experiences are influenced by the landscape of birth. Yet, as a child of our global village, I feel that we all share similar experiences, regardless of our country of origin or to which religion or nation we belong. The culture of survival that we have built in our country occurs at different levels in all the developed and developing countries of the world. Each of us who recognizes the responsibility latent in being alive at this time and feels the need to create a sustainable future for our world can draw parallels to the per-

sonal and social world in which he or she lives. What then, dear reader, are your experiences? What patterns of survival has society created within you? What is needed in order to move to the expanse of creating your personal and social future?

I pray that this book—bringing in the call of our preferred future—will encourage us in creating our desired reality of life and well-being for our planet, Earth.

Shlomo Shoham, 2010

Future Intelligence

Creating a desired future as intelligent behavior

Modern definitions of the term “intelligence,” as it applies to human minds, were born from the need to foresee the future. In 1904, psychologist Alfred Binet was asked to ascertain which students were unsuitable—that is, “mentally retarded”—to pursue formal education in Paris’ primary schools. The tests Binet subsequently developed, which examined students’ mental capacity, seemed to provide an appropriate means of predicting the likelihood of a student’s success at school. The measure used to evaluate mental capacity is commonly referred to today as an individual’s “IQ”—Intelligence Quotient (Fancher 1985). However, this cognitive assessment tool, like later descendants, such as the Scholastic Aptitude Test (SAT) used for admission to colleges and universities in the United States, measured just a single dimension of the intellect, resulting in a narrow, one-dimensional assessment of abilities.

For a generation, we have witnessed an accelerated investigation into human intelligence, with much early work focused solely on questions of IQ and its measurement. Such research has often been characterized by the need to generalize and to create scientific measures within a domain that, by definition, cannot be completely measured or quantified—the human brain and spirit, and the structure of human emotions. Perhaps inevitably, we came to discover that IQ was not in and of itself a sufficient measure. Nor was it in any way a valid indicator of life satisfaction or happiness. Over time, we began to develop the

supplementary theory of emotional intelligence, and we slowly discovered other forms of intelligence, namely, social intelligence, multiple intelligences, ecological intelligence, spiritual intelligence and more.

When we say that a particular person is intelligent, we are generally referring to a human characteristic, a certain essence in this individual, unrelated to outcomes. In everyday language, a person can be called intelligent despite the fact that he or she produces no desirable effect through the use of his abilities. However, in examining the various definitions of intelligence proposed throughout the years, we find two cardinal components.

The first, much like our everyday definitions, attempts to determine and define the specific human traits typical to an intelligent person. In contrast, the second inquires into the outcome an intelligent person might produce using his or her capabilities. Consider the following four definitions:

The first modern definition of intelligence was developed by Alfred Binet and Theodore Simon. According to Binet and Simon, there are three criteria of intelligent activity: thinking in a defined direction, the ability to adapt using temporary solutions and the ability to investigate, judge correctly and critique every assumption or solution. This definition deals exclusively with the first component, offering a description of specific human traits to convey the essence of intelligence.

A second definition, advanced by the English psychologist Charles Spearman, the father of psychometric testing, combines both of the cardinal components. Spearman argues that intelligence is a general capacity expressed in every intellectual activity. In carrying out specific intellectual tasks, we use this general capacity side by side with more specific abilities (Spearman 1904). Spearman thus draws a causal linkage between the general capacity of intelligence and the individual tasks involved with expressing intellectual activity.

A third definition, which has significance for future intelligence, is the current prevailing definition of intelligence as contained in the public statement “Mainstream Science on Intelligence” signed by 52 intelligence researchers in 1994:

“Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings—‘catching on,’ ‘making sense’ of things or ‘figuring out’ what to do.” (Gottfredson 1997)

This definition begins with a depiction of the human traits underlying the essence being defined as intelligence. The researchers proceed by stating that intelligence by its very nature cannot be subjected to an exact, complete and objective quantification or definition. This can be seen in the phrase “among other things,” which implies that the human qualities and traits described are only a part of a broader set of means by which to determine and define intelligence. Nevertheless, the second part of the definition presents the possible ends to be achieved by the intelligent person—“catching on,” “figuring out what to do” and so on.

The American psychologist Howard Gardner provides a fourth definition that stands in contrast to the preceding definitions. According to Gardner, “Intelligence ... [is defined as] the ability to solve problems, or to fashion products, that are valued in one or more cultural or community settings.” (Gardner 1993: 5) Gardner seems to be satisfied with the result that an intelligent person can achieve, without concerning himself (at least in this definition) with the human traits that bring about these accomplishments.

In his book, Gardner also discusses the latent potential in an intelligent person. He calls it a biopsychological potential and relates it directly to the result of using this potential:

“Fundamentally, I think of an intelligence as a biopsychological potential. That is, all members of the species have the potential to exercise a set of intellectual faculties of which the species is capable. When I speak of an individual’s linguistic or interpersonal in-

telligence, then, this is a shorthand way of saying that the individual has developed the potential to deal with specific contents in her environment ... If one bears this initial conception in mind, it is possible to extend the use of the term 'intelligence' in various ways." (ibid.: 36–37)

More recently, in his groundbreaking book "Social Intelligence: The New Science of Social Relationships," psychologist and science journalist Daniel Goleman suggests that we think of social intelligence as shorthand for the ability to perceive the best for both sides in a relationship. Goleman explains that this perception broadens the theory of social intelligence from a focus on one person's point of view to include the perspectives of many people, from the abilities of one individual to an examination of what develops when an additional person is involved in the relationship (Goleman 2006: 24).

He argues that this enables us to look beyond the individual to understand what actually takes place in the course of interpersonal interactions and to look beyond our own narrow personal advantage to include the advantage that the other will derive from the social interaction. With this broader perspective, Goleman includes within the framework of social intelligence abilities that enrich personal relationships, such as empathy and caring as well as a second, broader principle, namely, "the ability to act intelligently in human relations." Thus, Goleman defines social intelligence as an intelligence that sees advantages for both sides in a relationship.

In his work, Goleman relies on new discoveries in brain research, pointing to an automatic dissemination of emotion among people and the way people exert a mutual emotional influence over each other in any kind of interaction. He calls this phenomenon "emotional contagion," explaining its physiological basis using behavioral and physiological research and, particularly, the theory of "neuronal mirroring."

Goleman's research demonstrates a shift of perspective from dealing with intelligence on the individual level to concern with a broader societal level and, in particular, with social benefits. Using Goleman's work as a foundation, I propose to broaden the definition of social in-

telligence. Rather than focusing on the reciprocal influence of two people or groups of people, I see social intelligence as a network that exerts influence over humanity as a whole. It is therefore also possible to broaden this societal perspective in a manner that will channel joint units of social influence into the global level, focusing on the abilities that will bring about desired global benefits.

My goal with this book is to enhance the human ability to create a desirable future for the universe, for humanity and for all biological diversity. To that end, we must ask ourselves: Which “muscle” do we need to train? What are the abilities and qualities we must exercise? What are the tools we must create in order to let humanity reach this desirable future? What basic human characteristics might assist us in this pursuit? In other words, what essence of human intelligence can bring about this crucial result? I call this essence “future intelligence” and define it as *the human and social ability required to fashion and implement a desirable future for humanity, for the planet’s biological diversity and for the world.*

Implicit within this definition is Gardner’s understanding of intelligence, namely, the ability to create a future that resonates within several cultural environments and one to fashion products that are valued in or more cultural settings. There are several aspects of this future intelligence, including the ability to:

- act in harmony with one’s core values;
- understand the broad, future significance of activities taking place today;
- be aware of personal dreams in interpersonal, social and global terms;
- create future imagery;
- create harmony among the various images;
- be flexible and adaptive;
- let go and have the courage to forget;
- remain connected with one’s inner driving force;
- create a paradigm shift;
- exercise the freedom to dare and to err;
- create in a realm beyond dichotomy;

- translate a dream into a plan with a practical vision;
- make vision into reality.

As in Goleman’s definition of intelligence, there is a values motif running through the definition of future intelligence applied here. The focus of this definition is on our stated objectives of creating not only a personally desirable future, but one that acknowledges and embraces the social and biological diversity of our world. Because it embodies these values, future intelligence is also about creating a future desirable for all of humanity and the planet it lives on.

By definition, future intelligence includes goal-oriented elements. However, it has a built-in paradox. In order to achieve the ultimate goal of fashioning a desirable future for the world, it must also include a domain that is not goal-oriented, the domain of being.

Within this current framework, it is impossible to suggest a way of measuring future intelligence. As humanity’s use of this intelligence develops, and the more people train themselves to develop clearer, more exact images of a desirable future—while in parallel improving measurement tools—the more the area that can be measured will expand. As far as the holistic domain of being that constitutes part of this intelligence is concerned, it cannot be measured by any analytical tools of which we are currently aware. Our definition of future intelligence therefore raises weighty questions such as:

- What is a desirable future for humanity? Can it be defined, and can humanity reach a consensus as to its components?
- Do human intentions and the development of future intelligence have the ability to influence the realization of this desirable future?
- If so, what must each person and society exercise in order for us to be able to create a desirable future? In other words, what are the characteristics of intelligence that people must develop in order to create and guarantee a sustainable future for Earth and well-being for humanity?

Humanity is facing a future in which change takes place at an ever-increasing speed and at an unpredictable pace. The unknown awaits

us beyond the horizon. Yet, when we consider the wave currently carrying us forward, it is evident that our ability to digest and deal with the sheer volume of change is diminishing. I contend that the abilities of humanity—and of the world itself—to survive, as well as our individual ability to pursue lives full of satisfaction, will be determined by the ability to develop future intelligence.

This is a complex imperative. In order to arrive at insights that will serve us in molding future perceptions, we must develop our ability to cope with the future's inevitable flood of knowledge and information. This ability is not limited to the cognitive realm alone. If we are to move toward a desirable future we actively shape, we must sharpen our capacity to look inward in order to identify our mission, our heart's desire and what we believe is right and proper to create upon this planet. We are creating the womb in which the future of our planet, Eearth, is fashioned.

This exercise demands a holistic development of our faculties in the intellectual, emotional, physical and spiritual realms. Doing so entails the enlistment of non-cognitive capabilities. I firmly believe that we must train ourselves to “let go” of certain fears, concerns or anxieties and thereby develop a skill I refer to as the “courage to forget.” Without such a skill, we will prove unable to maintain the precision and clarity of human creativity in the face of the flood of knowledge that is threatening to drown us. When we discuss thinking about the future in the framework of futures studies, we must free ourselves from the classical rational way of thinking. In order to develop future thinking, we must develop abilities that are found in other realms. For this purpose, we must first turn to the wonderful world of futures studies.

From insight to foresight: an introduction to futures studies

In 1995, I left the judge's bench to work in Israel's parliament as the legal advisor to the Constitution, Law and Justice Committee. Many of my friends and acquaintances did not understand my intent in taking this unusual step. At that time, most of Israel's judges served in the judiciary not only until their first opportunity to retire, but for as long as they were allowed to sit on the bench—that is, until they were 70 years old. I, on the other hand, was appointed to the bench at a very early age and left it at age 45, after only 12 years. I explain to anyone who asks that, beyond personal and professional reasons, the force that drove me was the desire to stop dealing with traumas of the past and to be part of a team that had an impact on the future.

Judges deal in the settlement of disputes. The human drama is reflected in court with great power. The court is full of past traumas. Yet a judge's decision generally cannot heal the past, and judgments do not deal with creating a desirable future—unless a binding, future-oriented legal decision is made or we take into account the generally limited ability of judgments to exert an educational influence on future action. By contrast, the parliament's Constitution, Law and Justice Committee dealt and still deals with a vision of a desirable future for Israeli society, at least in the legal field. It seeks to realize this vision by means of constitutional proposals, basic laws, primary legislation and the confirmation of secondary legislation.

At the time I joined the committee, I did not yet realize what a significant change of direction in my life's path this move entailed. The statute of the Commission for Future Generations in the parliament was not legislated until seven years later and, at the time, I had never heard of the expressions "futures studies" or "sustainable development." My understanding of the significance of my choice, together with a clear understanding of my personal mission to facilitate future thinking, came only later. Nevertheless, it is easy to see how the desire to make an impact on the future influenced my decisions even then.

Looking back, there are two relevant lessons I learned from these events: First, that life comes to us in distinct segments. At any point, we can only see segments from the past and present, but we cannot see the future. The

proper way to act when making decisions is to listen to the heart and to follow the intuition that combines our emotional and intellectual abilities with life experience and our immediate senses. A look inward helps us to leave behind a conventional understanding of our present reality and to lead us onward, even when the logical reasons for our acts are unconscious and have not yet entered our awareness and understanding. A second lesson was related. If I had known then about the theory of futures studies, the processes and changes may not have been easier for me, but my understanding of the process of change and transformation might have illuminated my path.

At the time, I had to make changes in my life—changes that were extraordinary—and it might have comforted me to understand that there are moments in life when we must turn toward the future we are creating and march courageously forward, facing the fears that accompany every life change. This is no easy task, as our experience teaches us that the more fundamental the change, the more powerful the fear.

The origins of humanity's concern with the hidden future can be found in the large ancient cultures. They explored ways to think about the future in order to preserve their power and the continuity and expansion of their dynasties. From that time onward, every culture has wondered what is concealed within its future.¹

Futures research is methodic thought about the future based on accepted scientific criteria. It attempts to identify future challenges and to help us to cope with them more effectively (Passig 2000: 18). The work of futures studies therefore attempts to untangle the potential hidden in the present, since the future will develop from the conditions of today. Just as a scholar of history attempts to explain the events of the past and their constituent factors through the creation of a theoretical framework, so the researcher of futures attempts to form a theoretical framework that will enable the analysis of the

1 In my role as the Commissioner for Future Generations, I was privileged to enjoy the services of futurist David Passig, who was my consultant on issues of methodology during my tenure. I thank David for his assistance in building the vision of the Commission for Future Generations and for his help in writing this chapter.

present. This, in turn, develops an understanding of how various conditions were created and how they might change. Underlying futures studies is the belief that the future can be shaped, that it can come to look like our desirable future and that it can embody our hopes and dreams. In short, futures studies bears two fundamental characteristics: First, it involves the attempt to formulate a holistic point of reference for the examination of the future by relying on insights from a wide variety of disciplines and fields (*ibid.*: 33–34). Second, it entails focusing on possible alternative futures and on desired futures, while at the same time considering what is likely to happen (Bell 1997).

The futures researcher is not satisfied with understanding the events of the past but, instead, attempts to use knowledge of the past in order to examine future possibilities that have no counterpart in the past. In this way, futures researchers—in contrast to historians—claim that the future should be the focus of humanity’s activity and that the power of the past lies in the possibility of understanding and foreseeing parts of the future (Passig 2000: 37).

In order to identify trends, various formulas and scenarios capable of describing the present and future, futures researchers employ theoretical models and practical methodologies grounded in other disciplines. The technological and scientific breakthroughs that took place in the second half of the 20th century eased the entry of futures studies into the scientific pantheon, mostly thanks to the amazing power derived from the ability to accumulate and analyze data. Satellites, the information sciences and ultra-sensitive devices have created new tools for data storage and analysis, and they have significantly simplified the process of identifying trends.

These innovative analytical procedures have underscored the existence of a complex interdependence among many elements in nature and human existence. Technological developments have made it possible, for the first time in human history, to create new scientific tools that allow us to learn more of the interdependencies among many variables (*ibid.*: 29).

Since its inception, the scientific discipline of futures studies has been closely intertwined with the development of systems theory, be-

coming an independent scientific field only after World War II. Within the theoretical framework of systems theory, many sets of research methodologies have been developed over the years, some of which are still used by futures researchers. These include a set that contains techniques for forecasting time series and a set that involves techniques based on models or simulations of feasibility. Today, every theoretical framework contains dozens of methodologies used to produce various forecasts. Futures researchers apportion these methodologies into smaller sets in order to make it easier to match the methodology to the field being learned when producing a particular forecast.

Streams of research in futures studies

Over the past 80 years, research on the future has undergone four phases of development in which different approaches to investigating the future have been offered. In the first phase, futures researchers aimed to investigate the most likely futures in order to better cope with new conditions thought likely to arise. In the second phase, this focus was expanded to explore a wider set of possible futures in order to broaden the ability to adapt to changes. The third phase was characterized by a fear of the future, prompting a focus on unlikely futures in order to be prepared for extreme changes. The fourth phase was marked by an aspiration to identify the most desirable futures in order to increase the chances of realizing the goals presented to society by futures researchers, policymakers or the organizations for which they worked.

Since the research resources of any specific methodology are limited, a futures researcher must maximize results with respect to available resources. To do this, futures researchers have developed additional, meticulous investigative techniques using the most appropriate methodology for the forecast and topic being examined. In addition, futures researchers do not limit themselves to a single methodological stream, as strong evidence demonstrates that forecasts produced

by combining the findings of the four approaches have higher credibility.

It has been noted that the past contains within it the antecedents of the present or, as George Santayana claims in *The Life of Reason*: “Those who cannot remember the past are condemned to repeat it.” The wisdom of that statement is virtually indisputable; the past enriches us.

At the same time, unavoidable speculations arise. Is the future a constant repetition of the past? Are all possible changes not derived from the past? Is the future, in the end, no more than the other side of the mirror? Will an exact understanding of the past bring us to a higher certainty of the future? And can we not change and fashion our future based on the lessons of the past, while at the same time preserving the hopes and expectations we have of the essence of our being? The wisest of men, King Solomon, says in Ecclesiastes 1: 9–10: “What has been will be again, what has been done will be done again; there is nothing new under the sun. Is there anything of which one can say: ‘Look, this is something new?’ It was here already, long ago; it was here before our time.”

Is it true that the future is condemned to repeat the past? Is it true that human intention and human activity have no influence over the course of events? The answers to these questions are found entirely in the domain of faith. However, the theory of futures studies shows us that the future is not “decreed” and that our conduct in the present is not necessarily derived from the past but, rather, first and foremost from our individual and collective images of the future. Images of the future have a decisive influence on the way we choose to act in the present and, thus, inevitably on the future we are creating (Dator 2002).

The concept of future imagery, though broad, is one of the most empowering ideas raised within the framework of futures studies. All who are involved in futures research agree without qualification that the imagery we hold of the future can intensify our power of thought and help us to develop clearer concepts and future goals. Imagery can free us from the past and help us design a different and better future.

These images of the future sometimes fashion the present. In effect, a future can become sustainable through imagery, aspiration and the act of thinking about a better future (Bell 2002).

Creating an imagery of the future requires us to combine hope, understanding, concepts, thoughts and wishes. Becoming aware of ideal values is the first step toward the conscious creation of future imagery and thus also the conscious and intentional creation of culture. Future imagery reflects, nourishes and strengthens these values.

The development of shared norms and values anchored in the ethics and moral philosophy of a given culture leads to the creation of an organized system of expectations about the future behavior of the society and its members. It also leads to the creation of practices in science and religion designed to cope with natural and supernatural phenomena. Over time, a society's system of expectations takes on the character of systematic forecasts of the future. In other words, as the Dutch sociologist Frederik Polak asserted in *The Image of the Future*, images of the future are a product of the human ability to reconstruct our environment. For Polak, the future is a work of reconstruction in which we create images that depict a world radically different from the one we know today as well as images envisioning benefits for humanity as a whole (Polak 1961: 22).

Daniel Goleman and his colleagues Richard Boyatzis and Annie McKee stress this notion in their book *Primal Leadership*, indicating that significant vision precedes significant success. "Purposeful planners" or "visionaries," for example, are outstanding at sketching a picture of a distant and significant future state anchored in values, faiths and a deep sense of what is important in life. With their orientation to action, such individuals make notable achievements in a short period of time possible (Goleman, Boyatzis and McKee 2002). Polak also argued that, among children, there is a clear correlation between the ability to create a vision about the future that relates to their lives and their success in actualizing ambitions (Polak 1961).

Futures researchers attempt, on the one hand, to understand individuals' future imagery as an explanation for different behaviors and,

on the other, to inquire into the process of image production in order to enable a more conscious, intelligent choice of future imagery from the many opportunities embodied in our present.

The futures studies specialist Jim Dator suggests dividing future imagery into four generic alternative scenarios (GAS). The first, "continuation," refers generally to the continuation of economic growth. The second, "collapse," refers to the consequence of factors such as environmental crowding, resource over-utilization, lack of economic stability, moral degeneration or internal or external military threat. The third, "disciplined society," refers to a future society perceived to be organized around supreme values. Such a society is generally considered to be archaic, traditional, natural or as holding a rational ideology. The fourth, "societal transformation," refers to a more fundamental set of changes toward a so-called high-tech society or a "high spirit" society, which represents the end of known patterns and the rise of new forms of art, behavior and organization and perhaps even the rise (or discovery) of new intelligent life forms (Dator 1979).

In his work on cognitive skills in future studies, David Passig suggests a rather different schematic categorization of future imagery with his four categories. The first of Passig's categories, "complex future imagery," is derived from past experience, present circumstances and aspirations for the future. These images sometimes contain intellectual and emotional elements and are likely to relate to the destinies of individuals or groups. His second category, "organized future imagery," is a kind of collective future perception, a collection of distinct and separate images that merge into some sort of unified way of thinking. In futures research, this category is defined as "crystallized aspirations that developed into systematic forecasts." Politicians and others who shape public opinion often make use of this kind of imagery. Unfortunately, we often see abuse or manipulative use of this type of imagery. Passig's third category, "dynamic future imagery," relates to new experiences and changing circumstances. The point here is for us to dare to abandon patterns from the past and make room for new images that can serve us in our daily conduct. The final category, "mission-oriented future imagery," relates to the process of

making conscious value judgments that are clear. The production of goals and the intelligent and responsible choice of images drawn from a variety of potential alternative paths offer a genuine opportunity to discover and realize the individual and collective mission (Passig 2000: 38).

Creating mission-oriented future imagery serves as a bridge between futures studies and the concept of future intelligence. The human abilities to draw conclusions from the past while letting go of past patterns (if necessary) and to look beyond the constraints of the present are key to the possibility of fashioning a desirable personal, societal and global future. Embedding this way of thinking in the daily life of the public and policymakers, and then strengthening the practical ability to use this intelligence, are critical elements in the creation of a desirable future for the world.

Futures study also presents credible ways of thinking about the future while removing the cloak of magical mystery that stuck to it out of historic necessity. To practice creating images of the future and making them a reality broadens perceived horizons, strengthens intellectual flexibility and helps to create new patterns of behavior.

Obviously, the term “future” is intrinsically elusive. How then can it best be defined?

Futures researchers divide time into five different future ranges:

- The immediate term reaches out two to three years from the present day. It serves as the focus for organizational consultants and policy planners.
- The short term stretches out three to 10 years from the present. The events taking place in this time frame are generally determined by various obligations made in the past or present.
- The mid-term refers to 10 to 30 years from the present. This term is the most efficient time span for making forecasts, planning and creating transformations based on anticipated trends.
- The long term extends between 30 and 50 years from the present day. This is the time span on which national and world planners focus and on which decision-makers, legislators and economic and social policy planners must concentrate their activity.

- The very long term, from 50 to 100 years from the present, is the term in which, for the most part, visionaries, philosophers, business magnates and political leaders excel.

Whatever the time frame, future orientation indicates the ability to leave behind short-term limitations while exercising the imagination and employing a broad view of events. It supports our ability to understand and exercise control over what takes place in the present. Passig uses the term “future time span” to describe the reflective awareness of the passage of time and the events within it. By developing this awareness, we gain a deeper understanding of the significance and implications of events and, in so doing, we develop our power to change present conduct in light of a conceptualization of the future.

Future intelligence, by its very nature, includes the power of consciousness that is found in future time spans, yet it transcends the conventional intellectual sphere and necessitates the development of additional conscious traits and abilities.

Future intelligence and human happiness

Fast forward to New York. An exciting meeting. I had been serving as the Commissioner for Future Generations in the Knesset for only a short while when I was appointed to head the Israeli delegation to the annual conference of the U.N. Commission on Sustainable Development (CSD). After I spoke and explained the duties and authorities of the Commissioner for Future Generations in Israel’s parliament, I was asked by many: “What happens if the interests of our generation conflict with the interests of future generations?” Whose interest did I think was dominant from an ethical and values standpoint, the questioners wanted to know. I answered then intuitively, as I answer today after consideration: Our deepest and truest interest is always the same as that of our descendants and the descendants of our descendants—to the end of time.

It is true that, in our linear understanding of daily reality, we encounter situations which at first seem like a conflict between the interests of our generation and those of future generations, between our urgent and immediate needs and the need to look after the future. But if we examine human needs from the point of view of the human desire for happiness and well-being, we will discover that settling solely for our own contentment and short-term interests will not satisfy us. Even if dealing with issues of survival, with people mired in the dire physical conditions of starvation or war, humanity will not be able to leave this dismal sphere by solely satisfying primary needs. As long as humankind's awareness of what constitutes true concern for humanity and the environment remains partial, or blinkered by selfish motives, we will cause more and more suffering. Treating only the symptoms is not enough.

In my mind, the path suggested in this chapter, and the development and assimilation of future intelligence, has the potential to bring a ray of light to even the most difficult situations of survival. To be sure, this path is not intended as a palliative to the most urgent symptoms, and so its results will not be immediately visible. But, in its way, it touches on the essence of the human ability to bring fundamental healing to the force that drives humanity. Healing this driving force, just as in healing illness in the human body, will require time as well as a deep change in consciousness, but the process carries substantial potential for transformation.

If we examine in-depth the question of our most important and encompassing human interest, we will discover that this interest includes a need to live out our vocation according to our core values and in a way that has a much larger and broader meaning than short-lived material advantages or momentary pleasures. We will discover that, without meaning and without the belief that our deeds have meaningful future results, we cannot live happy lives. Indeed, in the words of the psychiatrist Viktor Frankl, a Holocaust survivor:

“It is a peculiarity of man that he can only live by looking to the future—*sub specie aeternitatis*. And this is his salvation in the

most difficult moments of his existence, although he sometimes has to force his mind to the task.” (Frankl 2006: 73)

The human concern with continuity is much broader than the simple survival instinct or even the need to care for our own offspring. At the present point of human development, humanity has the ability and the responsibility to look at the most expansive dimension of this primordial instinct and to extend and intensify it.

This ancient instinct, from which springs the responsibility for the sustenance of our own offspring, and which has been with us for millions of years, must move to a new stage of development, both because reality will impose the necessity upon us and because today we are more able to think of the future and can better see the broad consequences of our actions than could our predecessors of earlier eras.

Each one of us must, for the sake of the world’s survival, move from a primordial instinctive concern for her or his own offspring to a consideration of the whole human species and of the future of this planet—not just for the near term in which we and our children will live, but for much longer terms, for decades and for centuries. Naturally, this obligation will fall more heavily on the decision-makers who influence so many lives. I claim that decision-makers, diplomats and politicians make the most mistakes when they choose short-term considerations, surrender to the pressures of the moment or avoid—whether consciously or unconsciously—weighing the long-term consequences and broad impact of their decisions.

Future intelligence is characterized by its forward-looking perspective. Even if we look to the past in order to make suitable decisions, we process these decisions and use this processing to create the future. The essence of the perspective is still directed toward the future, from the realm of creating a future, not from thinking of survival. I am reminded here of an apt passage from Jerome K. Jerome’s *Idle Thoughts of an Idle Fellow*: “A new life begins for us with every second. Let us go forward joyously to meet it. We must press on whether we will or no, and we shall walk better with our eyes before us than with them ever cast behind.”

Future intelligence and our core values

Every day, the Jewish sage—the Rabbi—would get up early, immerse himself in the river and go to the synagogue to pray. On his way, he would contemplate the day’s affairs, go over the lesson he planned to teach that day and continue on his way steeped in thought.

One day, on his way to the synagogue, the new village policeman, who didn’t yet know very much, suddenly jumped in front of him and shouted, “Who are you? What is it that you want? Where are you going?” The rabbi stopped walking and looked at the policeman, amused. “Tell me,” he asked. “How much do they pay you to do your work?” The policeman responded, “I get 10 kopeks a day.”

Said the rabbi, “Come work for me. I’ll give you 20 kopeks a day, if you’ll just stop me every morning on my way to the synagogue and ask me, ‘Who are you? What is it that you want? Where are you going?’” ... (Jewish folktale)

Integral to an ethics of self-reflection, these are questions worth pondering: Who are we? What is it that we want? And where are we going? These questions, which draw upon our basic perceptions of the meaning of our individual lives and core values are worth reflecting upon. Another question then follows: When considering all the forces that drive us to action, how can we distinguish between those that derive from our core values, and those which are simply responses to the events that surround us?

The question of questions. Many of us ponder it many times during our lifetime.

Often, we’re not conscious of these questions. Often, our actions are neither directed toward creating our dream, nor are our actions connected to our core values and our genuine driving force.

Even if we find in retrospect that our actions don’t contradict our core values, the connection between them is accidental. If we examine the actions of many of the world’s decision-makers, who have such an impact on our lives, we will see too a significant gap between their dreams, their core values, their authentic driving forces and what it is they actually accomplish.

I believe that deeds follow intention. Therefore, it is important that we should ask ourselves two questions from time to time: “What are the core values by which we want to live?” and “Are our actions and the results we hope to achieve compatible with these core values?”

The surprise is that, each time we ask ourselves these questions, we will find in them new facets, different angles and nuances. By frequently concerning ourselves with these questions, we are renewed.

Humankind has been searching for answers to these questions since having developed the ability to comprehend the concept of the future and the fact that our actions influence the future. Many individuals over the ages have pointed to the indivisible link between our core values and the meaning we attach to our lives and actions, including the Indian mystic Osho:

“Life in itself has no meaning. Life is an opportunity to create meaning. Meaning has not to be discovered; it has to be created. You will find meaning only if you create it. It’s not out there somewhere behind the bushes, so you can go and search a little bit and find it. It is not there like a rock that you will find. It is poetry to be composed, it is a song to be sung, it is a dance to be danced. Meaning is a dance, not a rock. Meaning is music. You will find it only if you create it.” (Osho International Foundation 1999: 181)

Thinking about our core values, their perspective and the way we define them to ourselves is not a logical-analytical endeavor. It takes place more holistically, bringing into play our emotions, the core values with which we entered the world, the values with which we were raised and the insights we have gained in the course of our lives.

Without following our core values, we are likely to create a destructive future for ourselves and for those around us. History has often experienced people whose motivations were grounded in their personalities. Certainly, they too planned to create a future for themselves and for their countries. Their plans succeeded, and they created a new reality, but the reality was cruel and hurtful to such an extent that it would have been better for them and for the world had they

not been so powerfully capable. This illustrates the great importance of clarifying the driving force that motivates us and the core values that guide us before we plan for a desired future.

The approaches described in this book bestow power, and power demands responsible action so that we can build instead of destroy. The very act of involvement in creating the future contains within it the suggestion of a search for and definition of core values, which is derived from our responsibility for our existence on the face of this planet.

I believe that the theory of futures studies is standing on the cusp of a major breakthrough that, in my opinion, is destined to change humanity's current understanding in a significant way. It means daring to walk on the edge, to challenge classical logic and, at the same time, to offer a structured link between the conventional way of thinking and the fascinating, turbulent future awaiting us over the horizon—a comprehensible link between the known analytical world and a new realm, which will constitute a milestone in the development of humanity's awareness.

My favorite approach in futures studies is based on the proposition that we each have the ability to fashion our perception of the future and to influence our own future, the future of our surroundings, the societies in which we live and Earth. Indeed, as the Buddha said, "Mind precedes all phenomena. Mind is their chief. All phenomena are mind-made" (Dhammapada 1: 2).

From this basic premise flow deep meaning, responsibility and accountability for all our behavior on earth. If we accept this premise as an axiom, it obligates us to develop our future intelligence in order to bring a vision of long-term results to the decisions we make in the present. In others' words, such as those used in the Jewish prayer for the Sabbath by the kabbalist Shlomo Halevi Alkabetz, "The end result is contained in the first thought" or those used by the Mishnaic Rabbis, "Who is wise? He who sees what is born (of his actions)" (Pirkei Avot, Ch. 2: Mishna 1).

From the premise that we can influence our present lives and surroundings as well as our own future and the futures of those around

us, flows the understanding that we have a role to play derived from our very existence on this planet. In understanding this role, we gain an understanding of responsibility. This responsibility includes our obligation to come to a deep understanding of the core values that motivate actions intended to create the future we are planning.

Naturally, this process of clarification has its ups and downs, moments in which we see our mission and core values clearly, and moments in which we feel confusion and uncertainty. This path of consciousness holds an ever-deepening revelation of ourselves, the other and the world. Over the course of our lives, as our self-understanding deepens and broadens, so too does our understanding of our calling and of the core values by which we act.

Developing future intelligence entails asking ourselves fundamental questions. My recommendation is to return to these questions from time to time, to accept the confusion and lack of clarity but, at the same time, to listen well to our inner voice's answers. These questions, which can have a formative impact on how we conduct our lives, are:

- What is my dream for myself, for my society and for my world?
- What are the core values that motivate my actions?
- Can I influence the shape of my future, that of the society around me and of the world around me?
- If I can influence the design of my future, what would I like to create for myself, for the society surrounding me, for Earth and for future generations?
- What, then, is my personal mission that follows from the answers to these questions?
- What objectives are derived from my mission?
- What tasks and modes of action arise from these objectives?

This book does not offer answers. I do not pretend to deal with the question of the meaning of our existence on Earth. This is a book neither of philosophy nor of theology. Yet, I hope that the development of the theory of future intelligence will help develop the human capabilities for tackling these fundamental questions. During the course

of our lives, we may find ourselves at points where these questions disappear. Our calling will be clear to us, the core values that light our paths will be bright and well-defined, and the path lucid.

Generally, however, answers are revealed to us only after we dare to dive into the sea of the unknown, to look courageously into the mirror, even when there is more confusion than clarity. This is especially true when we have to admit to ourselves that we are not living out our calling and that our core values are sometimes not in harmony with our actions.

The path suggested here is not the difficult way of severe self-judgment, nor the path of guilt. These are all anchored in feelings about the past. Rather, the path recommended is the creation of harmony between our calling, our core values and our actions.

Developing our future intelligence will support us in establishing this compatibility with great ease. Once we do so, our actions will flow from within us naturally, and an intuitive harmony will be created, sometimes even unconsciously, between our core values and our actions.

A calling is more than a set of goals

By definition, future intelligence seems to be directed toward establishing and achieving a goal. Human experience demonstrates that wherever forces have been brought to bear on achieving an objective—no matter how exalted it might be—there have always been opposing forces acting against change. Will we be able to create a transformative space in which we can usher in a reality beyond the personal, social and political power trips we know? In imagining such a situation, we must consider the following questions:

- Will we be able to create a desirable future without becoming mired in power struggles over short- vs. long-term interests that erode the energies for change we bring with us?
- How should we exercise our abilities to create a sustainable future without being slaves to short-term needs?

- How can we become more proactive and create the needed influence that builds ownership and engenders a desire to participate instead of fears of the future? How can we influence without falling into the trap of creating resistance?

A considerable part of my youth was spent pursuing and achieving goals. I grew up in a family of overachievers that instilled in me the belief that, on the one hand, the more I succeeded in following the religious commandments, the more I would be loved by God and, on the other hand, the more I succeeded in my career, the more humankind would love me.

Judaism imposes upon each man the responsibility to fulfill 613 commandments. In practice, it is impossible to fulfill all of the commandments all of the time—“for there is no righteous man on Earth that does good and does not sin.” (Ecclesiastes 7:20) Since we cannot fulfill all the commandments all of the time, we are doomed to spend our lives with the need to continually improve as well as a feeling of guilt about not having succeeded in completely following God’s will.

As a religious young man, the tradition of independence was never part of my self-image. I can remember myself on the eve of Yom Kippur (Day of Atonement), a religious boy of about 10, standing beside my father during the U’netanah Tokef prayer, awe and guilt filling every cell of my body. I imagined the Creator of All Worlds, Almighty God, sitting there in the heavenly heights and beginning to look through his Book of Life. In this prayer, which is at the center of Yom Kippur, we acknowledge that our sentence is being decreed at that very moment and that God is checking our deeds, weighing the commandments we carried out in the past year against our sins. In the words of the prayer, God is determining “who will live and who will die, who by stoning and who by fire, who by the sword and who by strangulation.”

In those pre-computer days, the Book of Life was literally a huge tome listing the names of all the people in the world, whose pages God would pore over, one after the other, with weighty and serious intent. In my thoughts, I calculated that it would still be a long time before He got to my name. I went over and over my deeds of the past year, anguished over and examining those of my sins that were too heavy to bear. These were the sins

of an adolescent, such as lying to my friend or not giving shopping change back to my mother so I could buy myself a toy.

In those days, engraved on my tender soul was the awareness that life is an endless, crazy race toward unending improvement, toward achieving all the goals that family, society and, in particular, God constantly set for us. There is not a moment, I thought, to rest on one's laurels. There is no place where I can accept myself for who I am. With every goal I achieved, the next would appear on the horizon. I took as self-evident that profound self-criticism would continue to torment me over the entire course of this whole journey called life.

But, one day, after an exhausting trek of achievements, I read the following from the Indian mystic Osho: "There are those who seek out goals, and there are those who celebrate." When I first read this sentence, it hit me with all its power. I asked myself where I wanted to be: among the pursuers of goals or among the celebrants? I wanted—at any price—to move to the side of the celebrants and to be free of the "pursuer of goals" part of my soul.

In effect, this sentence brought me to the beginning of a process in which I tried to touch the opposite extreme of the pursuit of goals. As a result, from time to time, I found myself examining the boundaries of my inactivity. I asked myself: "Is there a goal that I must fulfill, or could it be right to spend the rest of my days doing nothing, to be in absolute being and abstain from doing?"

In the end, I decided to try to experience inactivity. When I ended my position as a legal advisor in the Knesset, and before I decided to announce my candidacy to be the Commissioner of Future Generations in the Knesset, I took a hiatus in which I did nothing, not even meditation, which I had practiced. I set out to see how I would feel in this state of absolute inactivity: It brought me great suffering.

I realized that my essence is motion, creativity and activity. So I asked myself a fundamental question: "How can I do, create, act and fulfill—without becoming a slave to the suffering that is caused by being goal-oriented?"

Either way, for all of us, as long as we have not attained the goals we've set for ourselves, we remain unsatisfied. Likewise, once we've achieved them, in order to escape the feeling of aimlessness that lies under all the noise, we immediately set new goals for ourselves. And the vicious circle continues.

“Why?” I asked myself. “Why do certain people derive joy from their worldly activities while the great suffering it causes others can be read on their faces?” Furthermore, one can also see that those whose actions are motivated by hardship, anger, frustration, pain or suffering spread these feelings and create areas around themselves that are uncomfortable to be or act within, while those motivated by joy succeed in spreading joy throughout their surroundings.

I have invested a lot of time in my attempts to study and understand which activities bring more joy and when. The answer is not derived from the books I read but from my personal experiences, and it seems utterly simple. I have discovered that when the force driving me is to share my energy with the world—rather than the need to acquire money, power or honor—I enjoy my activities. I have discovered it brings me happiness to have my actions flow from me harmoniously. I have discovered that the act of seeking to share with others is bound up with great joy. However, when I return to old patterns—the ones based on the illusion that the more I achieve, the more I will be loved and the more attention I will receive—even when I ostensibly succeed, the success does not bring me joy. In fact, suffering is my reward.

Likewise, I have discovered that my vocation is much broader than my goals. I have discovered that when I succeed in living entirely in the here and now, in knowing that joy is here and now, and in devoting myself to my activities while I am carrying them out, I can experience happiness and satisfaction in the present without having the need to meet a future goal overshadow it.

I have come to understand that differentiating between the celebrators and the goal-seekers is not to insinuate that those who celebrate their lives are unproductive. On the contrary, the celebrators can be involved in very creative and effective activities and still celebrate each moment—as long as it derives from a readiness to share their insights, their energies, their ability and their creativity with the world.

Developing future intelligence exercises our ability to examine what our calling is on this Earth. However, it does not teach us to be prisoners of the goals we have set for ourselves.

One's calling is a journey.

One's calling is an existential experience.

Pursuing one's calling does not mean living a goal-oriented life.

It means accepting ourselves as we are, at this moment.

When we fall into the trap that makes us dependent on future goals, we condemn ourselves to living lives in a vicious circle of dissatisfaction, piercing self-criticism and unmet goals—and, of course, to living discontented lives with an ever stronger need for external, conditional love. As the Jewish sages said, “Conditional love is ephemeral love” (Pirkei Avot 5: 19). And, as stated in the sacred scripture of Hinduism, “Pitiful are those who, acting, are attached to their action's fruits.” (Bhagavad Gita 2: 48)

Clearly, we are born within a given reality, but we also create reality through our intentions, thoughts and actions. Indeed, we presume to have the ability to influence our futures. This presumption contains, by definition, the obligation to act responsibly and be held accountable for our actions. It follows that we will be able to create the future we desire if we plan for it and work to achieve it.

At the same time, the actions involved with creating our desirable future are not in sync with the more familiar behavior of setting goals and achieving objectives. Within the framework of future intelligence, our actions are based on our desire to give to ourselves, to the society around us and to the world. The more we free ourselves of our need to achieve more for ourselves, the happier we can be in our giving and in the creation of our desirable future, and the better equipped we can be to avoid being enslaved by the need to achieve goals.

The discipline of logic teaches us to protest against this assertion and see it as a contradiction. After all, how can one fashion a desirable future without aspiring to achieve goals? But, by unifying these opposites, we will find that the essence of our existence in this world has many facets and that they can dwell hand in glove.

Beyond dichotomies

For many years, I have found myself engaged with the question of questions—What is the meaning of life?—in its various forms and shades. And, for many more years, I was a prisoner of the dichotomy between right and wrong, justice and injustice, truth and falsehood, commandment and sin. I moved back and forth between these worlds, searching for the absolute, analytical and rational answer.

I was like that soul in the Jewish mystical story that ascended to the skies above and came before the heavenly throne to be judged, was found to have merits and transgressions in equal part, and was sentenced to being tossed between heaven and earth for 40 years before being deemed deserving to enter paradise. Imagine two catapults of immense proportions, each placed at one end of the world. For many years, I would search for the absolute answer on one side or the other, only to be tossed between those huge catapults, back and forth, back and forth, without rest.

It was not until much later that I understood that the answer to the question of life's meaning is not to be found through analytic vigor. The answer, I have found, lies elsewhere—in a plane of infinitude and, as such, contains all contradictions. I call this plane the “expanse of the heart.” And it is the melodies and rhythm of poetry and prose that allow us to approach the essence of this expanse.

Two examples come to mind here, one from the teachings of Taoism, the other from Avraham Yitzhak Hacohen Kuk, an influential 20th-century rabbi. When I encountered the simple claim of Chuang Tzu, “When the heart is right, ‘for’ and ‘against’ are forgotten” (Merton 1969) and the rabbi's words of “In the union of opposites, we behold the blessing of peace” (Hacohen Kuk 1927), I felt the gift of life-giving waters that quenched my thirst and softened the sharp corners within that originated from the depths of analytical thinking.

The path I travel in carrying out my calling is sometimes wide and easy, but sometimes it requires me to hew out boulders from the walls of my heart. I have come to recognize that my task is to do my best to build a bridge between worlds, to translate the language of consciousness into practical words and daily activities. This means I am to bring forth from hiding

the holistic meaning found at the base of future intelligence so it can be grasped, if not explained.

I found a great illustration of creating a bridge between the worlds in the story of the prince who went mad, first told by Rabbi Nachman of Breslov (Ukraine):

Once there was a prince who went mad. He thought he was a turkey and that he needed to sit naked under the table and peck at crumbs and scraps of bone. All the doctors gave up hope of helping, let alone healing him. The king was filled with a sense of hopelessness until a wise man came along and said, "I will heal him."

The wise man undressed and sat under the table with the prince, and he too pecked at crumbs and scraps of bones. The prince asked him, "Who are you and what are you doing here?" And the wise man said, "Who are you?" The prince said, "I'm a turkey." To which the wise man replied, "I'm a turkey, too." And the two of them sat together for a while until they grew accustomed to one another.

Then the wise man signaled to the others, and they threw him a shirt. The wise-man turkey said to the prince, "Do you believe a turkey can't walk around with a shirt on? Surely we can be dressed in a shirt and still be turkeys." And so they both put on shirts. After a while, the wise man signaled again, and they threw them trousers, and the wise man asked the prince, "Do you think you can't be a turkey with trousers on?" And things continued in this manner until they were fully dressed.

Later, the wise man gave another signal, and they threw food prepared for humans from the table. He asked the prince, "Do you think that if one eats good food, one stops being a turkey? Surely one can eat and still be a turkey." And so they ate. Later still, the wise man said to him, "Do you think that a turkey must always be under a table? One can be a turkey and be at the table." And so he was healed.

As the story illustrates, in order to create harmony, in order to heal, in order to create a bridge between worlds, we sometimes need to strip ourselves of the conception of our lives (which we think is self-evident), of our achievements, our titles, our self-images. We must sit under the table and develop the flexibility—that is, adopt the ability—

to speak different languages. Only after creating human relationships with others will we be able to gradually arrive at a common denominator.

There are two aspects of ourselves to be developed in practicing future intelligence: the inner self that turns inward to the soul and the external self that we use in social interaction. In developing our inner self, we develop the ability to dare to let go of “our” knowledge, the knowledge we rely on. In so doing, we examine this knowledge anew and challenge or abandon its insights, developing the ability to go beyond the familiar. If we do this, we can more easily accept that there are solutions lying beyond the dichotomy of either-or, the dichotomy of “for” or “against.” The moment we look upon that same reality from above, we will be able to see beyond contradictions and paradoxes.

Developing the social side of our self, which entails our ability to nurture human relationships, allows us to accept the people around us with an open heart and from a place beyond judgment. We can then open a door to human behavior that is accepting and allows us to share unconditioned love and acceptance with other human beings.

The courage to forget and the ability to let go

We have the privilege—the great privilege—of living in a developed, multidimensional world. We have the privilege—the great privilege—of enjoying the great productivity of the creators, the inventors, the scientists, the intellectuals and the people within the arts who have lived and continue to live on this planet. We have the privilege—the great privilege—of standing on their shoulders and casting our eyes toward the distant future.

Medical and scientific evolution has improved our health—from the days of the witch doctor and the medicine man of antiquity all the way to the inventions of robotic medicine, nanotechnology, molecular chemistry, human genome research and much more. Every single day, we benefit from the legacies of enormous technological developments—starting with the invention of electricity and then the

creation of the Internet, and ending with the gadget that was invented yesterday morning and makes our lives easier, more convenient and more productive. I am not writing this book on a rock, not with a pencil or pen, but by sitting in front of a computer and typing letters on a keyboard.

Modesty is called for when we look back at the past and see all of the intellectual giants, their creations, their inventions, the development of technology and the power of the culture that surrounds us on all sides. At the same time, if we are to create a desirable future for ourselves, we cannot simply rest on the laurels of our human heritage. As Albert Einstein famously said, “We can’t solve problems by using the same kind of thinking we used when we created them.” It is our responsibility to do as they, the inventors and intellectuals throughout history, have done. It is our responsibility to understand—in depth—how they proceeded and then to dare to let go, to dare to forget—in order to create a promising future for ourselves.

If we delve deeply and examine their secrets—the secrets that brought them to create what they created—we will discover that they all had the courage, at one stage or another of their lives, to challenge everything that was known in their time. This courage meant abandoning the comforts of accepted thought and behavior for uncharted territories within which they could create. The key point here is that these individuals are remarkable not because of their intellectual achievements but because they succeeded in letting go of their intellectual achievements. After having nourished themselves on the marvels of past achievements, they let go of their vast knowledge, which in turn enabled them to create within the unknown—*creatio ex nihilo*—to create something from nothing.

In creating the future, there is a hint of the six days of creation in Genesis. That very creation from nothingness obligates us to start with the creation of “nothingness,” in other words, to let go of all that is known and familiar within us and, then, to pass through the needle’s eye with all of our past burdens left behind.

I drew upon the collective example of these individuals in a speech before the Knesset in 2004:

“In order to move to a new sphere
That awaits us beyond the horizon,
We had better let go of the fractures of our past,
At the narrowest passageway in the world,
As narrow as the eye of a needle,
And precisely, as at the moment of death,
Arrive there, vacant and clean.”

When we arrive at the future—innocent, unburdened and clear—we will sometimes carry with us past knowledge to assist us, but it will arrive in a different “molecular state.” It will arrive like the sand at the bottom of a glass of water after it has been stirred and falls back down to the bottom. No grain of sand ever returns precisely to its starting point. Most importantly, we will be better served if we place trust in the wisdom of the world accompanying us, supporting us and moving us forward. We must learn to have faith that the wisdom of the world will get there when it gets there and that only that which ought to arrive will arrive.

The creative sphere is born the moment we stop enslaving ourselves to old knowledge. The creative sphere is born when our ego no longer requires this knowledge in order to survive or empower itself. When we are ready to be as creative as little children, we will be ready to play with the creation that surrounds us, and we will be ready to live in the expanse of creating future.

The ability to let go, to look at the future with the intention of knowing everything and nothing, is a central element of future intelligence. This is the essence of the paradox we face: creation born of everything and nothing simultaneously. And, indeed, in the course of writing this book, when I spoke of this element, I often encountered fierce opposition from my listeners. They defended our history, our knowledge, humanity’s magnificent past and our duty to remember the traumas that people caused each other in order to guarantee that they are not repeated.

To all of these people, I would like to say: In my writing, I give full recognition to history, its importance, the importance of our knowledge and of humanity’s magnificent past.

It is important to understand clearly what has been said here. I give great recognition to human knowledge. At the same time, however, we can only create a wonderful future for humanity once we are able to pass through the eye of the needle—which is our present—into the future. In other words, once we are no longer enslaved to borrowed knowledge and we recognize the essence of life, which is the essence that is shared by human knowledge, that is, flow and change, we can create our desired future.

Recognizing that we must let go of the illusion that knowledge is fixed and immutable, recognizing that making knowledge static strangles creativity, and internalizing this recognition intellectually, emotionally and experientially can open the door to the enormous reserve of creativity that is still available to the human race as it steps into an unknown future. The remembrance of human traumas and of human history, to which a considerable part of school curricula are devoted, does not guarantee that they will not repeat themselves. In fact, the case is actually the opposite: It plants their seeds in our consciousness.

In the study of history, it is important that we emphasize the splendid, the creative and the lovingness of human behavior over time. Obligating ourselves to remember all of the holocausts that the human race has committed is no guarantee against a repeat of these kinds of slaughters in the future. Only the ability to release ourselves of our dependence on the past, to let go of the traumas that plague us will allow us to lead loving lives imbued with self-confidence. In fact, it is this very capacity that will fill the vacuum left behind by forgetting and letting go—with the energy of life.

Our need for a sense of control over our lives, our need to create for ourselves the illusion that there is something to hold on to in the course of our lives on this Earth is a well-known human need. At the same time, let us not forget that, although we can shape the paths we take, we do not have fundamental control over our lives. We do not know when death will come knocking on our door. We do not know the incredible and ever-increasing number of changes to come tomorrow. We are in the river of life, which flows toward us with increasing

power. If we fight the current or try to hold our position and stiffen, we will quickly find ourselves tossed against the rocks on the bank. But if we free ourselves, become flexible, flow with the stream—if we unite ourselves with the current—we can effortlessly navigate our various ways within it.

Adaptability and flexibility

Future intelligence is characterized by the problem of two conflicting axioms. On the one hand, our intentions, which are necessarily based on the information we have at any given point in time, help create a reality. On the other hand, it is clear that many parameters over which we have no control are changing and will continue to change.

How, then, can we say that our decisions, which are based on a particular reality of the past, are still valid even when this reality will have changed? We are like the driver of a car whose front windshield is entirely blacked out, navigating by looking in the rearview mirror at the road that has already been traveled. How are we to overcome our nagging doubts about decisions based on data valid in a specific present that might be totally inappropriate for the future?

Perhaps the trajectory of structured thinking about the future in professional contexts, such as scenario planning and strategizing, is misguided. Are we not likely to cause rather than resolve many more problems if we make decisions based on rational attempts to contain the future? Perhaps we need to embrace the vicissitudes of chance and act more randomly with respect to an unpredictable future. If decisions made about the future are based on data that will in all likelihood change in the future to which we are directing our actions, on what can we base a decision about the future?

There is a way to resolve this problem, and it involves paying close attention to our inner selves as we engage in creating future imagery. Later on, I will discuss how the images we find and create as we dive into our inner selves will change—because the reality we live in constantly changes. In order to be able to deal with our ever-changing

reality and images, we must therefore train our ability to be flexible and adaptive.

As discussed earlier, our ability to digest and manage the sheer volume of information and rapid changes we face every day is increasingly compromised. In order to cope with this state of affairs, we must exercise our ability to be flexible, which entails a measure of self-reflection. In so doing, we adapt ourselves mentally, emotionally and even physically to a changing environment. We also need to be more proactive in thinking about the future and in the structured analysis of our known reality as it relates to known trends and how we believe they will impact the future. As we plan for our desired future, we remain at the same time capable of adapting our intentions to changing realities. In other words, we re-configure our stance as we go.

Just as in driving, we have to look in the rearview mirror; but, above all, we must look through the front windshield toward the future into which we're heading. And if we don't want to get stuck or cause an accident, we have to be prepared to adapt our driving to the changes on the road.

Let us not be the prisoner of one concept or another that has captured our hearts or minds or of a prediction—no matter how beautiful—that was correct yesterday. When considering theoretical constructs, we must be prepared to revisit their premises, rethink their underlying questions and, ultimately, be open to shifts and changes in our own views and decisions.

Sustainability

In Resolution 42/187, the United Nations defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” In other words, development is sustainable when it does not deplete the resources from which it draws and consumes resources in a way that enables natural processes to replenish that which was utilized. When applied to the three pillars of our lives—namely, soci-

ety, economics and the environment—sustainable development constitutes a way of life that can exist over time without collapsing upon itself and which leaves behind the broadest span of possible choices to future generations.

Since the first articulation of this concept, several events have taken place on the international stage to transform sustainable development from an agenda into action. For example, the United Nations addressed the issue of continuous damage to the environment by forming international organizations tasked with bringing about change. Indeed, in 1972, it was at the UN Conference on the Human Environment that the international community recognized humankind's right to a healthy environment.

Two decades later, in June 1992, Rio de Janeiro hosted the UN Conference on Environment and Sustainable Development (also known as the Earth Summit), in which more than 170 states participated. A series of treaties and other agreements were either adopted or produced at the conference, including: the United Nations Convention on Biological Diversity; the Forest Principles statement (officially known as the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests); Agenda 21 (a comprehensive blueprint for global and local action); and the United Nations Framework Convention on Climate Change, which is the predecessor to the Kyoto Protocol of 1997. At the next UN Conference on Sustainable Development, which was held in 2002 in Johannesburg, South Africa, Agenda 21 was expanded to include actionable plans to implement sustainable development around the world.

Over the last few decades, we have observed a substantial breakthrough in the assimilation and implementation of the principles of sustainable development. This breakthrough has allowed significant progress to be made in easing the conflicts between development and sustainability. We should acknowledge that this constitutes a fundamental step forward in our attempts to elicit a pro-active and positive approach to development.

It is important to underscore here the fact that the common usage of the term “sustainable development” is grounded in the idea of survival. The conceptual definition as well lacks any reference to creativity or pro-active behavior. The classical definition of sustainable development is, in fact, a preventive-passive definition that fails to illuminate the essence of development. Instead, it defines the concept in terms of limits, of what it is not. So far, all efforts to define indicators of sustainable development have therefore focused on those development activities that threaten to destroy resources or undermine the extent to which they can be replenished. However, if we accept that sustainable development should target a vision of the world for the world, it must incorporate and acknowledge the need for creative and pro-active behavior.

I believe that in order to create a world of well-being for humankind and all of biological diversity, we must harness all forces of development currently available in the world and direct them toward creating a desirable future for us as well as for future generations. If the point of sustainable development is to create a better future for ourselves, our children, the universe and future generations, then attempts to pre-emptively limit global development will only distract us from the real issue at hand: activating our collective abilities and desires to work together for a common future. Indeed, setting boundaries for global development is like trying to keep the dam from breaking by placing a finger in the hole instead of changing the direction of the water source.

From a survival mode to sustainability

Passover Eve 2008. The state of Israel is preparing for the Passover festival, a holiday that symbolizes the passage from enslavement to redemption, from slavery to freedom, celebrated in commemoration of the exodus from Egypt that took place 3,320 years ago.

Preparations are in full swing as we engage in the ritual and rigorous cleaning of our hearts and homes. Each last crumb of leavened goods must

be removed, not a spot left untouched. Most important of all, we are to rid our hearts of anything sour. Indeed, the term leaven is used in the language of Jewish mysticism to refer to every unfit thought. The process of cleaning is meticulous, obsessive and filled with the anxiety that we may not have cleaned sufficiently, that we may have missed some leaven left in the nooks and crannies of our lives.

And then, the Jewish people's festival of spring begins with the Seder meal. Passover is not just a religious holiday. In Israel, it is considered a national holiday in which the majority of the population participates and which the Jews—even the non-Orthodox—celebrate. It is an opportunity for the extended family to gather around the holiday table and enjoy large quantities of food with symbolic purpose as they participate in the ceremonies.

One of the key rituals during the Seder is the retelling of the Israelites' exodus from Egypt by reading from the Haggadah. The climax of this ritual is reached in reciting the fundamental, far-reaching sentence that unfolds within itself thousands of years of a survival mode among the Jewish people: "In every generation they rise against us to destroy us; and the Holy One, Blessed be He, saves us from their hand."

A Jewish joke relates that the common thread connecting all Jewish holidays is "They tried to kill us, we won, let's eat." A joke, but a serious one. For contained in this climactic moment, renewed each year, is a thread of community and continuity that stretches back through history and far away into the future. And this thread of community binds a people that has fixed itself in victimhood, forever.

As Israel's Commissioner for Future Generations, I grappled with this fixation on a daily basis, and I believe today that anyone concerned with the preservation of Israel, or indeed with the task of preserving our planet as a whole, must address this fixation on survival.

For me, this anxious relationship to both past and future illustrates the difficulties—and the potential promise—in envisioning a sustainable future.

Living and thinking in survival mode

“In every generation, they rise against us to destroy us.” It is important to note that this statement is not merely a description of the past. It’s not even a sentence that describes the present. The use of the simple present here expresses the regularity of this occurrence, an everyday fact in a way. So it has been for generations, and so it will be forever. The single fate of the Jewish people is to be subject to the threat of extinction by “them.” Exactly who stands behind this “them” changes—from Balaam, to the seven nations of the ancient land of Israel, to the evil Haman, the Romans, the Greeks, the Germans, the Arabs and, most recently, the Iranians. There is always an “us” and a “them,” a vague demonization of all who would seek to destroy us. And only the Jewish god—a powerful, heroic and avenging god—saves us from their hands.

One would have thought this exodus to freedom would be seen by the Jewish people as a symbol of freedom from its obsessions, of freedom from its fears, of a move to a realm in which a better future could be built. Instead, the recitation ends in the known accord, in the self-fulfilling prophecy that renews a sense of danger as it reaffirms community: “In every generation, they rise against us to destroy us ...”

In truth, this is only a description of one religious motif from a holiday that symbolizes the exodus from slavery to freedom. However, one cannot ignore the ways in which this motif feeds into the Israeli public’s deep-seated fears of destruction. We Jews live, as a society, in a mode of anxiety. And it is this anxiety that serves as an essential tool in preserving the uniqueness of the Jewish people. Furthermore, and perhaps most importantly, as long as there remains a “them” bent on destroying us, we must place our trust in God and follow his commandments. Defying the threat of annihilation is the essence of Israeli national identity.

Judaism is not alone in dividing the world, of course. Other religions too have repeatedly created and nourished similar phenomena by dividing the world into “us” and “them.”

This is one of history's tragedies. When human beings choose to say that their path to God is the correct one and that all other paths are mistaken, they create the basis for discord between people. They create disunity, the domain within which one person will kill his brother in the name of God.

The understanding that each person in the world has the fundamental right to choose his or her own path to God, to atheism or to any other belief is the key to a sustainable world. This is the key to creating the basis for the world to persist without increasing hatred and division, without increasing the number of frustrated, jealous and vengeful people. Indeed, respecting the individuality of belief systems is essential if we are to continue our debates, our conversations—whether civil or rancorous—that, in turn, will help us stop the unfettered proliferation of virtual or real red buttons with the capacity to annihilate the world.

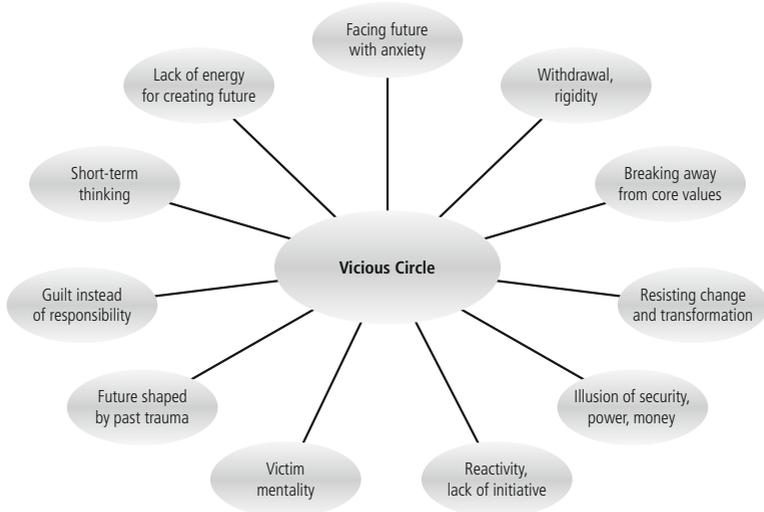
In Israel's case, self-identification as a perpetual victim has sentenced the state to live in and from the survival mode. Anyone who wishes to understand Israel's conduct as a nation over the last 60 years of its existence, whether from a political, cultural, societal, economic or environmental perspective, must begin with the fact that the state of Israel is in survival mode. However, as we continue to perpetuate this aspect of our identity, our ability to create a sustainable future for ourselves will continually shrink. Even when there is no immediate, existential threat to the State of Israel, the head of state, politicians, policymakers and military leaders continue to conceive reality in survival mode. The nature of their public communication remains one of "Caution! Danger is omnipresent!"

Over the course of the years I served as Commissioner for Future Generations in the Knesset, when I presented an opinion to policymakers or the government, I occasionally mentioned that other developed countries took long-term considerations into account. I witnessed a repetition of the same response countless times. "The developed countries don't have to fight for their lives," I was told. "They are not in danger. They have the resources and time to deal with [take your pick] a multi-year budget, a sustainable economy, a

long term approach to the environment. But we—we must ensure our survival.”

To my regret, I believe that this malady of the survival mode is contagious. When we Israelis act within this mode, the nations that live with us in the same wounded region of the Middle East are bound to catch this mode-as-illness, too.

Figure 1: The survival stance



Not long ago, I witnessed fear's crippling effects illustrated in my own home on a small but vivid scale. Hearing a loud barking coming from outside the house, I went out to find that a kitten had been thrown into our dog's compound. The kitten, trembling all over, was crouched in a corner of the yard battling for its life. It was clear to the little animal that it faced an existential threat. When I tried to save it, it tried to scratch me, too.

What was true of that frightened little cat can be true of us as well: When we are in survival mode, any movement to approach us is seen as a threat, even if it is meant to assist us, to help us, to extricate us from the true threat facing us.

Future imagery—benefits and practice

If we are to free ourselves from survival mode and create a sustainable future, we must first imagine this future, both individually and collectively. This is not only an exercise. Our images of the future can help bring that future about. Indeed, the primary forces in history are propelled not by a system of production or by industrial or military might but, rather, by the underlying ideas, ideals, values and norms that manage to achieve mass appeal (Polak 1961: 13).

On this journey to the creation of the future, we are driven by two forces. On the one hand, we rely on our life experience, anchored in the past. On the other hand, we are driven by our calling, which is anchored in the future.

Efforts to create the future, in general, and to create images of the future, in particular, are not necessarily linked to the past. First and foremost, they are linked to our desires. As futurist David Passig has suggested, wakeful dreaming can become an anchor that we can cast into our future and by which we can pull our thoughts forward (Passig 2000).

The long-ago discovery that time and place are two autonomous entities broken into everything that is in the present and everything that is not in the present was part of a critical conceptual leap for humankind. When man's consciousness was able to grasp that "here" could relate to yesterday or tomorrow, he discovered an ability to make use of time and place in different ways. They became tools through which man could fashion his imagery of the future, his plans, his aspirations and dreams for another time and another place.

Many futurists, such as Wendell Bell, W. Warren Wagar and Fred Polak, have identified the use of future imagery as an important element in social development and have therefore claimed that research into this kind of imagery should take a central place in futurists' activities.

Every social group, wherever it may be, uses images. Wherever we look, we encounter imagery: collective images and those of individuals, personal images and public ones, our own images and those of others, images of our nation, images of gender and so on.

What distinguishes images of the future from other images? According to Fred Polak, one of the founders of the field of futures studies, it is the dimension of future time, which operates first and foremost as a dynamic, motive force giving impetus to all other images.

One of the tasks of a futures researcher is to help people clarify their hopes for and fears of the future. This can help them rise above passive visions, allowing them instead to use preferred futures as a basis for planning and action (Hicks 2002: 742).

According to Polak, humanity can free itself from the bonds of time by creating constructive images of the future, combining intellectual insight with wishes and dreams. By directing our consciousness to our core values, we create the capacity to develop clearer concepts and goals, thus enabling the conscious creation of a better culture and future.

This process of making a conscious and responsible choice among the various alternatives developed by envisioning the future takes on an ethical character. In the process of our ethical development, we become responsible for the use of our perceptions and abilities to transform images into a different and better reality. A positive image of the future, in its classic sense, becomes one of the central tools supplying a culture with both the vision and the means to create that positive future.

As Polak argues, creating images of the future leads to cultural prosperity because these images provide detailed descriptions of the ideal future worlds. Although these images are typically created by a creative minority, they are in the end adopted by the masses and, later, provide the guidance and motivation for cultural renewal.

However, we cannot ignore the fact that a variety of research indicates that images of the future held by the public are mostly negative (Slaughter 1991). It is particularly this reality that we must combat if we are to develop a culture of sustainability.

If we accept Polak's approach, then we must invest significant energy in transforming the negative images of the future—wherever they transpire—into more positive ones. Otherwise, we will not be able to create a positive future for ourselves.

This process is particularly important for young people. The young person is required to construct his or her perspective of time in a way that will match his purposes or ideological values when structuring reality to meet his or her expectations.

Therefore, the developmental task of relating to the future is an even greater concern when confronted with the attitudes and images of the future held by the youth of states like England, Australia, Hungary, Israel, Japan and beyond, which demonstrate marked pessimism and a growing worry for the global future. This is not surprising. In a world changing so rapidly, there is a growing feeling of uncertainty and, with it, a growing feeling that we are not in control of our lives. And so, the feeling that we cannot predict the outcomes of our actions intensifies.

In spite of these difficulties, I remain convinced that a conscious and focused creation of future imagery is not only possible in practice, but even has the power to assist us in dealing with the future more positively and actively. The process of creating our images of the future allows us to distance ourselves from the world of familiar sights and sounds. We can recapture that amazing ability we had as infants to experience the unseen and unheard world for the first time and, in this way, restore to ourselves fragments of clarity from the unknown and merge them with the known.

In so doing, we will be able to accumulate a broader body of knowledge that can move us toward creating our desired future more clearly and efficiently (Polak 1961:2). The only way we will be able to respond truly and simply to the challenge of dealing with the unknown is by extricating our images of the future from within it.

Consciousness and its effect on reality

How can this be done? Polak suggests that the most important step begins with the understanding that the challenge is comprised of two parts: first, the division of time into the “now” and the “other” (any-

thing that does not exist now) and, second, the creation of a different world in order to fill the “other” time (ibid.: 5).

If we act on the basis of our personal images of the future, seeking to influence it and change it in accordance with our wishes and needs, we will acquire confidence in our ability to master it in some way. In this way, we will find ourselves actually transforming the future from a place of uncertainty, helplessness and anxiety to one of liberty and strength.

The purpose of future imagery is to broaden our horizons and free ourselves from the chains of limiting views. A heightened consciousness of future possibilities opens a small window to a larger number of options hidden in the present from which we can choose. By developing images of the future and employing future intelligence, we can strengthen and improve our ability to adapt to a broad variety of possible futures. This, in turn, allows us to live in the present with more knowledge, confidence and optimism.

Practicing future intelligence

The practice of future creation and future intelligence are as important to pursue on the individual level as on the collective, as important for private citizens as for organizations or makers of public policy. I believe the uniqueness of the approach suggested in this book has three defining characteristics:

- *Awareness of the images of the future that come from within us:* This allows us great authenticity in choosing our vision and in the activities we carry out. As a result, our actions will bring about the realization of our desired future and the realization of our mission.
- *Action within a broad context:* We will be able, after practice, to see ourselves as part of a world community and to understand the responsibility that follows from this fact. In this way, we will give broader significance to the activities that flow from the process.
- *Time conception:* We will be able to see ourselves as moving along an infinite time axis. After having practiced some of the methods

discussed here, we will be able to look more easily toward the future—even the distant future. We will be able to internalize the understanding that lies at the heart of this book.

We possess the ability to hear the call arriving from the future, to listen to it, internalize it and convert it to the source of our self-fulfillment in the present and in the activities that we carry out from now on.

Now, and in the days ahead, try to begin this process. To aid you in creating for yourself images of a desired future and imagining how you might turn them into reality, you will find a video guide to practicing future imagery on the website *FutureIntelligence.org*. I offer this visual guide with a set of exercises to help you augment your intellectual abilities by developing experiential capacities.

It is important that, during the process, we do not judge ourselves—whether we succeed in seeing more or less, whether our confusion increases or decreases, whether we are able to see our image from the future or not.

We keep in mind that, before the dawn, the world experiences the deepest darkness.

The more that the curtains—the blinds in front of our eyes—fade away, the brighter and sharper our vision will become. Our consciousness will be like a sea that can contain the whole world. Even if the confusion has increased, we will accept it with love.

Remember: Our vision, our desired future is already there. We just have to train ourselves to see it more clearly.

When we feel ready, we can share our experience with the people close to us. When we are speaking of our personal dream, it will be to our family and close friends. When we are speaking of a dream that touches on our professional levels, it is important to share with the people who work with us, our colleagues around us. People like to hear others' dreams and like to help people fulfill their dreams even more (Kelly 2007).

We will plan to create our desired *personal*, *societal* and *global* future. We can carry out this exercise several times. Our first experience will relate to our personal dream of the future. Afterwards, we can

carry out the exercise again with the intention of seeing how a desirable future will look for society. And, in the end, it is possible to carry out the exercise with the intention of seeing the desired global future.

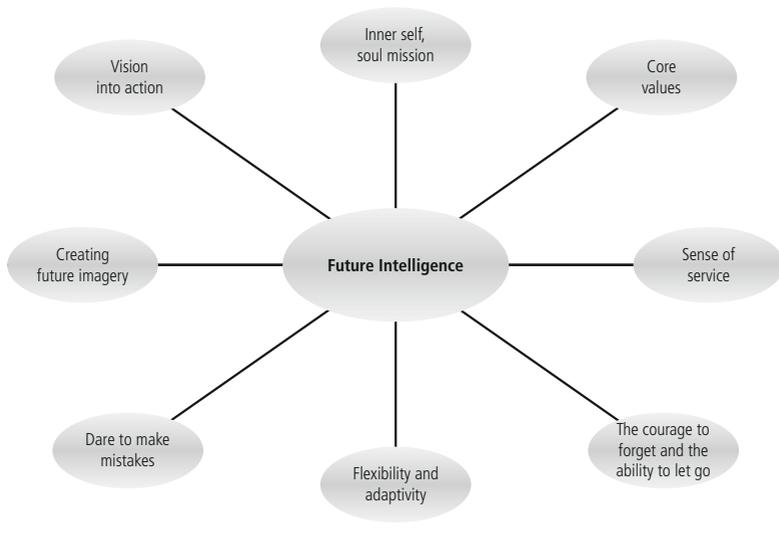
Next, we can turn to the later stages of the process, deriving missions, goals and modes of action from our personal and societal dreams that create our desired reality. This puts us on the path to realizing our desired future.

In the world of organizational consulting, there are innumerable methods used to help organizations develop a vision and, from this, derive goals and actions. One such method is the backcasting method, which I highly recommend but will not advise on how to carry out, as to do so would go beyond the scope of this book.

Nonetheless, I believe it is important to couple our future-imagining exercise with any technique used to develop a foundational vision. After diving again into the world of internal images of the future, we can thus verify that our vision indeed tends to create our images of the future and that there is harmony between them. In this way, we will ensure that our goals and ways of acting actually bring about the realization of our images of the future in the most effective way.

My dear reader, having gotten this far, I have only three more things to offer you in helping you create for yourself your desired future: first, a diagram (see Fig. 2) that briefly highlights what we have covered so far; second, some prose about creating a vision composed while I was Commissioner for Future Generations; and, third, a blank page (see pp. 70) intended just for you upon which you can sketch out your initial images or thoughts about the future. Please take a moment, look inside and let your hand write or sketch without rules or limitations.

Figure 2: Future creation – dimension



Vision

Vision is the dream that flows unto reality.

Vision is the choice of an individual, of a group, of a people to be responsible for its fate, to shape its future.

Vision is the ability to rise above mundane concerns, above living in reaction to reality, above fear of the future,

to a sphere of genius, boldness and magic.

Vision is creation, inspiration.

Vision is courage to see the future to which we aim even when emotional turmoil around us and background noises cause havoc.

Vision is choice

to create what is possible and what is perceived as impossible, to create a future and to not submit to background noise.

We can look forward and say to the world:

Yes, world,
we are ready to take the risk.
We are creating a new direction
and a new reality for this planet
We are creating a home where we shall be able to realize
our simple, personal dreams
and the dreams of our children ...

Assimilating Sustainability and Foresight into Public Administration

While it is commonly understood that foresight is necessary to the tasks of public administration, exactly how policymakers can generate and implement effective foresight is less well understood. In this chapter, I explore ways to implement foresight processes in public administration through a governmental body, such as the Knesset's Commission for Future Generations, and offer suggestions as to how to render such a body most effective. Tasked not only with empowering decision-makers to expand the boundaries of their perception, but also with identifying or detecting nascent threats and opportunities, any such body—by definition—is concerned with promoting sustainability. Indeed, the ultimate goal of such a body is to employ both creativity and structured analysis in navigating the rapids of our ever-shifting and increasingly complex globalized environment (Hines and Bishop 2007). Since the manner in which foresight can be applied will need to be adapted to the specific cultural and political features of a given state, I refer here more generally to such a foresight body as a “sustainability unit.”

Implementing effective foresight, particularly in public administration, demands that two considerations be taken into account. The first centers on the issue of content, or how to generate insights, and the second focuses on actionability, or how to implement these insights. If the point is to translate concepts into action, it is important to keep sight of the extent to which this knowledge is actually applied and the degree of influence on decision-makers that a sustainability unit might have.

While it is true that decision-makers and other stakeholders in the policy-making process are deeply motivated and influenced by the need to identify and assess risk, it is also true that their actions do not always reflect the use of strategic foresight. In other words, although applied foresight should be routine for policymakers, the demands of future-oriented thinking often run counter to the most basic interests on which most political systems depend. As a result, decision-makers and stakeholders in public administration rarely choose to implement foresight.

Foresight—beyond forecasting

If the 20th century was marked by the belief that the future could be predicted, today, at the beginning of the 21st century, it seems clear that the future is anything but predictable. As a result, the Western world has shifted its emphasis on forecasting to a focus on foresight, with a parallel shift of resources from forecasting projects to foresight processes. Whereas forecasting is a method of estimation that often relies on statistical analysis, foresight casts a wider conceptual and methodological net, approaching the future from a holistic perspective. Indeed, foresight processes lead to a fuller understanding of the forces shaping the future in the long-run (Martin and Irvine 1989). As such, they play an important role in political decision-making processes and policy design and planning.

States clearly have a vested interest in being prepared for the future. However, in order to conceive and formulate likely (or unlikely) future scenarios, a state must first identify and comprehend the nascent trends and forces driving change. Decision-makers must also be in a position to assess the impact these changes will have on the future of the state or organization. The better prepared they are, the more effectively they can use their relative advantages in leveraging the future for the good of all.

Foresight processes and futures thinking help decision makers pursue a course of action that is fundamentally pro-active rather than

ad hoc in nature. When employed effectively, foresight can help governmental bodies manage risks and surprises with acumen as they create opportunities for success and growth. Given the growing need to transform reactive behavior to anticipatory behavior, the significant increase in the number of foresight projects in governments around the world is not surprising.

In an international study of best practices in seven foresight programs conducted by the Battelle Institute, “Foresighting Around the World,” the outcomes of each program were examined to identify those factors influencing success and failure (Skumanich and Silbernagel 1997). The authors of the study, Skumanich and Silbernagel, found four features common to all of the programs. First, the future is unpredictable. Attempts to forecast the future are therefore fallible, and resources are more wisely invested in identifying a range of possible futures. Individuals can then determine which of the potential futures is the most desirable and focus their resources on creating it. Second, the process of thinking about the future creates ancillary effects that are as important as the results of such thinking. Joint development can trigger changes in thinking and improve communication and coordination among participants. As they share their visions of the future with one another, stakeholders in a foresight process learn to think flexibly, hone their empathic skills and cope with unknowns more effectively. Third, there is no single best method applicable to all fields. Since the nature and context of each challenge is unique, strategies must be tested and adapted for appropriateness. Fourth, foresight programs affect an organization and society in several ways, many of them immeasurable. Credibility is a foresight process’s measure of success. Relevant stakeholders must be included in the foresight process and feasible solutions presented if public ownership of the process is to be achieved.

In an article titled “Thinking Ahead: Strategic Foresight and Government,” Andrew Leigh focuses specifically on foresight units in public administration, identifying four ways in which “strategic foresight” (futures thinking) contributes to innovative governance (Leigh 2003).

- *Identifying unanticipated consequences*: Given the ubiquity of often invisible risks, government bureaucracies need to enhance their capacity to respond quickly to the unanticipated. By actively exploring nascent risks and opportunities, decision-makers can more easily mobilize resources when they are most needed.
- *Getting a sense of the “big picture”*: Addressing broad, cross-cutting issues, foresight processes require a holistic view of governance in which “fiscal priorities, environmental and economic forecasts, social trends and the political feasibility of achieving an outcome” are considered.
- *Drawing on a wide range of information sources*: In order to identify new trends effectively, foresight relies on a wide range of information sources both within and beyond the government’s apparatus. This includes not only the systematic appraisal of data, but experimental work with data as well. Foresight actors must maintain and cultivate contacts with academia, think tanks and other governments. Incorporating breakthroughs from the latest scientific discoveries, avant-garde movements and music trends can also be of interest here.
- *Involving the public*: Providing foresight reports to the public is one means by which the public can be made a partner in implementing strategic foresight. As seen with the example of the United Kingdom’s Strategy Unit under Tony Blair’s government, the public distribution of foresight strategies raised public awareness and fostered public debate, which in turn led to action on the part of the public and enhanced the “value-added” character of policies implemented.

In the early 1990s, a group of Israeli architects and engineers concerned about Israel’s long-range future petitioned the government to establish a foresight program. A joint planning program, “Israel 2020: A New Vision,” emerged from this government-academic partnership through which future scenarios for Israel were explored in terms of their implications for planning and construction in one of the world’s most densely populated states (Ministry of Foreign Affairs

Table 1: Short-term vs. future thinking

Primary issue	Secondary issue	Short-term agenda	Long-term agenda
Time frame		3–5 years	20–30 years or more
Planning attitude	Assumptions	“Positive” – feasibility tests within the existing system	“Normative” – achievement of future objectives and goals
	Time outlook	From the past, through the present to the future “Looking Forward”	From the (desired) future back to the present “Looking Backwards” to the future’s history mailbox
	Dealing with uncertainty	Extrapolation of past processes— with the assumption of continuity: prediction based on past behavior	“Thinking of the Future” Discontinuous changes and innovation: forecasting based on the expectation of innovation
Planning method	Methodological emphasis	Topical, rational emphasis	Creative theoretical emphasis
	Data	Most are under conditions of certainty, statistical probability and sensitivity tests.	Most are uncertain. The possibility of probability analysis is limited.
	Control variables	Mostly existing system variables (endogenous)	Mostly exogenous to the system depending on the scenario
	Techniques and tools	Data-based, quantitative methods and rigorous techniques, such as cost effectiveness, systems analysis, policy analysis	Use, as well, of non-data-based methods, such as scenario preparation, eventualities analysis, Delphi methods, brainstorming, simulations and gaming
	Economic emphasis	Using existing resource allocations	Based on long-term social-economic benefits that are the outcome of investment
Type of product	Main time period	Operational decision system	Status quo analysis, indication of desirable goals and policy framework for decisions
	Extent of details	Detailed “development and implementation” plan	Theoretical “prototype plan,” flexible, conceptual
Evaluation	Main criterion for choice	Overall evaluation, probability, practicality of implementation	Definition of a range of possibilities
	Essential element for maximization	Achieving defined goals with minimal input and resources	Maximization of “welfare” functions within a “cost/benefit” framework in its broad sense
Implementation	Starting point	From the existing organizational system to a new environment	From the new, future environment to a matching framework
	Implementation tests	Feasibility, ability to be implemented, organizational practicality	There are generally no implementation tests, no assurance of flexibility or withstanding test conditions of external scenarios.

1995). As a forerunner to the Commission for Future Generations, this project helped sow the terrain upon which the Commission conducted its activities. It did so in part by shaping the language used in Israel to discuss the dangers and pitfalls of short-term planning and the urgent need for futures thinking. Table 1, provided by the project leader Adam Mazor, summarizes the differences between the two discourses.

In short, future intelligence and the ability to make decisions under conditions of uncertainty require coping skills. These skills have their own unique language that differs from that used in traditional decision-making processes under normal circumstances. This language, the language of foresight, must be introduced into a public administration body's current mechanism of decision-making.

Sustainability units

The most important goal of foresight bodies is to influence the state and its institutions, prompting each to act in a visionary way and to take long-term considerations into account. Yet this kind of long-term thinking is too often precisely what decision-makers lack—indeed, the lessons of future-oriented thinking are frequently neglected in favor of pressing political interests. Any discussion on the correct model for a sustainability unit must thus take the following factors as practical constraints:

- Decision-makers and policymakers may seem to agree that conduct based on vision and foresight is desirable. However, foresight is sometimes in opposition to the hidden interests and motives (both personal and political) of the political system and its leading figures. It is these less obvious themes that determine the political agenda.
- Decision-making and implementation processes in democratic systems are not rational, striving to reach and manifest logical, optimal solutions. Rather, they fluctuate between a model of “find-

ing a satisfactory solution” and one of “organic chaos.” The precise balance will be determined by each country’s social and political structures, cultural tradition and leaders’ ability to govern.

Our experience in Israel perhaps showed an extreme example of both constraints. Despite phenomenal progress in Israel’s mere 60 years of existence, the country’s democratic government is subject to a multiplicity of fragmented and conflicting interests. The ability of the government and the political system to rule and act is relatively low. We learned that a successful sustainability unit must be modeled in a way that allows it to address this present-day political reality as well as to think about the future.

To this end, I claim that the secret to success is behavior emphasizing both of these goals. I therefore suggest a model in which sustainability units of all kinds are composed of two sub-units, one for content and another for impact management.

The rationale for this division is grounded in the often-imperfect processes of political decision-making. A sustainability unit will be influential only if it meshes with the way decisions are actually made.

All democracies, virtually by definition, show some level of fragmentation, conflict of interest and resource constraints. Political pressure often pushes leaders to act with short-term goals in mind rather than long-term vision. Orderly decision-making is very rare.

This environment lends itself to the “garbage can” model of decision-making. This model posits that, in the framework of organizational anarchy, small spheres of decision-making are created, among which appear at irregular intervals problems, solutions and incentives to adopt specific solutions that are derived from extreme events (such as times of crisis or great success).

Sound decisions are made and good policy is carried out only when the three elements—problem, solution and incentive—appear or are exposed simultaneously. Sustainability units in governmental bodies should be constructed so they can recognize and address each element in a way that maximizes the influence of their recommendations.

A successful sustainability unit will have a specific relationship to all of these elements of decision-making, each of which is worth examining in some detail:

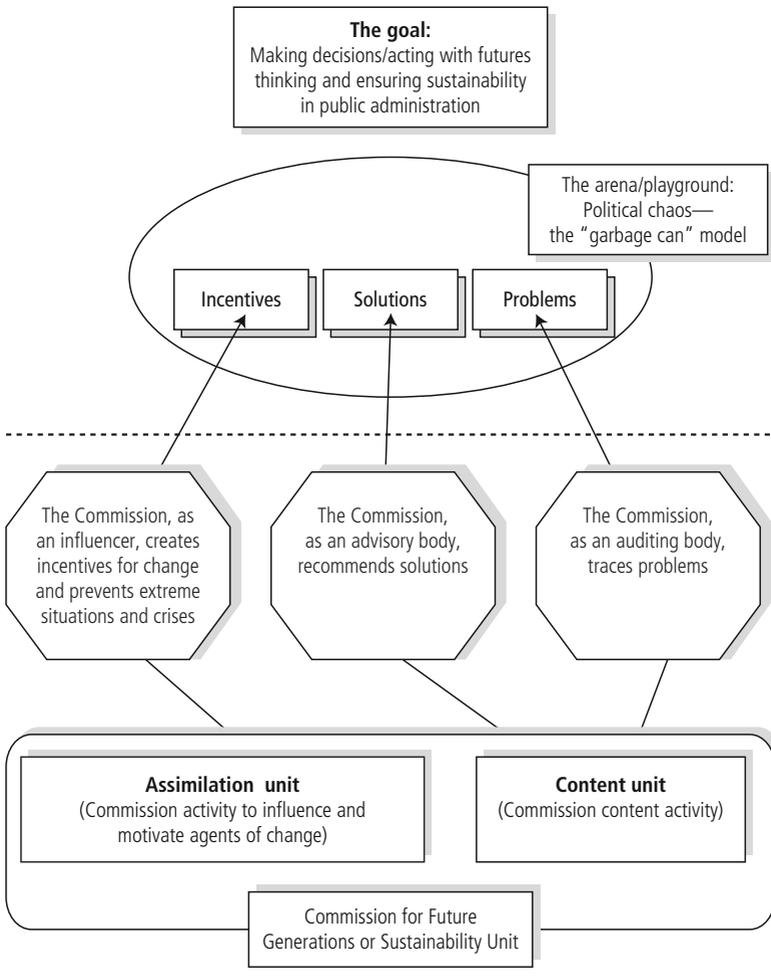
- *Problems*: The unit should serve as an auditing body that forms an integral part of the legislative branch’s supervisory authority over the executive branch. It should express its opinion on decisions that are in some sense damaging in the long-term view. In addition, the unit should be able to describe or anticipate problems that may occur in the absence of futures thinking—especially since crucial decisions are often a product of short-term thinking.
- *Solutions*: The unit should serve as an advisory body that creates contingency plans and offers solutions created through futures thinking and long-term consciousness (not necessarily as a response to existing problems).
- *Incentives*: The unit should be able to manage political stimuli in order to create incentives for decision-makers to act. It should draw attention to problems and its own solutions, thereby sensitizing decision-makers to the long-term consequences of their actions or, alternately, their inaction. In so doing, the unit facilitates timely change and helps prevent extreme situations from evolving into a crisis.

A body that addresses itself only to a subset of these elements will have difficulties in carrying out its task. The most exquisite sensitivity to problems and the most brilliantly conceived solutions will be useless if the incentives to act are not in place.

Creating a sustainability unit

The model suggested here for any new sustainability unit is composed of two principal sub-units: the content unit, which will identify problems and develop solutions, and the assimilation unit, tasked with creating incentives for the adoption of solutions. This can be done by working with outside researchers, civil society groups, the media and, of course, directly with decision-makers themselves.

Figure 3: The model



This model has proved successful even in the deeply fragmented, contentious Israeli Knesset. Although each country will have its own unique political and cultural characteristics, the model can be adapted locally in order to apply the proper amount of activity in each sphere.

The content unit

Like any organization, a sustainability unit will have limited time and resources. It must pick its battles intelligently, with an eye toward having the greatest amount of influence on the most important topics. It should therefore select topics to address that are based on a relatively short list of criteria:

- *Original vision and mandate:* No body is created in a vacuum. When a sustainability unit is created, it will be given a more-or-less limited mandate by the legislature (or whatever other body it is associated with). Topics should be chosen that resonate with the unit's mission, decision-makers' vision and the vision of the unit's own leaders. All these should be analyzed with the use of future intelligence.

- *Legal authority of the unit:* The legal authority of the sustainability unit naturally has great significance in determining the way it operates. Any implementing law should thus be designed to give the unit sufficient range of action and authority—all in accordance with a given country's regime and governing system.

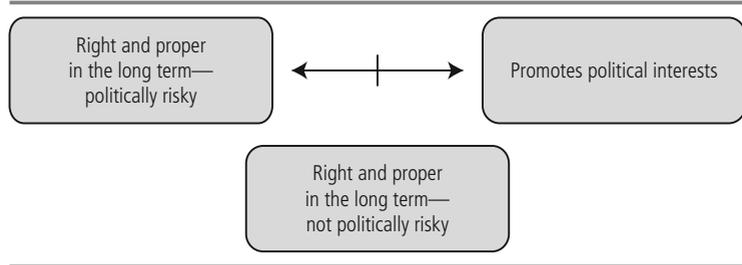
This said, I believe there is an advantage in positioning the sustainability unit in the legislative branch as an integral part of parliament (or at least an established part of the State Comptroller's Office, which derives its authority from parliament). This makes the unit independent of the executive branch, allows it to audit government policy with respect to issues of sustainability and allows for direct influence on legislation.

Creating this kind of unit as an independent authority within the government structure might seem an advantage, providing greater influence over the executive branch's daily activity. However, under this model, the unit is apt to be worn down by the bureaucracy that rules in government offices and to lose its power when faced with the survival behavior of the executive authority.

- *Sustainability of the unit over the long term:* At all times, the unit must find the appropriate balance between authentic behavior—warning of future dangers and assisting in the creation of a de-

sired future—and the understanding that it is often operating against decision-makers’ short-term political interests. Antagonizing powerful interests too often, in too controversial a manner, will ultimately lead to a lack of influence, or even to a revocation of the unit’s mandate.

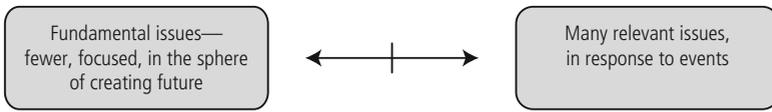
Figure 4: Weighing issues in terms of their capacity to motivate decision-makers



- *Ability to influence decision-makers:* Content units should choose issues that have the potential to create a change in decision-makers’ awareness, inspiring a desire to act with consideration of the future. The unit’s greatest challenge will be in changing politicians’ tendency to act and think of the short term. Choosing the right subject will help create a slow, cumulative change in awareness, which will ultimately change the character of decision-makers’ activity.

The weighing of issues, with reference to their alignment with policy-makers’ own interests, changes gradually. On one side are important, long-term issues that can be leveraged to gain personal and political capital (e.g., solar energy solutions at a time when rising fuel prices have triggered public protest). On the other are the important, long-term issues that are unpopular and cannot be used for personal leverage by decision-makers. Many of these issues may even carry personal cost for decision-makers, as is the case, for example, with public administration reforms or, in the specific case of Israel, an increase in fees for water consumption.

Figure 5: Quantity versus quality



One must find the appropriate balance between promoting decision-makers' legitimate personal interests and encouraging them to take political chances to advance issues in which they believe. A sustainability unit must act creatively, using its ability to influence and its acquired reputation to create a change in awareness.

But the unit's choice of issues must also be practical: It should take into consideration the personal costs to decision-makers involved as it encourages them to weigh these costs against the broader, social costs of not facilitating reform. Are there ways to ameliorate the effects of these personal costs while preserving the larger goal of creating a better future?

- *Quantity vs. quality*: The sheer number of problems facing a modern state will naturally tempt any sustainability unit to stretch its resources thin. Yet it must be remembered: Any such unit is responsible for future consequences; its duty is to rise above the contemporary storms and look to the future, without being enslaved to the demands of the moment. As I pointed out in the first chapter, its duty is to act to create the future rather than thinking only of survival. Nonetheless, no unit will have the time and resources to be wholly pure in this way. It must be concerned with being relevant in its own day's political space and must address itself to topics that occupy decision-makers and the public.

In short, the unit must become an expert in the art of creating the impossible. It must address the issues of the day, even if parliamentary demands sometimes require a quick and shallow response. Simultaneously, it must treat the same issues in a calm, non-reactive manner, making use of long-term thinking and the processes of future creation.

Here, as in all a unit's work, a balance must be struck. On one side is the reality that the unit must intervene in as large a number of subjects and fields as possible in order to have an impact through presence and relevance. On the other side is the fact that opinions on future consequences require a vast amount of research, taking substantial time and resources before a finished product can be achieved. Units must therefore choose their spheres of activity selectively.

1. Producing future-oriented opinions

In the hectic environment of real-world politics, sustainability units will not always have the privilege of waiting for finished, comprehensive products. On the contrary, they will have the duty to clarify and raise their own work's relevance by giving up-to-date opinions on timely subjects and by adapting to the decision-makers' short-term time frames, even when this comes at the expense of an opinion's thoroughness. Even quickly developed opinions must be well-founded and precise, however.

The content unit's opinions can be produced in a number of ways. On one extreme is the preparation of new material each time, conducting research from the first stage through the creation of an opinion appropriate for the particular question. At the other is the use of existing content without saying anything new or contributing in a significant way to the research on the subject. The first pole requires the full-time employment of various researchers who are experts in each field, while the other requires the employment of experts in the management and leveraging of information.

My recommendation is to focus the content unit's mission on leveraging existing information and on quickly adapting this data to address the tasks on the agenda. To this end, the unit should employ people who are skilled at creating a network of information sources and have the ability to make use of content experts across a range of different subjects. However, it is most important that a small number of carefully chosen independent research experts be employed

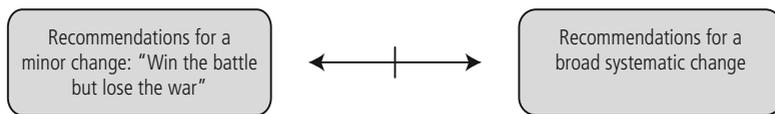
full-time for long-term futures research on a limited number of topics that they choose. These researchers must be shielded from the day-to-day “storm in parliament” and given relatively longer deadlines for their work. These opinions will constitute the essence of the sustainability unit’s work. Even if they draw relatively less media coverage or decision-maker attention, they are actually its primary function.

2. Formulating recommendations

The most useful opinions will contain not only an acute analysis of the consequences of future activity, but a recommendation for action. These recommendations can come in several forms, depending on the political environment.

At one pole is an approach that utilizes the broadest possible recommendations, that presents a better systemic solution (at least theo-

Figure 6: Balancing the form and nature of the content unit’s recommendations



retically or normatively) or that seeks overall transformation or a true paradigm shift. At the other is an approach that presents relatively minor steps, requiring minimal change in behavior. Here, too, a successful content unit must sometimes draw from both sides. Most important is the ability to find balance, suiting the solution to the dilemma while taking into account the political dynamics within which the unit operates.

Almost by definition, a content unit will offer solutions that are not simply more of the same. Stemming from a process of sustainable thinking and future intelligence and from a viewpoint that encompasses long time spans, its recommendations are likely to be rela-

tively creative and will often fall outside the bounds of mainstream thinking.

Yet realism is important. Content units should avoid recommendations that present perfect, magic solutions that are academically pure but have little chance of being put into practice. Rather, we should be satisfied at times with minor, incremental recommendations that entail realistic, layered changes and that are clearly and cautiously worded. The intention is not to bow down or to be self-deprecating in the face of decision-makers' skepticism, but to find the golden path of practicability.

Even the design of reports themselves is important if the unit is to avoid being seen as irrelevant or confrontational. Opinions should be polished, precise and inviting to read.

The members of the unit must themselves be the living embodiment of these reports as they interact with government ministers, members of parliament, public administrators and leaders in the economy. They must be masters of persuasion and practiced in presenting their positions, even from memory.

Indeed, our experience in the Israeli Commission for Future Generations taught us that a large part of our influence in fact lay behind the scenes, in personal meetings and in laying the groundwork for change, work that was for the most part hidden from the public eye.

The assimilation unit

No matter how excellent the content unit's analyses, decision-makers must have some incentive to adopt its recommendations. The assimilation unit, tasked with creating and fostering these incentives, is thus a crucial complement to the content unit's work.

The Israeli experience illustrates the great difficulty in bringing about change in public administration systems without such a model in place. Many public committees have been established in Israel over the last 40 years, often recommending far-reaching governmental reforms; however, few saw their recommendations implemented

in any significant way. Efforts to change behavior by means of legislation have been somewhat more successful, but using this tool without employing future intelligence can lead to bloated legal codes and often to disregard for the law or a lack of enforcement.

Even when legislation in the Knesset has led to a significant process of governmental reform, there have been several instances in which the legislative process itself had to be cancelled. The most prominent example of this was when the country's Basic Laws were amended to allow the prime minister to be directly elected. After only five years (1996–2001), the Knesset had to cancel this change, and the previous governmental structure, in which the prime minister is the leader of the political party holding the most parliamentary seats, was restored.

Economic reforms have also been proposed with regularity. Some have been successful, some less so; but it is clear that most were not made by means of any structured futures-thinking process.

The biggest test of any sustainability unit will be its ability to influence and implant foresight and futures thinking among public administration decision-makers. Therefore, great weight should be given to the assimilation sub-unit, which will be responsible for influencing the contemporary political scene's most important change agents. But a note of realism must be introduced here: It is important to note that making decision-makers aware of important issues, or even eliciting their support for particular solutions, does not guarantee actual implementation of these solutions.

1. Resistance to change

A sustainability unit dedicated to futures thinking and, thus, to beneficial policy transformation will inevitably meet resistance to change. Research literature on public administration deals extensively with this subject, deriving motives that can be characterized as:

- organizational and governmental conservatism;
- structured concern and fear of change;

- the fear of loss of authority, prestige or power;
- the desire to avoid unnecessary turmoil.

In Israel, we noted additional sources of resistance to change, some of which, when found in other states, may affect them in different ways. These include a public system that lacks a tradition or culture of organization, a system of governance shaped by specific historical circumstances and a clumsy bureaucratic system—each of which pose various blocks and obstacles to change.

An assimilation unit must understand these various components of resistance to change and work to create an environment of incentives that overcome them. In practice, policy implementation will largely take place in one of two ways: either top-down, driven by a senior policymaker with the power to effect change, or in a “garbage can” sense, in which an unusual set of problems, solutions and incentives must be supplemented by a change of consciousness in the public and media. Both models are worth examining in some detail, as they will require the assimilation unit to pursue different approaches.

2. Top-down change: Working with change agents

The public administration ranks of any country will contain few true change agents, that is, decision-makers with the ability to understand the need for and the power to implement change. The role and classification of these figures will change from country to country and from time to time, depending heavily on the personalities active at any given time.

During the Israel Commission’s tenure, we learned that the number of decision-makers who are anxious to use their authority to make change is inestimably greater than the number who use their authority appropriately, and even more than those who overuse their authority. This is even truer of non-elected civil servants, who serve in their positions for many years.

As noted above, the content unit should naturally invest substantial resources in the creation of clear, well-founded opinions. From that point on, the assimilation unit must find the most effective ways to influence the relevant decision-makers.

In the first chapter of this book, I suggest a values-driven approach to developing an infrastructure for influencing change agents. Helping these individuals see the linkage or harmony that exists between future-oriented interests and their own true interests is a crucial component of this infrastructure. The key to this is the understanding that long-term considerations are crucial for good management practices in the present and that ignoring these considerations will ultimately harm those most dear to us, including our children and grandchildren.

3. Incentives for change: Leveraging alliances

Often, decision-makers will prove reluctant to implement change, or the dynamics of political power will keep specific change agents from being effective. In these cases, the assimilation unit's role will be as a catalyst, helping to create a broader environment in which change becomes possible.

In some cases, this can mean enlisting the support of influential bodies to which the government is obligated by geopolitical forces. In others, it might mean turning to solutions that have been successfully implemented in other countries.

By developing working relations with parallel bodies elsewhere in the world, a sustainability unit can gain status and world recognition, which can help attract the attention of its own governmental decision-makers and mobilize public opinion in support of an idea the government refuses to accept. Today's technology makes it possible to recruit substantial world support, even for ideas beneficial primarily to the sustainability unit's own country or society.

Decision-makers, and particularly politicians who must seek reelection, often pay close attention to public feelings. If broad public

support for a given solution has been cultivated (or even if decision-makers just think that such support exists), this can afford the opportunity to enlist decision-makers' support or help change their thinking on a subject they rejected in the past.

4. Incentives for change: Gaining legitimacy and public attention

The creation of public discourse around an issue that entails examining future-oriented problems and solutions is a critical tool in the development of public support. This public discourse itself provides a setting for public criticism, which becomes an important stage in the recruitment of public opinion.

The development of joint projects with the public or with public opinion makers is a good platform for creating connections that lead to public trust. Civil society has developed quickly and powerfully in recent years, and more and more non-profit organizations are carving out spheres within which civil society can evolve and express influential opinions.

As much as possible, the sustainability unit—through its assimilation sub-unit—must work in harmony with civil society on every subject it addresses. This increases the power of its statements and provides a significant channel for influence for civil society itself.

In parallel, the unit must develop an orderly system of consultation with academics, scientists and universities. One of the greatest absurdities of the democratic state in the 21st century is that the wealth of knowledge generated within academic settings is often left outside the decision-makers' circle of influence.

In our experience with the Israeli Commission, we found this resource to be extraordinarily fruitful, precisely because of its traditional underuse. Academic researchers and scientists are often frustrated that their knowledge and research results have such small influence in the decision-making process. The sustainability unit can become their mouthpiece, bringing previously untapped knowledge to policy-makers before critical decisions are made.

While it is true that many parliaments have science and research units, these units are sometimes sterile. Their role within the legislature is often pro forma, making it difficult for them to take a stand, and their opinions are often ignored in favor of populist measures.

5. Incentives for change: Working with the media

The media has a decisive role in 21st-century democracy. Its influence on decision-making processes is extremely strong and, quite often, it disturbs the proper balance among the authorities. It is important to remember that, from time to time, the media determines its own positions and is not satisfied with simply delivering the objective news. This obligates any sustainability unit to invest considerable thought in its own media relationships.

On the one hand, broad, positive media coverage of the unit's work will help expand its influence. On the other, sustainability units will by nature seek to deepen public discourse and to bring long-term considerations and externalities into the decision-making process. This poses a problem for any such unit, however, as many of these things are not easily rendered in the visual language of the media.

To improve ratings, the media focuses on immediate drama and anxiety. By contrast, sustainability units should deal with implications for the future, with finding creative solutions not in the realm of danger and drama, but in the thoughtful creation of our own future. We are rarely speaking about a cocked gun at a person's head, but of future dangers.

However, through creativity, daring and original thinking, these structural difficulties can be overcome. A way can be found to tell the story of our children and grandchildren in a life-embracing and heart-warming manner.

I must admit that, during the many media interviews (mostly on television) that were held during my tenure on the Israeli Commission, I was sometimes forced to wade into the media quagmire and to

use superficial, populist explanations in order to arouse listener interest. The length of these interviews was rarely greater than five minutes, especially on prime-time programs or during newscasts. It seems to me this is the price we pay for the “superficialization” of our world, as presented in the media.

But, with this in mind, we consciously worked to supplement this reporting. We invested considerable resources in building the Commission for Future Generation’s website, making it a part of the Knesset’s site. We worked hard to publicize our positions and reports, which often contained many pages and were mostly in-depth and well-supported. Along the way, we learned how to reach the public using existing means and without abandoning an explanation of our positions in sufficient depth.

Our experience in Israel showed us that the Commission had a relative advantage in its relationship with the media, which could be exploited with great caution. Similar units in other societies can draw similarly on this fact.

A sustainability unit on the model we outline here, by its very nature, is a repository for considerable professional knowledge. It works with the assistance of scientists and produces well-researched opinions, quite often including criticism of government actions.

An open secret is that media organizations often lack the means to carry out similarly in-depth investigations. Thus, they will often be drawn to the unit’s reports and opinions—particularly when an impressive headline can be published—and the credit can be given to the sustainability unit or to a scientist who was a consultant for the unit at the time.

However, this is a double-edged sword to be used with caution. As we sought to do in Israel, a sustainability unit has an obligation to maintain objectivity. If it fails in this task, it loses its power as a government organ or as a department of the parliament.

The choice of spokesperson for the unit is thus crucial. It is important to select someone who has experience, is completely familiar with the media, knows how to behave within it and already has a reputation in his or her field. Yet, this person must also be inti-

mately familiar with the unit's activity, must identify with its vision and must be deeply knowledgeable about the materials under discussion.

6. Staffing and structuring a sustainability unit

One of the most important resources any sustainability unit will have is its credibility. By its very nature, the unit is likely to take stands that the government does not like and to be the focus of governmental criticism. This requires the head of the unit (the commissioner, in the case of Israel's Commission for Future Generations) and its employees to be free of any suspicion of political bias.

This goal should be given structural and legal backing from the very outset. In Israel, for example, Commission employees may not be politically identified. The commissioner is appointed by a respected public committee, through a process similar to the selection of parliament's legal advisor, and serves a full five-year term. All of these conditions provide the Commission and its employees with the immunity and security they need to express their positions without fear.

I believe it is very important to anchor a sustainability unit's public status by creating an external public council composed of public figures of the first order. Vested with the authority to help define topics and to audit the sustainability unit, this council would provide an additional layer of credibility to the unit's recommendations. However, I recognize that this kind of initiative might encounter opposition from members of parliament if the sustainability unit is an intra-parliamentary body.

With regard to staff itself, employees should have a professional rather than political character. As mentioned above, I believe that my decision as commissioner to hire public servants skilled at synthesizing information sources, rather than specialists at the top of their field, was the right one.

To be sure, well-regarded specialists would enhance a unit's status and professional authority; but budgetary limitations, as well as such

figures' inability to make themselves available as full-time sustainability unit employees, make this alternative difficult.

In Israel, we created a structure of domain directors, each of whom coordinated one or more of the areas for which the Commission was responsible by law. Their role was to manage the domain for which they were responsible, to accumulate knowledge from the leading professional experts in their fields in Israel and worldwide, and to bring these experts' conclusions to the attention of decision-makers. Most domain directors had civil-servant status, although some were external consultants. In parallel, we sometimes chose to draw on assistance of the leading professionals in their fields to prepare opinions and appear before Knesset committees or other high-ranking decision-makers.

The head of the sustainability unit—the Commissioner for Future Generations, in Israel's case—will necessarily take a central role. His or her personality, status, experience, management ability and connections will directly impact the unit's work. It is extremely important to appoint a non-partisan person to this position who knows how the legislature operates and has acquired prestige and respect therein.

Choosing an external professional who lacks an intimate understanding of the political system and is not well accustomed to the given political climate—even if he or she is the most qualified expert in his or her field or a recognized sustainability expert—is likely to cause many difficulties, particularly in terms of influencing decision-makers. Nonetheless, if it were possible to find a sustainability expert who understands parliament, knows how to negotiate its hidden byways, and can have an impact there, he or she would be the most successful choice.

As outlined above, I believe this sustainability unit model can be adopted anywhere in the world and to great effect. Nevertheless, it is critical to think deeply before establishing such a body and to understand experience of other similar efforts worldwide; only afterwards should the body be adapted to the conditions of the specific parliament and political environment.

Experience teaches us that global activity is intensifying and that the global impact of our deeds can be understood more widely than ever. Therefore, the time-tested slogan that has inspired action around the world works in this case, too: “Think globally. Act locally.”

The Story of the Commission for Future Generations

It's morning. I've just returned from a run in the orchards. The skies, blue and clear, are typical for an Israeli autumn. The flowers have responded quickly to the call of October rains, and I feel at one with the birds' calls, the branches of my favorite tree and the cool wind that gently caresses my body. The morning's start was even better: Before I was completely awake, I groped my way along without my glasses to find the morning paper and discovered in its pages the victory speech of Barack Obama, the president-elect of the United States of America.

It was a moment of grace. There was not a single word of cynicism to be found in the paper's first pages. Pundits laid aside their derision and perhaps even sacrificed ratings in honor of the moment's excitement. As I read this man's victory speech, tears began to flow—tears of great release, tears of excitement, tears of knowing that a turning point was taking place right before my very eyes. When I asked myself why I was so excited, I felt, as so many others did that day, the great pain and frustration over the hatred we so typically create in the world and the destruction of this earth and, with it, a great yearning for change, for transformation.

In this world, even the purest of such feelings provoke skepticism. As I turned the newspaper's pages, I found more cautious responses to Obama's victory—voices warning of the mountains of work ahead, arguing that simply getting elected was not enough to ensure change, that the new president's true test was just beginning. Even the little devil within me cautioned against placing my faith in his promise. For I have witnessed—all too often—the optimism inspired by many outstanding speeches shatter against the hard, cold stone of reality.

But I believe there is cause for optimism. I know, as many others around the world know, that we can succeed in creating a critical mass of hope, a critical mass of belief in our ability to create change. Perhaps this transformation is concealed; perhaps change already underway is hidden from our skeptical eyes. Yet we are creating a critical mass of positive images of the future of our planet and a worldwide belief that change can come, and I believe these trends will have real power. This book is both part and manifestation of this process.

There is a clear correlation, proven in many studies, between positive future imagery and success. I know that we can overcome our individual fears, doubts, greed and sense of alienation. We can overcome barriers based on race, gender, religion and more, barriers created in human minds over the years. In imagining and realizing this future, we are already on the threshold of a new, more promising era. The division that we created in our minds between the rulers and the downtrodden is crumbling.

When Barack Obama sits down with the people of the planet—many of whom experience a profound and visceral sense of being discriminated against, motivating some to act in ways that have endangered the whole world—his pathway to their hearts will be more open. The man in whose grandmother's house in Africa there is no running water, Western plumbing or television will not be seen as arrogant, as a tyrant, as a conqueror. This man, who symbolizes more than anything the end of separation between humans, has already brought about, by the very fact of being elected, the change that the world so needs.

My most salient feeling on this morning is that I am part of a large family whose basic motivation is to create a better world. I am particularly happy to have been a partner in this global movement toward sustainability as Israel's Commissioner for Future Generations. In one small country, the Commission for Future Generations was privileged to make its own modest contribution to sustainability, with its activities founded on faith in a better future.

As I savor the news of Barack Obama's election and think of the Commission's work, I feel confirmed in my belief that all our various intentions for creating a better future on this planet are similar in their main points and that we are all partners in this endeavor, which is greater than any one of us. And I am reminded of Solomon's words, "This only have I

found: God made mankind upright, but men have gone in search of many schemes.” (Ecclesiastes 7:29).

But how can I capture this process? I sit now in front of a blank sheet of paper, trying to describe in written prose the course of five years of my life—five years during which I got up each morning with the title “commissioner.” In one sense, this is only one of many professional roles I have filled in the course of my life, like being a lawyer, a judge, a legal advisor in parliament. But this particular period—clearly a transformative process in my life—refuses to be written about. It refuses to submit to the conventional measures of success or failure, refuses to be sacrificed to cynicism, on the one hand, or to be writ too large, too dramatically, on the other.

I am trying to decipher what took place there for me. I am trying to sketch it out with the tools of prose, but the words are insufficient. There was great hope, there was pride, there was excitement—and there was pain and great cynicism, all mixed messily together.

Two fundamental things took place in my soul in the course of my tenure in this position. First, a covenant developed between me and the position. Unlike other positions I have filled in the past, I understood even then that my concern for the future was a true calling. I understood that, even after leaving the position, I would not go back to being who I had been before. I understood that I would continue working to create a better world for us, for our children and for future generations. Second, a deep vulnerability was born in me. Because I experienced such deep identification with the position, its role and the Commission’s goals, the moments in which we failed to influence the results of legislation as we wanted were painful and difficult.

Nor, thankfully, was I alone in assuming this role. All of the Commission’s staff—each one head and shoulders above the crowd—were people of great talent, people of vision who believed in this path with all their hearts, who came together with the greatest of intentions to create a change in Israel’s parliament. At times, we were perceived as an easy-to-ridicule gimmick, at times as Don Quixote, at times as great reformers; sometimes we were perceived as successful, and sometimes as failures; sometimes we experienced highs, and sometimes we needed to persist; sometimes we were perceived as powerful, and sometimes as weak.

This book is an attempt to assess our successes and failures from the distance of time and detachment. I hope that the lessons learned from the Commission's experience can help advance and embed futures thinking, sustainability and a stronger sense of responsibility to future generations within the governing bodies of the world.

Creating the Commission: Addressing democracy's blind spot

By definition, the Commission for Future Generations' task—to create a space within the Israeli parliament in which desired futures can be conceptualized and pursued—was not an easy one. Perhaps more than any other such body in the Western world, Israel's Knesset is infused with a survival mentality. Indeed, its members often see the problems that Israel faces as the most serious problems in the universe and that the Knesset's choices alone can ensure the country's survival. In many cases, however, there is a significant gap between the felt sense of urgency and the external reality.

I remember clearly the moment I first heard the name of the Commission for Future Generations. It was the subject of a bill to be proposed to the Knesset. At that time, I was serving as legal advisor to the Constitution, Law and Justice Committee, which was to approve the bill. I must say that the idea appealed to me greatly, but the name seemed too bombastic. The bill seemed worthy and proper, while the need to act on concerns about our future and the future of our children seemed obvious. As I read the bill, I came to understand that a body such as the Commission for Future Generations was absolutely essential in Israel and in the various parliaments around the globe.

I understood, even then, that there is a blind spot in democracies, almost by definition. Every person elected for high office, every person who seeks to influence the world around *him* through a political position, gets there, I believe, with a basic desire to benefit his constituency and to benefit the nation that sent him to his high position. Yet democratic systems impose constraints on decision-makers: Crucial decisions must be made under severe time pressures, and deci-

sion-makers want to be re-elected, a fact of democratic life reinforced by every person's natural desire to be popular. This need to placate the voter cannot be brushed aside or ignored; it is present, crucial and immediate, and it continually guides a person with sharp political senses.

At all times, this thought flows through the soul of a politician like a subterranean stream on a conscious and subconscious level: "What I do must resonate with the public, here and now." Because it necessarily references a large body of people, themselves holding differing opinions, the activity that flows from this thinking is not always rational or precise. It is nourished first and foremost by what the politician thinks that the public expects, even if he or she also lacks the tools to check whether this belief is true.

In today's world, a politician's public image is formed through depictions in the media. This adds a new layer of pressure, constantly forcing politicians to seek the public eye. It becomes a daily struggle to satisfy the media and ratings monster, which voraciously demands headlines. All of this creates, by definition, a powerful preference for short-term interests capable of producing immediate results, which can reap benefits and generate support here and now. This preference comes at the expense of strategic, future-oriented interests that hold little chance of helping a candidate to get re-elected. Add this to the survival mindset within which members of parliaments around the world frequently operate, and throw in the narrow interests of those stakeholders constantly lobbying elected officials, and it becomes clear that there is an urgent need for an objective, authoritative advisory body that serves as a "check" on the battle over short-term gains by addressing the good of all our futures.

While reading through the proposed legislation for the year 2000 to create the Commission, I could see the profound need for such a body in Israel. Israeli society is relatively young, dynamic and constantly redefining its priorities. Steeped in a constant fight for its existence, the Israeli public is accustomed to heated debates over short-term issues. As a result, recently elected decision-makers often feel the public is demanding immediate solutions to current problems,

even if swift action means disregarding future ramifications conflict with other government policies or postponing attention to essential long-term subjects.

A brief look forward here is important. Frequently, when the Commission turned to the public and explained the future consequences of decisions and legislation, it turned out that the public was not really asking for instant solutions. The public turned out to be willing to pay a present-day price in order to safeguard the future of its children. When decision-makers came to appreciate the public's deeper desires, they often accepted our opinion and changed their stands.

Even at the beginning of the legislation process in the year 2000, I saw that the proposed Commission for Future Generations could help bridge this gap between policymakers' beliefs and the public's deeper, often unvoiced expectations. The structure of the proposed body, the broad authority it was to be given, its position within parliament and the relative freedom of action it would have all seemed most positive to me. Yet I had no way of imagining what an impact this bill would have on my life.

Ultimately, the Knesset passed the bill to establish the Commission for Future Generations with the support of MK (Member of Knesset) Tommy Lapid, the late minister of justice who first initiated the legislative drive. The Commission was given the responsibility and authority to influence legislative work in every place that short-term interests were likely to harm future generations. From that day on, the Knesset would be required to take the long-term consequences of its own legislation into consideration.

At the time I was appointed to lead the Commission, it was still unformed. We decided, over time, to carry out a structured process within whose framework we could determine the new body's appropriate vision and mission and develop an action plan in order to realize these goals. Much of our subsequent work within and outside the Knesset was derived from this process.

It is important to share the variety of subjects with which the Commission was involved during the years of its operation in order to allow you to understand the practical dimension attached to the vi-

sion. In what follows, I will provide a sketch of the broad swath of the issues we dealt with and then discuss in detail our four main areas of activity in the following chapter. I will explain our reasons for being involved in these policy areas, the way things were done and the decisions that were made on these subjects.

Over the five years of my tenure as commissioner, between 2001 and 2006, we submitted hundreds of reports, wrote opinions on bills and initiated comprehensive thinking in critical areas for the future of the state. We worked with Israel's best researchers, academics, organizations and other government bodies to help them tell their stories. I think the big picture will emerge from the wealth of practical subjects described below. It is easier to understand the essence of the Commission's role, its position within the Knesset and its impact by exploring the areas in which it intervened, how it intervened and the ensuing results.

The Commission's powers and authority

The Commission for Future Generations was born out of a great vision of the future. Lapid's intention, subsequently adopted by the members of the Knesset, was to establish an honorable position for the Israeli parliament among the nations of the developed world. Indeed, the Commission was established out of the conviction that those who formulate the legislation shaping Israeli society ought to consider the consequences of that legislation and that the various interests informing legislation should remain beholden to an overriding principle: protecting the interests of our children and grandchildren—of future generations—and preserving a broad scope of choices for them. In short, the Commission was to help the Knesset to take seriously the goals of intergenerational justice.

From a legal perspective, the Commission for Future Generations is defined in Chapter 8 of the Knesset Law. The idea was to establish an intra-parliamentary body with the resources to develop a comprehensive picture of Knesset legislation and carry out an audit of rami-

fications that could affect coming generations. The statute provides the Commissioner for Future Generations with the power to examine bills that, in his opinion, hold the potential for future harm and to bring concrete data and recommendations to parliament. The commissioner can express his opinion during the deliberation of legislative committees or submit it as an attachment to bills being discussed in committee or voted on by the parliament in plenum.

The commissioner also has the authority to express his opinion and make recommendations on various topics unrelated to specific bills as well as on secondary legislation brought to vote in the Knesset. He has the authority to advise members of the Knesset on any topic that has special relevance to future generations.

During my years of activity on the Commission, every bill tabled in parliament was also presented to us. This included private bills, government bills and secondary legislation. As commissioner, I had the statutory authority to announce our involvement in a particular bill. When this happened, I was invited to the meetings of the relevant committee to offer a written and spoken opinion.

The enabling legislation gives the Commission the authority to demand and receive any document, piece of information or report needed to carry out its duties. Similar in kind to the powers of the state comptroller, this authority covers requests to all governmental entities, including ministries, state institutions and government corporations (State Comptroller 1958).

This authority gives the commissioner an advantage over members of parliament and government ministers, who are often left in the dark regarding their colleagues' work. During my tenure, the Commission often used this authority to obtain information that was not otherwise available or that the authority had no interest or obligation to publish, such as data on water pollution or the internal deliberations of medical ethics committees.

In one illustrative example, the Commission looked into the issue of a government-run electrochemical plant, closed in 2004, that had contaminated its surroundings with hazardous materials. The Commission demanded the medical files of the plant's employees, the ma-

majority of whom turned out to be sick with related diseases for many years. Along with the medical files, the Commission requested to review any safety regulations that had been in place since the establishment of the plant in the 1970s, details on any doctors who attended employees and any environmental inspection reports made over the course of the plant's operation. The subject was initially ignored by the government. However, we presented the information to the media, which led to a public campaign and eventually legal proceedings on the issue.

One key Commission power is the right to be given enough time to prepare an opinion on a bill. The enabling statute even requires committee chairs to delay discussion on legislation in order to allow this, if necessary. This implied authority to create a delay in the legislative process can be crucial, particularly when it comes to budgetary bills.

By law, if Israel's annual budget is not voted on by March of the preceding year, parliament must dissolve itself and hold new elections. The commissioner can introduce uncomfortable delays into this process on issues he deems critical—but in doing so, he risks drawing antagonism from all sides. Thus, this authority was rarely invoked; when it was, it was usually done implicitly and behind the scenes rather than in a formal manner.

The Commission's mission

The law grants the Commission a broad and comprehensive scope of activity. Specific issue areas under our authority included the environment, natural resources, planning and construction, science, development and technology, education, health, the economy, demographics, quality of life, law and any matter that the Knesset's Constitution, Law and Justice Committee considered to have a significant impact on future generations.

This gave us authority, but not a guiding principle, without which no such body can affect change. To establish one, we started with an assessment of the political environment. And we all agreed that poli-

tics in Israel are dominated by a survival mentality—that is to say, by the sense that we are obligated to find solutions for today’s problems without the luxury of considering tomorrow. This has left the state with a perceived mandate to put out today’s fires while creating those of tomorrow.

A part of this problem is rooted in information flows. Broad knowledge is available on the topics with which the Knesset is involved. A vast amount of information is constantly being developed that illustrates the potential future consequences of Knesset legislation. However, this knowledge does not always find its way to policymakers. We saw that we could play a part in bringing this information to policymakers’ doorways, enabling those individuals in the lawmaking process to become more forward-looking.

But more broadly, we saw a great need to adopt futures thinking, which might allow us to ascertain the impact of today’s legislative processes on the future. The adoption of futures thinking advances long-term planning. We felt our role should be to establish the practice of creating futures both within the Knesset and the Israeli public at large.

We quickly agreed upon our guiding principles, declaring our mission to be: *enhancing long-term and sustainable thinking among policymakers and in the state of Israel at large and ensuring that these considerations are included in primary and secondary legislation.*

From the Commission’s mission to first principles

In the process of defining the Commission’s mission and ways of operating, we settled on three central principles to guide our action:

- *Scope of effect:* Theoretically, one could argue that every subject on a parliament’s agenda will impact future generations. For this reason, the Commission decided to test the scope of effect. Only when a subject under discussion promised substantial future impact would the Commission intervene. We chose to intervene in topics that had the power to impact the lives of a large group of people positively or negatively—and irrevocably.

- *Effectiveness*: Because the Commission had an obligation to use its limited resources optimally, we decided to intervene only in areas in which our involvement would be effective and efficient. However, this second condition was not met in all cases. We chose to intervene in some issues we felt to be of such paramount importance to future generations, even if it was clear that our intervention would be solely declarative and would not bring substantial results within the legislative process.

Throughout the entire period of our activity, we examined the probable effectiveness of intervention with respect to every subject under discussion in the Knesset. There were some issues for which substantial change was clearly impossible; but it was also clear that small, recurring battles had the potential to instill—if only slowly—the understanding that change was necessary.

The annual Appropriation Bill serves as a good example of this tactic. Every year, the Commission presented letters, position papers and broad opinions analyzing the dozens of paragraphs making up this legislation. The Appropriation Bill itself was never cancelled, but we made a humble contribution to ameliorating its most harmful proposals.

- *Spectrum of choice*: I have been asked—more than once—if we have the authority to make any kind of decision for future generations and, if so, where it comes from. Do we have the right to decide what core values they will live by, what their priorities will be, what their urban and rural areas will look like, what kind of water they will drink, what kind of air they will breathe, what kind of food they will eat, in what kind of cars or planes or trains they will travel, what is right for them and what isn't? How do I allow myself to speak in the name of those who have not yet been born? How do I decide what policy is good or appropriate for them and what is not.

The answer to these questions is that we do not have the right or authority to make this kind of decision. As a result, at the Commission, we sought to ensure that future generations would have the *broadest spectrum of choices possible*. We therefore defined the

Commission's role as protecting the scope of this spectrum in the face of political decisions threatening to narrow it.

Our actions today must leave behind them a wide and differentiated enough spectrum of choices for future generations to create their desired future. If future generations are denied enough clean water to drink, clean air to breathe or sufficient food for their needs, they will be denied sufficient liberty to establish their priorities. If we do not act today to establish sustainable conduct, the whole question is likely to be moot because future generations of the human race will not be able to survive on Earth.

And this is not only a matter of environmental concern. If we, as members of humanity, do not act to lessen the divisions and hatred within our societies, the day is likely to come when one frustrated person presses on one of the too many red buttons we already have, and all of our theoretical discussions will be carried off by the wind.

Creating a public status

Naturally, for an institution with no precedent and designed to act with the interests in mind of a public that did not yet exist, creating a public status was one of the first and most fascinating issues to address. One of the Commission's main responsibilities was to raise public awareness in a way that would make an impact on committees discussing legislation and on individual parliamentarians. We had a mandate to participate in committee discussions and to attach our opinions to bills as they were voted on in the plenum. But we needed recourse to the media, as well.

Exposing the Commission to the media brought about four main effects:

- *Recognition*: Parliamentarians started to appreciate the Commission as an institution with the power to cultivate public interest in issues. The Commission thus won recognition as a body to be considered within legislative activities.

- *Enhancing participatory democracy*: The public started to show an interest in the concept of sustainable thinking and to demonstrate how they related to it, mainly in terms of suggesting input. People in Israel were apparently concerned about the future and found the new, still unfamiliar Commission to be a potential vehicle through which they could express their anxieties. To us at the Commission, this presented an opportunity to introduce the Commission’s parliamentary powers to the public.
- *Improved information*: Information—primarily from academia—was directed at the Commission, introducing us to a wealth of exploratory research on issues relating to future generations.
- *Shaping discourse*: The mere expression of the concepts of future generations and futures thinking, which had not previously been introduced to the public, helped these ideas to find a broader footing in public life. Both of these concepts have since been used as touchstones in Knesset debates and in decisions made by Israel’s Supreme Court.

In short, the media—which was the conduit through which some of the most vociferous criticisms targeting the Commission were expressed—became an important tool for us as well, allowing us to garner public support as we positioned the Commission and the concept of future generations. Indeed, throughout my tenure as commissioner, it was through the media that I felt both biting criticisms as well as reassuring voices of support.

The rights of future generations and the values of sustainability

One of our first steps in establishing the Commission for Future Generations was the significant need to explain and define what constitutes “of particular interest to future generations” as stipulated in the wording of the law. In the beginning, we defined this in terms of our understanding of the term sustainability, which expressed the values on which responsibility to future generations is based. Surpris-

ingly, though the concept of sustainability—to the best of my knowledge—was not a concept the initiators of the law were aware of, the 12 areas which legally fell within the Commission's authority matched the principle components that make up the concept as it is described in scholarly literature.

The Commission had been authorized to act in policy areas falling within three broader areas that often involve interrelated issues: society, economics and the environment. And, indeed, one of the Commission's successes was to raise public awareness of sustainability in a way that encompassed all three and in a period when the idea of sustainability was associated almost exclusively with environmental issues.

Soon after the Commission's formation, Israel began intense preparation for the United Nations' World Summit on Sustainable Development held in Johannesburg in 2002. Internationally, vast amounts of knowledge were being collected with an eye toward application of the Johannesburg Plan of Implementation (to which Israel is a signatory) based on the principles developed at the United Nations' Earth Summit held in Rio in 1992. In preparation for the Johannesburg summit, I—as Commissioner for Future Generations—participated in the final meetings of the interdepartmental committee established by the government for this purpose and, later, took an active part in representing Israel in various committees and events at the summit.

A key element of this policy drive, both internationally and in our work in Israel, was to highlight the conflict between short-term development forces and sustainability. A policy striving for sustainability requires multidimensional planning that takes into account social, economic and environmental issues as well as long-term considerations, while short-term development forces seek to act within the immediate time frame in order to solve problems of the here and now.

The act of legislating almost always brings us face-to-face with this conflict, obliging us to consider our steps so that the legislation will be sustainable. The Commission saw in this concept of sustainability, and all that follows from it, a platform of ideas for its work. The first step in adopting this concept in practice was to examine its

significance for the various policy areas within the Commission's purview. What did we mean in speaking of sustainable economics? Sustainable health? Sustainable education? Sustainable scientific development? A sustainable environment?

To some extent, these questions had already become part of Israel's public discourse. A 2002 shadow report on Israel's progress toward environmental sustainability released by environmental organizations found a pattern of development underway which contradicted the principles of sustainability, in certain cases irreversibly (Friends of the Earth Middle East 2002). From examples like this, it was clear that the process of embedding the principles of sustainability and building a strategy unique to Israel was unavoidable. At the Commission, we began to see legislation focusing on sustainability as a critical tool for helping implant futures and long-term thinking in Israel's decision-making processes and governmental policy design.

After the Johannesburg summit, the Commission drew up a proposed government bill to create a strategic plan for sustainable development, which was presented to the government on January 30, 2003. In the Knesset, we pressed for the advancement of a basic law on the topic since this would raise the issue to the status of constitutional law.² As such, it would serve as a counterweight to the interests that opposed sustainable development.

The bill was intended to establish—at least as a goal—that all economic, societal and environmental development be conducted in a sustainable manner. Indeed, the U.N. Plan of Implementation signed at the Johannesburg summit spoke specifically of an institutional framework as the proper way to embed and advance sustainable development at all levels of government. The plan called for the government to use all available means to embed these principles, and it specifically mentioned the use of legislation and the rule of law alongside the activity of governmental institutions (United Nations 2000).

2 For specifics regarding the status of the Basic Laws within Israel's constitutional framework, see the Appendix

However, prominent individuals in Israeli politics proved to be concerned that a basic law on sustainable development would stop the wheels of development. As a result, the sustainable development bill ultimately formulated by the Commission and presented by members of the Knesset was narrower than originally intended. We hoped that a clear law, even a merely declarative one, would be recognized as a principle to be taken into account in setting action priorities. Even this would be a significant first step in the right direction.

The bill was discussed in the Constitution, Law and Justice Committee. Yet, despite wide agreement as to the importance of legislation of this sort, the bill was never passed. It is my hope and belief that the conditions for this advanced legislation will coalesce at some point.

It is worth noting that, following the Commission's initiative, the right to sustainability found its way into the map of rights contained in the proposed bill for the Israeli constitution. It is my hope that the transition from a legal system based on basic laws to a legal system based on a written constitution will take place quickly and that, with it, the rights to sustainability will be anchored in the constitution. This would bring about a whole system of changes, as constitutional rights override obligations and rights legislated as "regular" laws. Many laws would have to be reviewed in order to confirm that they do no damage beyond what is called for by the right to sustainability.

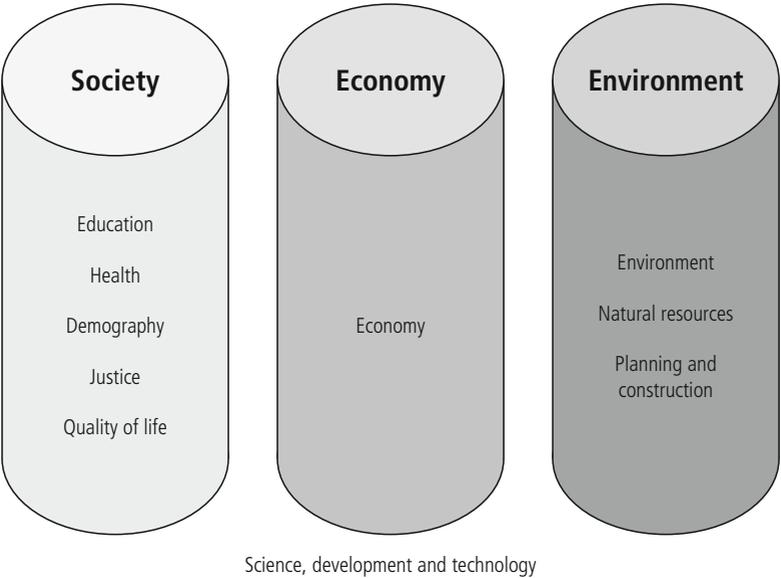
Yet, even despite this early legislative setback, the post-Johannesburg campaign bore fruit. The idea of embedding the concept of sustainability in government action, and the associated examination of the built-in conflict between development and sustainability, led to public conversation and brought a new dimension to decision-makers' discussion. New terms entered the public and political conversations. The terms sustainability, sustainable development, futures thinking and concern for future generations are now found in almost every public debate over decisions with long-term significance. The Commission for Future Generations, together with many others, contributed to the strengthening of the conversation about sustainability in Israel.

The problem is that use of these words is much more frequent than is the activity on their behalf. But one can hope that the more conversation there is of this kind, the more the public sense of commitment will grow, and that activities bent on protecting sustainability will follow.

The Commission’s interventions

Building a strategy for sustainability in each of the policy areas dealt with by the Commission for Future Generations demanded that we develop a renewed definition of sustainable development. As a part of this, we had to evaluate priorities and think of how to allocate and manage resources in a way that would be sustainable over the long term.

Figure 7: Commissioner’s areas of activity



In the next section, I will provide a brief survey of the Commission for Future Generation's work in each of the three main areas of sustainable development. These correspond to the Commission's areas of jurisdiction as illustrated in Fig. 7.

I believe that exploring the details of the topics in which the Commission was involved will allow you to see the practical aspect of this kind of body and will emphasize the need to establish and maintain this kind of body in every parliament in the world. By way of introduction, I briefly discuss below three policy areas in which the Commission was involved: education, health and environmental policy. In the chapter following, I provide an in-depth exploration of the Commission's activities in each of these areas.

Education

In the field of education, the Commission for Future Generations defined four principles that organized its activities: sustainable education, future education, child welfare and the promotion of youth involvement in the democratic process.

- *Sustainable education*: The Commission for Future Generations defined sustainable education as much more than education for sustainability. Rather, we sought a new *raison d'être* of education itself. We focused on providing for the special needs of youth in Israel's primary and secondary education systems and on the rights of those with special needs to receive support so that they could be integrated within the education system in the best possible way. Within the framework of the Commission's "Education 2025" project, which we initiated in 2005, we engaged more than 150 researchers, academic lecturers, students, teachers and teachers of teachers to define the kind of education Israel should have by the year 2025. More on this subject will be discussed in the chapter on education.
- *Israel's future education system*: The commissioner was a member of the legislation committee for the Dovrat National Task Force in

Education, which aimed to bring education legislation up to date. In my capacity as commissioner, I helped write the “public education law” that would contain the majority of educational legislation and allow Israel’s general public to take a more active role in the education system. Guided as we were by the firm belief that the education system sows the seeds of the country’s future, we sought to integrate equal rights into public education. To this end, we established a joint forum with the Israeli Center for Management (a forum of future managers), in which we came to understandings on goals and developed the wording for a document on the topic.

In a position paper and testimony in front of the Knesset’s Education Committee, the Commission pressed for more resources to be invested in preschool education, which we felt was a valuable investment in children’s long-term future. We recommended creating a legislative framework covering the rights of gifted and talented children in the education system, believing that they represented an important part of the country’s future human capital.

We worked with philosophers of education on a document calling for the creation of an authority concerned with strategic thought in education. As we saw it, this authority would work with the Ministry of Education in everything to do with continuous strategic futures thinking on education, and it would be made up of philosophers, teachers, pupils, students and experts from the Ministry and academia. The document was presented to the minister of education and the implementation team of the national task force on education. And while we had made great strides in garnering support for this legislation, the Commission’s tenure came to an end before our work in this area could be successfully completed.

- *Child welfare*: As part of its activity in the area of education, the Commission worked on various levels to advance legislation for the preservation of child welfare and children’s rights. We saw this activity as part of our authority and felt a responsibility to assure a better future for the generations to come, the parents and

leaders of the future. We dealt with a variety of subjects in this connection, including the status of minors in criminal proceedings, children and families, and the rights of children in civil procedures.

In work on the 2004 National Insurance Bill, the Commission recommended legislation that would increase the size of the fund for children at risk from NIS 15 million to 4 percent of the children's branch of social insurance collections. This decision followed disturbing data showing a rise in the number of children and youth at risk and recent cuts in benefits for families and children.

Under this plan, the National Insurance Institution would have been able to devote substantially more funds to developing services for children at risk. These additional services would include those focused on removing children from the cycle of risk and distress, preventing additional children from entering this cycle, protecting and treating children who had been harmed and, more broadly, on investing appropriate resources for the at-risk population's growing needs. The bill was introduced in the Knesset by MK Shaul Yahalom.

In addition, the Commission initiated a discussion in partnership with the Committee for the Rights of the Child on the absence of educational frameworks for young children in Arab society and submitted its opinion on the matter. We recommended that the Israeli state carry out its part in breaking the cycle of poverty and addressing the lack of educational opportunities in Arab settlements. By this, we meant not only certain actions required to improve the situation, but also the establishment of a broad day-care infrastructure in Arab settlements.

- *Promoting youth involvement in the democratic process:* The Commission was involved in various initiatives aimed at familiarizing children and young people with the decision-making process that affected their lives, thus strengthening their commitment to Israel's democratic process.

We supported the establishment of a youth parliament, serving as an advisory council alongside Israel's Knesset. In this goal, we

worked with the initiator of the idea, MK Rabbi Michael Melchior, the Ministry of Education, the educational center in the Knesset and the Kibbutzim College of Education's Center for Democracy. In addition, we worked to promote public involvement by students in the Tel Aviv school district. The Commission took part in a steering committee, developing a model in which young leaders would work with the Knesset and local government figures. In cooperation with the educational administration of the city of Tel Aviv, we initiated four regional conferences in which children participated and which were designed to stimulate broad involvement and awareness of the project. During the year, children in the project visited the Knesset several times and participated in activities of the Knesset and its committees, giving them the opportunity to influence the public agenda from their points of view as young leaders.

Health

In developing a conception of sustainable health, the Commission focused strongly on advancing preventative medicine. In Israel, as in the Western world, most of the national resources are invested in treating morbidity and not in its timely prevention. With this in mind, we worked to advance a better balance between health and medicine.

Today, more than 96 percent of Israel's resources for health and medicine are dedicated exclusively to the needs of medicine as a profession. This includes expenditures on medical services, research and development and investments in medical technology and infrastructure; meanwhile, less than 4 percent of overall health expenditures are actually allocated to programs targeting healthy lifestyles or individual health. Without a policy for improving health, the resources demanded by medical care will continue to rise. Already today, there are insufficient resources to respond to this increase.

Data from the World Health Organization shows that, in 2002, about 60 percent of all cases of human death globally were caused by

non-contagious illnesses—from heart disease, strokes, cancer and other illnesses, many of which are related to genetic and environmental factors. These ailments constituted 47 percent of all morbidity. The Organization also estimates that, by 2020, 73 percent of all deaths in the population will be caused by these ailments, and they will constitute 66 percent of all morbidity. Given these numbers, and the fact that we have the power to affect our environment in order to preserve health, the Commission chose to advance the issue of health in two areas, namely, raising awareness about the relationship between public health and the environment and strengthening preventive services.

- *Public health and the environment:* To raise awareness of the relationship between public health and the environment, the Commission worked with civil society organizations, concerned public leaders, policymakers and members of the medical community in shaping policy on pollution. In one initiative targeting air pollution, the Commission called on the Ministry of the Environment to institute mandatory pollution regulations to replace the “Industrialists’ Treaty,” which had been in place since 1998. This agreement between the Ministry of the Environment and the Industrialists Association constituted nothing more than a voluntary commitment on the part of industrialists to implement standards for discharging pollutants into the air. Lacking the binding power of a law and phrased in exceedingly vague terms, the agreement had little effect in terms of reducing pollution.

Although criticized by both industrialists and the Ministry of the Environment for advocating a clean air act for Israel, the Commission continued its work by initiating a workshop on the topic of clean air legislation in the Knesset’s Interior and Environment Committee. We invited Harvard University Professor Joel Schwartz, a world-renowned researcher on the relationship between health and the environment, who worked on the original U.S. Clean Air Act and its 1990 amendments and ultimately helped bring about Israel’s Clean Air Act, as well. Legislators, government ministry staffers, representatives of environmental organizations and citizens all participated in the workshop.

On May 16th, 2005, a Clean Air Act for Israel was introduced in the Knesset. The bill, formulated by the Adam Teva Vedin (Man, Nature and Law) NGO, was signed by 47 members of the Knesset. At the Commission, we submitted a position paper in support of the legislation, which was attached to the bill as it came to a preliminary plenum vote.

In a separate initiative, the Commission convened a conference on health and the environment at Tel Aviv University in collaboration with the Porter School for Environmental Studies. The conference was primarily intended for medical doctors and the opinion leaders among them as well as Israel's decision-makers on the topic. There were three sessions at the conference. The first dealt with providing a scientific context for the connection between health and the environment; the second dealt with the medical community's awareness of the relationship between health and the environment, and the third session served as a call for action to decision-makers. In addition to doctors, Knesset legislators, government ministry staffers and representatives of environmental organizations all participated. Eventually, following three years of heated debate and innumerable delays, the Knesset finally passed Israel's Clean Air Act in 2008.

- *Strengthening preventive services:* In our aim of advancing preventive medicine, the Commission issued an opinion on a pilot program to transfer preventive services in 10 communities from the responsibility of the Ministry of Health to health maintenance organizations (HMOs). In this opinion, we recommended that the pilot program be rejected in order to prevent mortal injury to preventive services. In parallel, we recommended conducting some long-term thinking on the character of future baby-health services. We also worked to confront and combat the issue of obesity, which, as in several other advanced industrial nations, plagues Israeli society.

Environment

The environment has a decisive effect on the quality of our lives, on our health and on our very existence. Human civilizations have filled the Earth, often at the expense of ecological systems. Human intervention in nature has attained unprecedented dimensions as a result of advances in science and technology. We have the ability to completely alter our physical surroundings, and we make extensive use of this capability. We use natural resources as raw materials and sources of energy and even create new artificial materials that have significant environmental implications.

But this intervention has come with a price. Humanity has changed the planet's delicate environmental balance. Climate change, the extinction of habitats and animal species, and the constant threat to the planet's variety of species—all of these have implications for life systems on Earth that are as yet impossible to estimate.

The foundations of human existence are based on the most ancient of elements – air, water and land. These elements are interrelated, nourish each other and are incomplete without each other. Harm to one of them is harm to them all. Any change in them has a long-term impact on life systems. From an environmental point of view, these elements are supreme issues, which, by their very nature, gather around them a whole complex of environmental problems.

A sustainable environment is one that maintains the life within it and leaves a range of resources to sustain the existence of future generations. This kind of environment is a product of thought, planning and a common approach by the various national bodies that implement and make decisions.

With this in mind, the Commission for Future Generations set as its goal the creation and promotion of an infrastructure of preliminary legislation for a sustainable environment in Israel. We focused on a variety of core issues, including health and the environment, open spaces, land policy, parks, coastal policy and the relationship between land, capital and governance. I will address the details of our environmental work in the “Fields of Action” chapter.

The national economy and budget

A stable economy provides a solid and necessary foundation upon which to move the future growth of the Israeli economy. Therefore, the Commission for Future Generations saw as a supreme goal the promotion of a forward-looking economy that holds high on its banner the principles of sustainability.

According to what is accepted in the world, and particularly in OECD countries, a sustainable budget is characterized first and foremost by transparency and long-term responsibility. It is built according to the multi-year programs of government ministries and allows measurement of production-based performance. These elements give it strategic weight for managing the economy in the long term because it allows the Knesset to supervise the priorities of the government and make informed, rational decisions. Since the state budget is a central tool for the design and influence of the economy in every country and reflects the priorities of the government, a state budget that is sustainable will lead directly to the management of sustainable policy in all areas of government.

During the 2004 – 2005 operating year, the Commission for Future Generations chose to promote the issue of a sustainable budget through six major points:

- a multi-year budget as a tool for significant, long-term decision-making;
- advocating legislation for a clear and transparent budget that allows for the supervision of its content and execution;
- acting to support a basic bill on the state economy (Amendment—budget hearings and the Appropriation Bill);
- acting to support a bill to amend Knesset rules (Appropriation Bill and the Budget Goals);
- conducting an economic appraisal of externalities and their inclusion in the sum total of considerations for examining every economic activity;
- presenting an opinion on the Budget Law and the Economic Plan Law.

Science and technology

Developments in science and technology in our time are creating and propelling social and economic processes the importance of which cannot be overstated. Scientific curiosity cannot and should not be stopped, nor should the budgets devoted to research and development. Indeed, Israel has relied on research and scientific and technological advances as a means of development since the state's founding, and these remain one of the "natural resources" available to it for its future. Yet this infrastructure does not receive the resources necessary to maintain and develop it so that Israel can prepare for future trends and their interdependencies.

This state of affairs was of particular concern to the Commission for several reasons. In general, the Commission's work in each one of its subject areas requires support from academic and scientific experts. Sustainable development and sustainable activity require a solid scientific infrastructure that can present an up-to-date snapshot of the status of national resources and infrastructure. In addition, sustainable management of resources requires the development of environmental technologies based on scientific development.

The Commission's work in supporting the national scientific infrastructure took a variety of forms. We promoted the issue of science and research as a national priority, supported the establishment and funding of governmental research institutions in legislation and in the government's agenda and called for renewed attention to the subject of government research and development (R&D) and the chief scientist in the ministries. But despite the Commission's wholehearted support for the scientific infrastructure as a whole, our activities in parliament were guided by the precautionary principle, especially when handling issues related to new technological developments.

In our world, the separation between science and technology is becoming more and more artificial. The terms are becoming interchangeable because technology is an essential platform for science of various kinds. Technological advances bring with them vast changes

in our lives that have impacts the depths of which cannot be plumbed, certainly not in light of the enormous pace at which they develop.

In light of this uncertainty, the Commission for Future Generations called on Israel's parliament to take precautions and remember that science's function is to serve humanity, and not vice versa. The Commission recommended the building of public mechanisms to ensure that scientific development will not be destructive to humanity. Though no halt in scientific development is intended, a long-term view requires that technological advancements be evaluated with respect to their effects on health, the environment and society.

In the areas of science, development and technology, the Commission for Future Generations took action on the following issues, among others:

- *Selecting a baby's gender*: The Commission warned about the lack of true public discussion on the topic of determining a baby's gender and about the failure to bring this before the Knesset in a proper legislative process. We were particularly concerned about the possible implications of this technology's use for non-medical needs. We asked the Director General of the Ministry of Health to state his position with respect to the issue of legislation on choosing a baby's gender. As commissioner, I also brought the topic up for discussion in a joint forum of the Knesset's Committee for Science and Technology and its Committee for Labor, Welfare and Health and presented our recommendations on the issue. The position paper we presented was discussed in the Ministry of Health in terms of its effect and possible demographic, social and ethical implications.

In parallel, the Commission demanded that the Ministry of Health provide information on other subjects that raised ethical issues as a result of the use of advanced technologies.

- *Genetic cloning*: In an opinion submitted by the Commission on the issue of genetic cloning, we took a clear stand in support of making a prohibition on human genetic cloning permanent. After

our request was denied, in light of the importance of and the ethical dangers entailed by the process, we worked on an opinion recommending amending the subject in legislation.

It is important to note that this initiative was by no means aimed at preventing progress in research using stem cell technology or any other technology for the purposes of healing or saving lives. The Commission concluded that the ethical and practical dangers to the human race as a result of inappropriate use of stem cell technology were enormous. However, we distinguished between the use of stem cells for medical purposes and the use of stem cells for the purpose of human cloning for fertility needs.

This decision was in keeping with the Commission's stand that the applications of scientific technologies must be subject to ethical considerations and fundamental values and that a supreme public committee should evaluate new technologies on this basis in order to prevent potential dangers resulting from inappropriate use.

- *Radiation:* According to the best expert professional information existing today, exposure to high levels of non-ionized radiation in a sustained, uncontrolled manner is likely to cause damage to humans, animals and plant life. As a result, the Commission believed that the precautionary principle should serve as a guide when analyzing the potential health effects of non-ionized radiation from various sources. In other words, we should identify possible damaging effects and prevent them in time, even if these are not yet clearly proven at a scientifically acceptable level.

The Commission argued that the failure to adopt the precautionary principle would essentially lead us to conduct experiments on large numbers of humans, a possibility pregnant with disaster. Much better would be to precede mass use with controlled experiments.

Within the framework of these concerns, we therefore worked together with a government-appointed team to establish a knowledge center for the study of electromagnetic radiation. This team, which was headed by a representative of the Ministry of Science,

was asked to prepare a detailed proposal, including organizational and budgeting details, for the establishment of such a center. The Commission also offered its opinion on a variety of bills regulating cellular broadcast facilities and non-ionized radiation at various stages in the legislative process.

This partial list of issues addressed by the Commission illustrates the variety of topics that can have decisive future impact. It shows the critical necessity for an objective body within the governing system that can analyze policy from the perspective of futures thinking and can draw decision-makers' attention to the far-reaching consequences of their activity. I believe it would be advisable for parliaments globally to take this path.

The Commission's legacy

In the last annual report published by the Commission for Future Generations, it was clear that the activities of the Commission had borne fruit. It had established its status and become "a self-perpetuating entity."

After five years of operation, we see that the Commission began to implant futures thinking within the parliament, government and the public. In each of the areas of action for which the Commission was responsible, there was very substantial activity. I can now say with confidence that we had a significant impact on Knesset legislative proceedings and on decision-makers in general. We played our part in helping today's policymakers shoulder the responsibility for future generations, which can sometimes be hidden in decisions taken here and now.

The Commission's opinions were lent great power by its absence of interests other than the good of the country's future, by the purity of its activities and by the foundation of its positions in both practical and research knowledge. The opinions' publication by the Knesset and other media bodies gave the words power and influence within

and outside of parliament. But there was also backlash: The more the Commission's voice was heard, the more the criticism increased, for it is not possible for criticism of parliament to come out of parliament itself. Criticism of the government naturally drew its own critics.

Members of parliament had and have the power to change the act of legislation establishing the Commission for Future Generations, to give or to take the power that it holds. Indeed, the realization of the Commission's own vision—the day when Israel's decision-makers lead with a responsible, future-oriented perspective—will make it into an unnecessary body. It is hard to say that the Knesset is close to that point; however, the Commission's five years of activity in parliament have established a basis for sustainable thought and planning both in the legislature and the executive branch.

The years of policy-making in Israel that took place without sustained long-term planning helped create a consensus on the crucial necessity for a body that could play this role in Israeli government institutions. Yet, despite all the activity detailed above, this consensus did not prove lasting inside or outside of parliament and, after five years of deep and meaningful activity in parliament, a bill for the annulment of the Commission for Future Generations was brought before the members of the Knesset. The annulment bill is no longer valid. Although the speaker of the house is required to appoint a new commissioner, he has yet to do so and has sought to minimize the Commission's authority.

Much more will be written and said about the interests and forces that lay behind this bill. In reading the protocols, it can be seen that there was not a single person willing to stand in front of the Knesset and say that there was not supreme importance in the existence of this body. There was talk of a different mechanism or different authorities, but nothing was said about the parliament's readiness to absorb within itself such an independent entity.

We must see in the experience of the Commission for Future Generations a difficult but also courageous, touching and enlightening experiment. Our activity was aimed at creating a space in the political system to work toward the creation of a future of health, safety

and welfare. And this was done precisely in the midst of a political environment characterized by a deeply ingrained survival mentality, by struggles for power and influence, by contradictory interests.

But it is proper, and our experience showed it can be possible, for every parliament in the world to consider its legislation's impact on the future—on us, the children of this generation and future generations.

Fields of Action

Education

“Education is the womb in which the world’s future is formulated.”

The call to support education reform by giving education a budgetary priority on par with that of infrastructure development was one of the most popular calls during debates in 2005 over education in Israel. In the midst of one of these discussions, I asked myself: Are we really not able to see education as the superhighway to the creation of our future?

After all, we were not talking simply of a technical aspect of “national priority.” The question to be addressed here is not even which policy field—education or defense—is more important in principle for the Israeli state. The question fundamentally at issue was: How willing are we to take responsible action for shaping our future?

Providing education is part of our basic human duty to create a better world for ourselves and our children. Education provided today determines the way our future will look when our children take hold of the reigns of leadership. Indeed, education determines how we ourselves will look in the near and long-term future.

We can clearly see what we have created so far. Yet despite our splendid cultural and technological achievements, many people throughout the world are ill at ease with the current state of the world. There is a lingering sense that—in terms of our core values, in terms of creating harmony on this planet—we are standing on the edge of an abyss.

Without the transformative power of education, we are doomed to create more of the same. Good intentions alone are not enough to ensure a sustainable future. We need to establish educational strategies capable of equipping the next generation with the cognitive and emotional tools they will need as they navigate the complexities of integrating social, economic and environmental sustainability.

In short: We need to make education itself sustainable and educate our children for sustainability.

Education for a sustainable future

The classic definition of sustainable development refers most generally to development that meets the needs of present generations without compromising the ability of future generations to satisfy their needs. Directed as it is at the three pillars of human life—social, economic and environmental relationships—sustainable development entails a way of life that can persist over time without self-destructing. Indeed, it is a way of life that does not damage the resources from which it draws; the utilization of resources enables the natural processes to replenish that which was utilized.

The role of education in sustainable development has thus far focused primarily on environmental or ecological matters. Underlying this approach is the increasingly widespread acknowledgment of the need to ensure that our children internalize the urgency of maintaining a healthy, prosperous world so that they too can bequeath such a world to their children.

The United Nations' "Agenda 21," a blueprint of action for states to develop education for a sustainable future, was designed to expand on the principles laid out by the 1992 Rio Declaration. Several states, including the United States, United Kingdom and Israel, have since drafted legislation for or issued statements on sustainable education, but no binding legislation has yet been passed in Israel.

Within the framework of its national strategy for sustainable development, the British government defined education for sustainable

development as that which “enables people to develop the knowledge, values and skills to participate in decisions about the way we do things individually and collectively, both locally and globally, that will improve the quality of life now without damaging the planet for the future” (SDEP 2000).

In Israel, at the Commission for Future Generations, we drafted a statement on sustainable education in which the education system would be charged with taking the lead in directing sustainable development. We stated that education must be aimed at supplying children with the requisite tools, knowledge and skill sets that empower them to go out into the world of tomorrow with the broadest possible spectrum of choices before them.

By defining sustainable education for the state of Israel in terms of the broadest spectrum of choices, we went far beyond the mainstream statements on curricula targeting environmental sustainability issues. Taking issue with the preventive-passive nature of classical definitions of sustainable development, we felt it important that the creative and proactive aspects of ensuring a desirable future should be given greater emphasis.

If sustainable education is education aimed at the realization of a world vision, it must nurture creativity in thought and action while, at the same time, facilitate the individual and collective capacity to be proactive. Whereas mainstream references to sustainable development are grounded in a survivalist mentality, our definition of sustainable education at the Commission is embedded in a fundamental affirmation of the power of life. Sustainable education in this sense addresses and incorporates our core values as a society and equips us to reflect upon our intellectual and emotional world. In so doing, it provides us with the integrative literacies needed to formulate our vision of the future.

Sustainable education is therefore future-oriented education. But if sustainable education is future-oriented, we must ask ourselves what sort of tools, what special capabilities, what emotional and mental funds of strength we seek to grant our children as they embark on their lives into this invisible future.

This is a daunting task. The children who are born today will retire (if retirement exists then) in 2073. What do we know today about the world of 2073? What can we know, and how should we act when we can't foresee it? What is our obligation to future generations? How shall we understand it, and how shall we design it?

We must constantly ask ourselves: What will better prepare our children to live in that future? What will give them the strength, wisdom and faith to create a better world? How will they be able to save themselves and their world—our world—from social, cultural and environmental annihilation?

How will they create a future that will enable them, their environment and their offspring to live and exist honorably and with pleasure—a future that will allow expression of all the goodness and creativity with which they are endowed and provide space for their physical, emotional and intellectual talents? How can we train them to cooperate with each other and to create harmony among human beings, our planet and all life upon it?

In addressing these questions, we know how to make a start. We must bequeath an intellectual and emotional flexibility to our students and children. We must give them a multidisciplinary and multicultural education, an empowering education and education for creativity. These are the cornerstones of sustainable education.

Our task is to train young persons to contend with a world in which the rate of change is accelerating by the day. We must thus find additional ways—ways unknown to us today—to train our youngsters for the creation of a desired future.

Education 2025 project

At the Commission, we sought to translate these questions about the essence of education into a more concrete form. We created a project, which we called “Education 2025,” aimed at adopting the techniques of future-oriented thinking to identify issues, ask new questions and develop new ideas and proposals that would catalyze sustainable edu-

cation in Israel. From the beginning, we understood that we were setting out on a journey into the unknown—and that there were more questions than answers.

The primary idea was to provoke new ideas and discussion from among Israel's educational leaders and thinkers. To this end, we held a large conference, inviting the foremost individuals within the political policy-making structures, leading educators and educational leaders from various nontraditional sectors. All of the conference participants, about 150 individuals, were asked to create a description of the ideal graduate of Israel's public education in the year 2025 and the environment they would be graduating from. The description had to cover three areas: future core values, a core program for future education and, lastly, Future expertise and life skills. At its core, we hoped, would be the idea of sustainable education.

Brainstorming with the ID procedure

We designed this to be more than an ordinary process of brainstorming, however. Seeking to unlock our participants' creativity, we adopted a unique methodology for futures thinking called Imen-Delphi (ID), developed by Bar-Ilan University's David Passig.

The ID procedure is a variant of the classical Delphi forecasting technique, which was originally designed as a method to solicit and synthesize the forecasts of experts groups and was to be used primarily to obtain estimates of projected dates of future occurrences. The ID procedure was developed to enable participants in a forum to analyze trends, discuss their meaning with other participants and generate desired solutions to common problems.

We saw the process as an excellent fit for our Education 2025 goals. It is a powerful and flexible exercise, useful for structuring group communication and well-suited for allowing members of a group to understand expert forecasts effectively, address their own personal futures, analyze complex problems, generate new images of the future, establish common ground and, finally, determine a com-

munal future working mission. It can also be described as a responsibility, self-awareness and concept-enhancement procedure—all elements we felt to be critical in developing an idea of sustainable education (Passig 1997, 1998, 2004).

The ID process takes place in several stages. In the first stage, participants concentrate exclusively on a desired future, ignoring practical concerns so as to focus on their dreams, daring to go beyond the bounds of the sphere of limitations to which they have become accustomed.

Determining which aspects of this vision are possible and attainable arises only in the second stage. It is then that participants define the future task and develop an implementation plan, searching for a way to bridge the visionary world and the real world. The aim is to encourage creativity, daring and the ability to transcend known patterns and limitations. Often, participants in such a process discover that perceived limitations do not exist in reality but are products of habit or figments of their imaginations.

I, like others at the Commission, was drawn to this methodology because it enabled a multidimensional orientation, namely, a simulation of one's desired personal future, a simulation of the desired social future and a simulation of the desired global future.

Putting ID into practice

For the conference, we adopted and adapted this multistage technique for our specific concerns. In a first stage, participants were given “thought provokers,” that is, quotations about education from thinkers of various times and places in the world. Every participant formulated questions about future education provoked by their own ruminations on the quotations. In our second stage, participants were asked to formulate responses to the questions that were asked in the first stage and use these to crystallize a set of mission statements.

In a third stage, participants were asked to express their professional opinions about the practicability of the mission statements that

had received majority support in the previous stage and to write down operational ideas for the list of agreed missions. This stage included work with future imagery. Finally, participants were asked to compose a whole system of operative recommendations.

The response to the conference was extremely positive, and it encouraged us to go farther. Seeking to spread the benefits of this thought process as widely as possible—and to draw ideas from the widest possible body of thinkers—we set out to pursue a similar process with a far larger group of 2,000 educators and practitioners in Israel.

With a group this size, there was no practical means of conducting the procedure in a conference setting. Instead, we started by sending each of our expert participants a workbook containing a few dozen of the “thought provokers,” or quotes on education (for examples, see “An ID for all of us” beginning on the next page). We asked the experts to pause after reading each one and to compose one or more questions with respect to future education that came to mind as a result.

In order to advance to the next stage, that of mission statements, we sent all the experts a collection of the questions we had gathered. Each of the participants was then asked to answer a list of questions composed by Commission staff, drawing from and synthesizing those the participants themselves had provided.

From the answers to these questions, we created a list of future or mission statements for the future of the education system. These were sent to the experts, who were to decide on priorities and order the statements according to their importance for graduates and the educational system itself as well as in terms of their feasibility.

The third stage, as with the conference, was the consolidation of the future missions and, ultimately, the development of a link between these statements and practical proposals. Participants were asked to respond to the list of mission statements that received the most votes in the previous round and to add operative ideas to the statements.

Unfortunately, work on this study stopped at its peak because my five-year term as Commissioner for Future Generations came to an end. As a result, we did not manage to formulate or arrive at a consensus on a renewed definition of a future graduate of the Israeli pub-

lic education system. I look forward to seeing this project successfully finished by the next commissioner.

An ID for all of us

I believe this kind of program should be carried out in every government institution in every country of the world. Naturally, the triggers for thought—the quotes, or “thought provokers,” as well as the questions that follow—must be tailored to the circumstances of each country and each issue.

But this is an exercise that is valuable for you and me as well. Sustainable education is not something that should be the sole responsibility of professional educators and youths attending school. For, after all, we all learn and teach throughout our lives, whether consciously in a formal structure, through our behavior and interaction with others, or through informal study in an infinite variety of forms.

Thus, I want to include you, the reader, in this trek to the future. Allow me to suggest that you follow the path we did and experience this fascinating process yourself. And, so, let us look inward and enter the world of future imagery.

The year is 2025. The pupil who comes from the future wakes up with a smile. He rubs his eyes and stretches his limbs toward the new day. Let’s assume that he’s 10 years old. What kind of day will he experience today? What will he learn? Whom will he meet? He remembers the dream he had during the night . . . What was his dream?

On his way to school, he meets friends. He loves these moments. He enjoys the journey. We will let our imaginations unfold pictures and sensations before us.

What does the educational space that he is about to enter look like?

What words of peace and encouragement will greet him?

What colors and sounds will he meet?

What will stimulate his senses and preserve the natural curiosity that tickles him inside?

Who will caress his heart, and how?

Let's allow the vision of education for the children of the future to appear before us. What is the most important thing for them? What values are important to them? What skills? What is the nature of the relationships among them and their relationship to the teaching figures? What are the teaching methods that suit them? What is the image of a graduate who completes the years of compulsory education? What tools does he carry away with him for the tasks of his life? What are his core values?

Are his eyes open? Is his heart open to his community?

What qualifications do the teachers of the future possess? What kind of training do they receive?

Let's look at everything that pops up in your mind—we will not judge—and let's outline the image of the future class for ourselves, the future school, as they freely enter our imagination.

And, now, let's read the following quotes. Let these sayings seep into our consciousness and see if our images of the future change as a result and, if so, how. Let's allow ourselves to release our hold on the ideas we have about education and read the following pages as a clean slate. Even if these quotations are familiar to us, it is still very important to let ourselves see how reading them anew influences our perceptions.

“Your children are not your children.
They are the sons and daughters of Life's longing for itself.
They come through you but not from you,
And though they are with you yet they belong not to you.
You may give them your love but not your thoughts,
For they have their own thoughts.
You may house their bodies but not their souls,
For their souls dwell in the house of tomorrow,
which you cannot visit, not even in your dreams.
You may strive to be like them,
but seek not to make them like you.
For life goes not backward nor tarries with yesterday.”

(Khalil Gibran 1996)

“In such a world, the most valued attributes of the industrial era become handicaps. The technology of tomorrow requires not millions of lightly lettered men, ready to work in unison at endlessly repetitious jobs ... but men who can make critical judgments, who can weave their way through novel environments, who are quick to spot new relationships in the rapidly changing reality ...

“Finally, unless we capture control of the accelerative thrust ... tomorrow’s individual will have to cope with even more hectic change than we do today. For education the lesson is clear: its prime objective must be to increase the individual’s ‘cope-ability’ — the speed and economy with which he can adapt to continual change.”
(Alvin Toffler 1970)

“The aim (of education) must be the training of independently acting and thinking individuals who, however, can see in the service to the community their highest life achievement.”
(Albert Einstein)

“Know that each person is unique in the world ...
And he would do well to bring his uniqueness to perfection.”
(Rabbi Nachman of Breslov)

“Know yourself before you attempt to get to know children. Become aware of what you yourself are capable of before you attempt to outline the rights and responsibilities of children. First and foremost you must realize that you, too, are a child, whom you must first get to know, bring up, and educate.”
(Janusz Korczak 2006)

“In Waldorf education, we aspire to enable our children to become healthy people of body and mind and clear of spirit. Bodily health, freedom of mind and clarity of spirit are things that humanity will need more and more in the future.”
(Rudolf Steiner)

“The rapid obsolescence of knowledge and the extension of life span make it clear that the skills learned in youth are unlikely to remain relevant by the time old age arrives. Super-industrial education must therefore make provision for life-long education on a plug-in/plug-out basis ... If learning is to be stretched over a lifetime, there is reduced justification for forcing kids to attend school full time ...

... [This] places an enormous premium on learning efficiency. Tomorrow’s schools must therefore teach not merely data, but ways to manipulate it. Students must learn how to discard old ideas, how and when to replace them. They must, in short, learn how to learn.”
(Alvin Toffler 1970)

“The changes and uncertainty that characterize the society of our day are so large that it is dangerous and mistaken to base the curriculum on any static view of reality—whether of the past, the present, or the future ... We must select for the curriculum those elements which can provide true preparation for most of the possibilities that the future world holds. In the new age, students will need new skills, primarily in three areas: the expertise to learn—to teach students how to learn, how to forget what they’ve learned, and how to learn anew. Skills in creating human connections—through groups for study, or to accomplish a task. And skills of choosing and initiating.”
(David Passig 1997)

“I didn’t teach Anna to do things the right and proper way. There is no doubt I taught her how to do things—in quick ways, funny ways, hard ways, all kinds of ways, but not the right way. First of all, I myself wasn’t sure what the right way was. So Anna was naturally forced to find her own way ...”
(Fynn 1974)

“The primary aim of our education must be the cultivation of people who are skilled, caring, and who can give and receive love.”
(Shlomit Grossman, Former Head of the Education Section of Israel’s Commission for Future Generations)

When you are finished reading—and make sure to take time to think and let your mind wander across any unexpected terrain—write down any questions about the future that occurred to you as you were reading.

Once you have finished with these questions, allow yourself to sit, think and observe what you have written. What mission statements proceed from your questions? Here, too, we will permit ourselves to deal solely with the desired future rather than the future that our practical, skeptical sense tells us is possible. We will imagine we have no budgetary limitations, no political limits, no limits from the environment and so on. We will remove the concept of limitations entirely from this sphere of imagination in which we are immersed.

After writing these mission statements, let's take a little more time and consider a list of actions that could help bring about, even if only in part, the desired educational landscape we have envisioned.

For the first time in this exercise, we will concern ourselves with existing reality—but without abandoning the future we have envisioned. The actions on the list should be practical, but all should be directed toward the fulfillment of the missions we have set up for ourselves. I hope that you, like others, will discover that creative solutions arise within you when considering your desired future.

It may not be our task to complete this work. But through this exercise, we can see how, within our sphere of activity—whether as educators, leaders, decision-makers, parents or children, teachers or students—we can get closer to creating our desired future.

As I have previously noted, research shows that the very act of creating clarity about our image of the future creates a breakthrough of intention, which in the end produces success. This is not a process that should stop today, with the end of my tenure as commissioner or with your reading of this chapter. As a team, with people who work with us or with people we later come into contact with, we can continue to create joint mission statements and, from them, lists of activities that strengthen our desired educational future.

It is important to share the insights we've gained with others and the solutions that emerge as well. In our Internet-connected era, we

have enormous power to strengthen ourselves, our surroundings and a significant part of the world through these processes. This process can be carried out (at least once a year) by educational leaders, educational decision-makers in every country, school principals, teachers in the teachers' lounge, parents when they get together, children in their classrooms, students in universities—indeed, by all of us.

Let's not be afraid to dream. When our images of the future are clear, we can act. Whether in a public context or a political one, whether as teachers, parents or students—each one of us, according to his or her ability, can formulate in the most practical way possible steps toward this future.

Sometimes a small, apparently minor change will be made, and we will be amazed to see that it brings about results we never imagined possible in a kind of butterfly effect. Sometimes, if we are responsible for extensive resources, we can carry out changes with greater mass. Sometimes the change will be top-down, and sometimes bottom-up. All we have to do is see the light at the end of the tunnel and hold to that direction, even if we think it is impossible to reach. Our inner compass, our intention and our togetherness will lead us on the path to the future.

Health

The sages did not treat those who were already sick. They taught those who were not yet sick. (Veith 2002)

When we hear of someone whose health is unstable or who has died from a serious illness, we naturally think of how this pain can be soothed. This might be through minimizing the illness's effects or by healing the individual. But, often, the most nagging question is one of missed opportunity: Could we have prevented the illness if we had acted earlier?

At the Knesset's Commission for Future Generations, we believed this question deserved attention before the onset of illness, not after-

ward. As one of our key subject areas, we thus chose to focus on strengthening preventive medicine in Israel.

While this aspect of our work took a number of forms, I will describe here our efforts in combating the obesity epidemic and, particularly, the childhood obesity that is threatening health and shortening lives around the world. We saw this subject as one of the most important issues in preventative medicine today, and one that would have substantial impact on future generations.

Our vision was to create a state such that, in 2025 and thereafter, obesity would be a marginal phenomenon. Our ultimate dream was to create a future in which people would not suffer from illness as a result of obesity.

But, more generally, we hoped to encourage discussion and involvement in the topic of sustainable health. In this context, we promoted thinking and activity connected with public health in Israel today and with the health of future generations. Ultimately, we believed—and I believe today—that the core of sustainable health policy must be an effort to deal from the outset with health rather than with disease.

Defining the obesity epidemic

Since late in the 20th century, the industrialized world has been characterized by an abundance of food that is high in calories, widely available, accessible and cheap. At the same time, advanced technologies have made it possible to achieve many of our goals with minimal physical effort.

We live in a time of plenty, and obesity is the ailment of an affluent society.

The problem of obesity is taking a more and more central place in daily life. On the one hand, people are getting fatter, a trend worsening in most developed countries. On the other, people's awareness of their weight is intensifying, from both the aesthetic and health points of view. Today, many studies have found that excess weight contributes to increased risk of morbidity, including early mortality, heart at-

tacks and ailments, diseases of the circulatory system, type-2 diabetes, high blood pressure, breathing problems, diseases of the bladder, osteoporosis, various kinds of cancer, physical disability and more (Caspi 2004).³

Obesity has a cost to society as well. We can distinguish between three forms of cost:

- *the direct cost*, or the cost of medical treatment for obesity and the diseases directly caused by it;
- *the indirect economic cost*, or the loss of output in the labor market, in the household or in other systems as a result of early mortality or absences attributable to weight-related illnesses; and
- *the indirect individual cost*, including the cost of assorted diets and damage to the quality of life.

Though large differences exist between countries, roughly 1.6 billion adults around the world suffer from problems of excess weight and, of these, at least 400 million are obese (World Health Organization 2006). By comparison, in 1995, about 200 million adults suffered from obesity.

Among children and teenagers, too, obesity is at epidemic levels in certain areas of the world, particularly in high-income countries, but it has also risen dramatically in low- and middle-income countries as well. According to estimates, about 18 million children under five years old worldwide are overweight.

According to data on obesity collected for the Commission, the cost of obesity in Israel, including direct treatment and care of related ailments, is estimated to be about \$3 billion annually, or 40 percent of the country's health budget. These estimates are derived from the costs of the disease in the United States, where the cost of treating these ailments just for those suffering from obesity is about \$102 billion.

In Israel, 68 percent of the population is under 18 years of age. A recent study in 15 industrialized countries worldwide examining the

3 Unless otherwise noted, all data on obesity for Israel referred to here in this section is derived from Micha Caspi's research published in 2004.

extent of overweight and obesity among adolescents between 13 and 15 years old showed that Israeli children are among the heaviest in the world, falling into third place after their counterparts in the United States and Greece (Lissau et al. 2004). When segmented by gender, Israeli girls rank in fourth place (6.2 % of Israeli girls are overweight), while Israeli boys are ranked third (6.8 %).

It is no exaggeration to call this an epidemic, though it has no source in viral or bacterial infection. Indeed, obesity is no less destructive than the severe epidemics that mankind has known throughout history. Identifying the urgency of the matter early on, in 1998, the World Health Organization declared obesity a global plague. Some health officials estimate that if nothing is done to change the situation, the worldwide death rate from obesity and related diseases will rise by 30 percent in 20 years and that the number of deaths will rise from three million people to five million per year (UK Dept. of Health 2002: 40).

A number of countries around the world have national projects for the prevention and treatment of obesity, but Israel has no national system treating the issue. The Ministry of Health has begun to deal with the matter, but there is no project that takes a broad systemic approach.

Reasons for obesity and types of fat

Obesity is caused by many factors. Two of the main ones are unbalanced nutrition, usually associated with an increased consumption of calories, and reduced physical activity. The abundance of food that characterizes our era prompts us to eat more, and much of this food is even enriched. Primeval man was short of food and constantly in motion in order to find it. Today, food is constantly accessible, and the nature of our work involves a great deal of sitting. The amount of movement we carry out in a day is much less than in the past, and it is decreasing among children who sit in front of a computer and television for many hours and, so, are much less active than children were

in the past. In other words, weight gain takes place whenever the balance of energy is positive—when the amount of incoming energy from food is greater than that which is expended (mostly by physical activity).

Usually, obesity is caused by a combination of genetic, cultural and environmental factors. However, researchers conjecture that environmental factors are the principal contributors, while genetic and endocrinological factors, which are known to influence the body's weight regulation, make a relatively smaller contribution. For instance, even a person's manner of eating can impact weight: eating while standing, eating quickly, eating while doing other things, such as watching television or the computer, eating while reading or doing homework, eating while stressed or from boredom, eating in the kitchen straight from the pot, or eating at scattered moments throughout the day, all can increase risk of weight gain.

Obesity can produce many physical complications, among them orthopedic problems, such as pain in the knees, breathing problems during sleep and hormonal disturbances. However, the emotional aspect is also complex. Obesity is often a factor in low self-esteem or lack of confidence, the negative effects of which are well documented.

The reinforcement of a slender image as being beautiful has had a lasting impact on eating disorders and obesity among young people and adolescents. This image is getting stronger in Western society thanks to the widespread dissemination of this message through visual cultural and commercial content, such as photography, movies, television, billboards, periodicals and websites. This wealth of information and imagery that creates an ideal of beauty for a young, easily impressionable audience often leads to effects opposite to the ones desired—to eating disorders, extreme diets or obsession.

The obesity epidemic is affecting developed and developing countries, and it is being felt at all levels of society. However, it seems that, in developed countries, obesity is particularly widespread among the weaker strata. While agricultural and economic development have ensured that most foods are now accessible to most of the public, fatty foods, sugar and salt—expensive in the past—have become the cheapest items in the food basket.

There are a number of target populations for which approaching the problems of obesity with foresight is particularly significant. The first group is pregnant women. The environment of the womb is deeply influential on fetal development; thus, the passing of poisonous substances to the fetus might influence the future development of diabetes or have other deleterious effects on newborn health. Therefore, from the perspective of generations to come, pregnant women's health is a paramount issue.

A second important group is babies. Recently, it was discovered that babies born at a normal weight but subsequently overfed (often out of a mistaken belief that a fat baby is a healthy baby) are more liable than others to develop diabetes. A third critical group is children, and a fourth is adolescents.

Children—on the forefront of obesity worldwide

The rise in obesity among children worldwide has been particularly worrisome. In the United States, the high rate of escalation in the last 20 years has strengthened the supposition that environmental factors bear a significant share of responsibility. The more hours children watch television or a computer, the more they are in danger of obesity. It was found that most overweight children have an inactive lifestyle with little physical activity and many hours of sitting. Other contributors include exposure to food advertising, especially for fatty foods, as well as consumption of fatty foods in larger quantities than in the past.

In 2004, the World Health Organization reported that 10 percent of schoolchildren worldwide between the ages of five and 17 were overweight or suffering from obesity. There have been several further studies exploring the subject of overweight children and their subsequent risk of being overweight as adults. It found that overweight children at age three with normal-weight parents have only a low risk of developing obesity as adults. However, among adolescents, obesity in itself is an important and reliable predictor of obesity in adulthood without reference to the weight of the parents.

The future impact of obesity is not only on health; obesity in children brings with it social problems, problems in employment and problems in school, all of which are accompanied by a decreased quality of life.

Unfortunately, as we began addressing this issue in Israel, we found regrettably little statistical information on the topic. Over the years, there had been no national statistics published on the incidence of overweight in Israeli children based on professional measurements of weight and height. The first survey to gather such statistics was conducted in 2004 by the National Center for Disease Control and the Food and Nutrition Services under the auspices of Israel's Ministry of Health. The survey, "Mabat Tsair," surveyed children and adolescents from 12 to 18 years of age to collect data on weight, nutrition and eating habits.

This is a serious problem that needs remedy. In Israel, there are children's services and clinics for family health. These facilities offer opportunities to see all of the children in the country at different points of time and to carry out preliminary activities to identify irregularities in weight.

Treating obesity in children

Around the world, medical professionals have recognized that the central goal in treating obesity in children is to change the family's lifestyle. This must include increasing the child's level of physical activity and involving the parents in promoting the process of change. An important part of the treatment is teaching parents to take on the responsibility for the change and giving them skills to deal with the problem.

Children copy and adopt the habits they see in the home in all areas of life. While external environmental influence is certainly important, the influence of the home has enormous weight in implanting values. Parents must understand that children have a very healthy sense of when, how much and how to eat as long as the food presented to them is composed of healthy ingredients.

Thus, education for health within the context of schools must be carried out in parallel and in coordination with parents. Educational programs should be built in a manner appropriate to the age of the children and should begin as early as preschool. They must be prepared in cooperation with the health establishment (doctors, therapists, nutritionists, physical education teachers, clinical psychologists and others). It would be desirable for the establishment to create sites to provide education for a healthy lifestyle, correct and wise nutritional values, and physical exercise.

But a wider approach is also desirable. Society and the media incessantly give children and adolescents the message that they must be thin. Advertisements in newspapers and on radio and television offer a myriad of high-calorie food products. There is little in the way of countervailing media messages recommending that one's menu should include natural foods, such as whole grains, legumes, vegetables and fruit.

Different countries have suggested a variety of ways of dealing with the wider phenomenon of obesity. This includes legislative approaches, the establishment of standards, educational activities, cooperation with food producers and advertisers, community programs, the creation of recommendations and guidelines for changes in lifestyles, and providing information allowing members of the public to make intelligent decisions about their health.

Experience around the world shows that interventions directed to the widest possible public—not just people at high risk—not only reduce the risk of obesity slightly, but also contribute to a marked improvement in the population's level of health. Therefore, from a futures perspective, there is great importance in preventive treatment of obesity.

In order to find a solution, it is important to have a good understanding of the factors that contribute to obesity. While healthy nutrition, physical exercise and a non-smoking lifestyle are elements of an efficient strategy for reducing cumulative threats from noncontagious diseases, it appears there is no single, efficient solution that can treat the epidemic in the short term. Instead, an integrated system of pro-

grams must be built that will bring about significant results over the long term.

Countries in which the rate of obesity is rising will face high costs in treating disease, costs from loss of workdays and indirect costs of phenomena such as depression, social problems and more. It is clear, then, that every country has an economic incentive to act quickly and efficiently.

The work of the Commission for Future Generations

These, then, were the concerns that guided the Commission for Future Generations as we approached the issues of obesity and sustainable health. But, as with all our work, it was necessary to first define the topic's boundaries in order to act in the most efficient way possible.

One of our central goals was to encourage action aimed at improving the health of young people and future generations. We therefore sought to change Israel's policy approach to childhood obesity. We felt that children clearly had to be the focus of activity for three primary reasons:

- the Commission deals with subjects that have a significant impact on the future;
- children are more vulnerable and more exposed to harmful advertising, and we, as responsible adults, bear responsibility for their physical and emotional welfare; and
- society has many more tools to influence children than adults. Correspondingly, there is a greater likelihood of changing the attitude of children because they are less enslaved to past patterns and old habits.

In studying the issue of childhood obesity in Israel and worldwide, we understood that immediate action was critical or we, as a nation, would soon see the harmful effects of neglect and the lack of proper treatment. The statistics we read were daunting; we found that the success rate in treating overweight children ranges from only 5 per-

cent to 15 percent. Even worse, after two years of treatment, the success rate shrinks to just 2 percent to 3 percent. This led to the clear conclusion that it would be better to focus on preventing obesity in the first place.

For that reason, special attention was given to obesity's early stages. For example, we viewed it as important to provide treatment to pregnant women in order to encourage the birth of healthy babies and also to give preventive treatment to babies from the moment of their birth.

Toward this end, the Commission was very involved with the Clinics for Family Health ("Tipot Halav"), over time working to strengthen them and prevent them from being taken over by health maintenance organizations (HMOs). These clinics, which provide preventive health-care services in particular to pregnant women, babies and toddlers, are widely used throughout Israel and considered by many Israelis to be foundation of community health care.

An investigation conducted by the Commission showed that there was almost no attention paid to the problem of obesity at these clinics, a fact we saw as a serious concern. As a result of our activities, all clinics began to gather statistics on the height and weight of children for follow-up.

However, our overall goal was to focus on prevention first so that there would be no overweight children. That is to say, the hope was to reduce the number of children who had the potential to become overweight rather than simply to treat currently overweight children.

Over time, we developed a work plan and began making contact with outside organizations, such as medical professionals, the Ministry of Health, the Ministry of Education, municipalities and HMOs. We also worked to enlist members of parliament who expressed interest in the subject. Thus, slow movement on the process began, and work procedures were created in alliance with the Ministry of Health. It should be noted that an integral aspect of this process involved the efforts and contributions of Dr. Shai Pintov, who served as our expert on health issues. Dr. Pintov was instrumental in coordinating our work plan while cultivating contacts with health organizations and

nonparliamentary bodies, such as the Israeli medical corps, to facilitate consensus-building among stakeholders.

Goals and partners

To guide our work on obesity, we defined our vision as reaching the maximum possible health by 2025, while changing the emphasis from medicine to health. In other words, we aimed to facilitate a cultural shift in which good health is facilitated from the outset (ex ante approach) rather than poor health being treated with medicine (ex post approach).

This vision led the Commission to define a number of central goals, of which the following focused on battling obesity through nutrition and physical exercise:

- reducing the incidence of overweight and obesity, as expressed by the body mass index (BMI). The BMI is derived by dividing an individual's weight in kilograms by the square of their height in meters (kg/m^2). Obesity is defined as a BMI of 30 or more, although this can vary for children depending on age;
- improving nutrition habits and providing information on food variety and wise choices;
- ensuring that monitoring of proper weight and development began at birth and continued throughout life;
- publicizing nourishment and eating habits as promoters of health, both in terms of quantity and quality; and
- supporting appropriate exercise and recreational activity as part of an active lifestyle, raising awareness of the importance of physical activity and providing a spectrum of possibilities for such activities.

From these goals, a series of immediate steps were identified, all of which we believed should become permanent aspects of our society:

- improving the availability of fresh food and reducing the prices of fruits, vegetables and other healthy foods, such as whole-wheat or

whole-grain bread, olive oil, whole grains and legumes, especially for low-income populations;

- increasing the number of mass-media messages encouraging a sound energy balance and stable weight and adapting these messages to various cultural groups;
- encouraging the creation of additional space for leisure activities and exercise, such as sport facilities, walking paths and bicycle paths; and
- appointing a national committee (to have a long duration) that could research, execute and monitor programs and interventions aimed at the prevention of obesity. Preference would be given to programs for schoolchildren and the community.

In establishing these goals, the Commission mapped out all stakeholders on the topic: government ministries—health, education, finance, justice, the interior, the environment, labor, welfare and industry, among others; the private sector—the food manufacturers, pharmaceutical companies, food additive manufacturers and others; nongovernmental organizations (NGOs); the armed forces; academia and research foundations; the mass media; the general and supplementary insurance companies; local authorities and communities; and the general public.

Toward a national plan

In our preparatory work, we concluded it would be best to work on several levels in parallel rather than concentrating solely on legislative activity. In order to coordinate this work and help bring about the necessary change in awareness, we helped create a steering committee tasked with formulating recommendations and a national plan.

This committee was composed of people with relevant knowledge or professional experience. From the official sector came representatives from the ministries of health, education, industry, trade and labor as well as the armed forces. Private-sector representatives in-

cluded HMO employees, pediatricians and members of the medical association and the central school parents committee. Over time, the committee suggested a number of directions for activity, some involving legislation and some cooperation with the various government ministries.

Separately from the steering committee, the Commission also established a team of HMO directors. We attributed great importance to having the HMOs participate in the process because HMO doctors are accessible to the broad public and have a central role in making the public aware of medical issues, and in providing patients with tools to treat obesity. The HMOs shoulder the high costs of treating the morbidity caused by obesity and, therefore, have both the economic motivation and tools available to make significant contributions to the issue.

The think tank, which included representatives of the HMOs, outlined various directives for activity that led to a number of operational agreements:

First, the HMO representative agreed on the need for a monitoring policy. The sector promised to strengthen its policies requiring measurement of childhood and adolescent height, weight and BMI and to add BMI to the items that pediatricians are required to check. Second, a consensus was achieved on the desirability of treating obesity through prevention, with emphasis on ages zero through five, and on increasing pregnant women's awareness of the issue. Third, there was agreement on the need for overall cooperation if an anti-obesity campaign were to be successful. This would have to include the participation of the Ministry of Health, whose goal would be to increase awareness of the problem.

Questions were also raised about the feasibility of sharing information between the Ministry of Health and the family health clinics. The HMO representatives promised to promote the flow of information to the Ministry of Health. On the other hand, the Commission for Future Generations committed to promoting the transfer of information from the Ministry of Health to the HMOs.

Finally, it was agreed that the Commission for Future Generations would work to promote the subject in the media; this would include

both the topics chosen by the steering committee and information about the Commission's legislative bills (meeting of HMO directors' forum on April 12, 2005, unpublished data).

We soon began seeing the effects of this coordinated approach. Data provided by the HMOs was passed to the newspapers, which began to write on the epidemic of childhood obesity. A series of programs was broadcast on television, including investigative programs on the issue of obesity in general and specifically among children.

Not surprisingly, a domino effect took hold as the public's awareness grew, and the most popular media programs and publications in Israel have since dealt with this topic frequently over a relatively long period. In fact, to this day, there are very popular reality television shows that have been dealing with the topic of obesity for years.

In the Knesset

Our work at the Commission on the topic naturally involved a legislative component as well. As we came to understand the importance of a national program targeting childhood obesity, we reached out to various bodies in the Knesset, helping to raise awareness of the phenomenon and its treatment there.

The Commission's work in the Knesset included: a staff-performed comparative study of other nations' programs for treating obesity; a request to the Information and Research Department to conduct a background study of prohibitions and limitations on harmful food advertising in the world; organizing a discussion in cooperation with the Committee for Labor, Welfare and Health and with the steering committee on the topic of the obesity epidemic; and presenting an opinion containing operative recommendations for a national program on the topic.

Along with the head of the Commission's health subject area, Dr. Pintov, I participated on the legislative subcommittee of the Ministry of Health's anti-obesity steering committee. Within the framework of this task force, various work teams were established to present a plan of activities with different perspectives on the subject.

We collected a wealth of potential approaches to dealing with the obesity epidemic. The Commission took upon itself to translate these opportunities into practical parliamentary action, including legislation for the prevention of obesity, the establishment of parliamentary committees to deal with and prevent the problem and training the population how to adopt proper eating habits.

In this vein, the Commission initiated two bills, both of which we saw as critical elements in the overall campaign: a bill on food advertising directed toward children, and another on trans fats. The Ministry of Health, which has taken up the latter issue, is still working on secondary legislation targeting trans fats in edible goods. The processes involved with getting the proverbial balls rolling on these two bills are discussed below.

Limiting harmful marketing to minors

Advertising is one of modern industry's primary means of influencing the behavior of consumers. Over the years, there has been an increase in the advertising and marketing of food products. Research shows that the food industry worldwide spends considerable amounts of money on advertising "junk food" and unhealthy food that is saturated with oil, calories, sugars, salts and the like. Food advertising increases sales of the advertised food while at the same time increasing sales of food similar to the advertised one.

More specifically to our point, various studies have shown a clear link between the advertising of unhealthy food and the spread of the obesity phenomenon. Children are particularly vulnerable to the influence of advertising and have become an increasingly important target market for marketers' increasingly sophisticated appeals. Television is the primary channel for the advertisement of food products intended for children, and it turns out that the most widely advertised food products are those thought to be unhealthy.

TV is not the only channel, however. Children are also frequently confronted with messages in the form of advertisements, sponsor-

ship, the sale of products and much more within the walls of educational establishments. Growing concern over this phenomenon and its influence over education and food consumption has led many countries to limit advertising inside schools by means of legislation, government regulation or standards adopted by schools or industry bodies themselves (Hawkes 2004).

Studies show that advertising of foodstuffs directly influences children's consumption behavior—which includes behavior that influences their parents' purchase choices—and food preferences (Fulwider 2004). In addition, a clear and significant relationship has been demonstrated between children's exposure to television advertising and snacking, particularly with respect to the amount of calories and the variety of nutritional components consumed (for a well-documented example, cf. the United Kingdom's 2004 Food Standard Agency study on food advertising).

In addition, studies have proven that children believe that claims made in advertisements are true and that, until a rather advanced age, they do not distinguish between a television program and the advertising that is integrated within it (Munger 2004). Thus, the demand to limit advertising intended for children is founded, among other grounds, on the claim that advertising has an especially strong influence on the preferences of children. Following are some central media-based factors that have been identified as contributing to the phenomenon of obesity:

- *marketing and advertising of food products* with low nutritional value, including marketing using famous personalities, competitions, gifts, games, toys, dolls and accessories, thus increasing their consumption among children and adolescents;
- *indirect advertising of food products* in schools and other frameworks through sponsorship and other strategies;
- *a lack of physical exercise* as a result of sitting for many hours watching television or using a computer;
- *limited or misleading information* about the health properties of food products and advertising of food products as having healthy properties even though they are rich in ingredients of low nutritional value that contribute to obesity; and

- *the creation of an ideal image of thinness* that is unrelated to healthy eating habits and the consumption of foods of high nutritional value, as well as (paradoxically) an image of life in which there is no connection between overeating and obesity.

From a survey of the connection between the media and obesity, it is possible to see its negative contribution, especially in relation to the amount and type of advertising of low-nutritional-value food products. On the other hand, one cannot ignore the great potential for the media to contribute to raising awareness and spreading information on healthy nutrition practices. Indeed, there are a variety of national and local initiatives around the world in which the media constitute an important means of ensuring obesity is a topic addressed by individuals, communities and decision-makers.

Thus, we saw a challenge in designing a national policy for promoting health in relation to obesity. We wanted, if possible, to reduce and even prevent the communications environment from encouraging obesity—while still encouraging media companies to provide positive messages.

One possible way to do this is to come to agreement with stakeholders in finding appropriate boundaries for the marketing and advertising of food products beyond existing legislation. For instance, some countries have drawn a line at marketing to children under age eight. Another possibility is to encourage companies to include health information in the advertisement, as was done by commercial companies, such as Kraft Foods, in the United States.

However, legislative approaches remain a powerful tool. In various countries, public health organizations have led calls for limitations on marketing and advertisement of foodstuffs of poor nutritional value. They have sought legislation limiting the amount and methods of marketing, primarily to adolescents. Various countries have also set limitations on the advertising of food directed to children or which is presented during children's prime viewing times. In Ireland, for example, there have been laws on the books regulating advertising the children since 2005. Sweden, Italy and Belgium have

banned television advertising targeting children altogether. Australia and Denmark, by contrast, have placed restrictions on such advertising relating to type and time slot (Fulwider 2004).

Through our work at the Commission, we put the subject of the marketing of “fast foods” and low nutritional foods intended primarily for minors on the agenda of Israeli legislators. This campaign received considerable support from the public, which was aware of the negative influence of advertising on children and wanted to reduce it. Indeed, surveys conducted for Israel’s Second Radio and Television Authority showed that an overwhelming majority of respondents (80% of adults, 75% of adolescents polled) consider advertising to have a negative impact on youth behavior and support the supervision of advertising.

Our activity in this area encountered stiff opposition from food producers. For most of them, this was the first time they faced an initiative threatening to undermine their companies’ marketing activities, and their initial response was suspicion. It is important to bear in mind that we are talking about activity that took place between 2003 and 2005, years in which public awareness of this topic was still in its infancy.

However, despite the opposition, the Commission continued its activities and initiated a bill intended to regulate the advertising of food and drink to children. To do so, we prepared for members of the Knesset a draft of an amendment to the consumer protection law that would specifically protect minors.

Our bill aimed to add directives to existing Paragraph 7a of the Consumer Protection Law, entitled “Advertisement Intended for Minors.” The paragraph is in the section of the law called “Deception and Taking Advantage of Distress,” which gives instructions on establishing regulations for preventing deceptive advertising to minors.

The measure was designed to address the problem in two complementary ways:

- by requiring that information on the nutritional properties of specified food and drink products (the ones to be limited) be provided at the same time or place as their advertisements; and

- by regulating in various ways the advertising and marketing methods of specified products, including limiting advertisements for these products to non-prime-time viewing hours for children. Certain means of advertising, such as the use of celebrities and cartoons, would also be prohibited.

It should be noted that the legislature clarified that by “marketing methods,” it intended to include “any approach directly, indirectly, openly, or hidden, including through mail, telephone, radio, television, electronic communication of any kind, fax, catalog advertising or notices, whose goal is to make a business contact or to promote sales of a product or service.” This was done out of the recognition that one can influence children and adolescents through various media.

However, it was beyond the scope of the legislation itself to determine precisely which products would be affected. Rather, in order to be balanced in the creation of these advertising limits, the bill provided for the creation of a balanced public committee that would determine which products would be included within the bill’s framework.

This committee would include representatives of the relevant government ministries, representatives of the public, including representatives of the consumer council, and professionals, including an expert on children’s nutrition, a child psychologist and an academic researcher on nutrition. In order to create balance, the committee would also have representatives from the relevant industry association. The committee would examine the basic nutritional characteristics of food and drink products deemed problematic for children’s nutrition, as outlined in research by the World Health Organization and in the majority of developed nations worldwide.

Politically, we recognized that this legislative approach threatened to conflict with other basic rights in Israel, particularly the “freedom of occupation” and “freedom to publish” contained in the Basic Laws. However, we felt that the immediate need for change out of concern for the future, as well as the duty of the state to be concerned for the health of its inhabitants, justified this strategy.

In defense of our position, I argued that a space free of advertising is also a part of human dignity and liberty and that the duty to protect minors' right to health and freedom from harmful influences has its own legal weight. Since the bill to be enacted was for a proper purpose and proportionate to the problem, we considered that it should not be regarded as a violation of other basic rights. The bill, "Amendment to the Consumer Protection Act—Food Advertising Directed at Minors," was introduced on October 20, 2005 by members of Knesset Roman Bronfman and Yuli Tamir.

The private bill pushed the government into hurrying to submit its own bill and, on January 17, 2006, acting Prime Minister Ehud Olmert presented its own amendment, which was focused on advertising directed at minors, to the Consumer Protection Regulations for approval by the Knesset's Economics Committee.

The purpose of this amendment was to expand the permanent instructions in the regulations so that they would apply to marketing methods directed at minors and not only to advertisements. The proposed amendment prohibited marketing to minors that essentially deceived viewers or took advantage of minors' age, innocence and lack of experience. It also prohibited marketing that might encourage minors to do any harm to their bodies, for example, by consuming alcoholic drinks or smoking cigarettes. The Knesset's Economics Committee eventually passed these regulations in February 2006, and they went into effect 30 days later.

Raising awareness of trans fats' dangers

In parallel with our work on harmful advertising, the Commission also led a campaign to increase awareness of the dangers of consuming trans fats. The core of this effort was a bill that would have required labeling of trans fats in foods and imposed a limit on the proportion of trans fats allowed in foods.

Trans fats—or, more properly, trans isomeric fatty acids—have only relatively recently been understood to pose significant risks to the hu-

man body and brain. Trans fat is a non-saturated fat that has been processed in order to harden it, which makes it solid and less likely to spoil during food processing, and using it extends the shelf life of products. The processing makes the fat solid at room temperatures and also more viscous and sticky in the blood. In the solidification process, various fatty acids are created, some of which are only partially saturated. Therefore, there was initially a widespread error that claimed these products were less harmful than conventional saturated fats.

Over time, it became clear that the solidification process gave the artificial substance the properties of saturated fats. Today, we know that the impact of these trans fats is even worse than that of saturated fats from animals, which are known by their primary constituent, cholesterol. Because of the change in their structure, trans fats interfere with the ordinary exchange of materials through essential fatty acids.

This, in turn, harms all inter-cellular communication and the functioning and monitoring of body processes, especially in the brain. This is particularly acute during children's growth period, when communication between nerve cells and the rest of the body is vital. These acids thus have a direct and determining impact on obesity and diabetes, primarily among adolescents. According to researchers, other potential harmful effects include:

- a rise in the creation of “bad” cholesterol (LDL) and a drop in the creation of “good” cholesterol (HDL);
- increased probability of blood-vessel blockages, blood circulation problems, high blood pressure, heart problems and strokes;
- a reduction in the elasticity of blood vessels;
- a drop in cellular-level response to insulin, which directly leads to type-2 diabetes and obesity;
- harm to fetal development and birth weight;
- the encouragement of allergic reactions and an association with the rise in the incidence of asthma in children;
- assimilation by the body's cell walls, which weakens their make-up and ability to protect the body;
- a weakening of the immune system and the subsequent increased likelihood of infection;

- a reduction in the operating time of enzymes that fight poisons and carcinogens (materials that cause cancer); and
- an obstruction of the positive impact of Omega-3- and Omega-6-type fatty acids, which are critical for growth, development and the activities and operations of the brain. This can influence the future cognitive development of young children.

Israel was not alone in seeing the need for a policy response to this danger. The U.S. departments of Health and Agriculture also announced recommendations targeting consumers and food manufacturers about the necessity to reduce the use of trans-fatty acids to a minimum. The U.S. Food and Drug Administration determined that, as of January 1, 2006, all food containing trans fats must be prominently labeled as such.

After studying the issue, the Commission recommended that the Knesset follow the Finnish legal model and that of a bill introduced in the Canadian parliament by setting a threshold for the amount of trans fats allowed in processed food.

However, in spite of our firm stand on this issue, the legislators promoting this bill decided they would be satisfied with a labeling requirement as an initial approach and would continue with more stringent legislation after the first bill was passed.

In this spirit, the Commission recommended a law requiring the labeling of all food products containing fatty acids. Such legislation would give consumers critical information, enabling them to make an intelligent choice. This approach was in keeping with the reasoning behind existing public health regulations requiring nutritional labeling.

We also recommended that a provision be added determining the duty of an employer who allows a corporate officer to violate provisions of the directive. The bill to “Amend the Directive on Public Health” was introduced in the Knesset on July 27, 2005 by members of Knesset Eitan Cabel and Leah Ness. While this bill did not receive the two-thirds majority needed to pass in 2005, a new bill drafted by MK Orit Noked in 2009, which includes all of our recommendations, has been proposed.

Working with the Ministry of Health's National Task Force

In addition to our legislative activities, the Commission participated as a member of the national task force established to combat the obesity epidemic. The task force, headed by representatives from the Ministry of Health, worked to change the current situation by facilitating cooperation among various bodies at different levels. The Commission's recommendations and strategies were integrated into the group's activity, particularly in its approach to kindergartens and schools. Goals in this respect included modifying children's nutritional habits, increasing awareness of the value of physical activity, tracking children's growth and preventing the advertising of unhealthy foods in the vicinity of educational facilities.

The task force's work took place at several levels. We were involved in creating recommendations for activities and also for fostering cooperation between the institutions that would ultimately carry them out. This included considerable outreach to municipalities, communities and parents.

Much of this activity was directed at improving parental awareness of the dangers of obesity. The Ministry of Health's connection with new parents offered a valuable platform in this respect. The task force promoted a number of measures, including encouraging breast-feeding, making information on preventing overweight and obesity more accessible, and improving the accessibility of support services and treatment for overweight children.

The task force also approached industry, asking it to do its part to stop the epidemic. We encouraged advertisers and professionals in the field to be leaders in more responsible and healthier advertising of food products. We asked them to avoid misleading claims as well as to use their media power as a tool to spread messages supporting healthier and more responsible nutrition. In parallel, the task force pressed the Knesset and the government to improve their own legislation, supervision and enforcement of related issues.

The Commission's focus on childhood obesity, and its broader reliance on the principles of preventive medicine, bore fruit in a num-

ber of governmental initiatives. I believe our work had a major impact on the launch of the Ministry of Health's "Toward a Healthy Future 2020" initiative in 2005. As a part of this, hundreds of professionals from government ministries, HMOs, academia and NGOs took part in 19 committees. One of the committees dealt with healthy behaviors and included a subcommittee focused on the prevention and treatment of obesity. The hope was to formulate measurable goals for the year 2020 and to offer recommendations with a strong scientific foundation.

In addition, the Ministry of Health promoted the development of educational and community programs intended to reduce rates of obesity in the general population. These programs were managed by 15 health bureaus around the country using multi-disciplinary professional teams. Various bodies, including HMOs, government ministries and public and government bodies, participated in these efforts.

The anti-obesity task force worked from the assumption that the residents of Israel should be offered an organized system supporting a healthy lifestyle, including prevention and treatment services. The Commission took an active and significant part in this initiative, which ultimately led the Ministry of Health to develop a national strategic plan designed to publicize the importance of preventing obesity. This program included, among other things, clear and consistent instructions on healthy eating and drinking and on developing habits of regular physical activity.

I believe that all of these activities showed the great importance of a body like the Commission for Future Generation, which approaches topics from the viewpoint of sustainability and is situated within governmental circles.

As an interdisciplinary body, we were able to rise above immediate political pressures and the survival mentality of practical politics. In doing so, we were able to be a significant catalyst in triggering interest in a subject with long-term impact, in creating public awareness and in bringing about a change in legislation.

On the topic of childhood obesity, it can be said that this activity bore fruit and that our Commission was successful. Many activities—legislative, communal and communications-focused—came about as

a result of the rise in awareness and the communications buzz that we helped create.

We can now note with satisfaction that community awareness forced food manufacturers to be more conscious of the importance of providing the population with healthy food, although there is still a long way to go. It must be noted that we constituted only one player in the institutional team that included some far-sighted food manufacturers who worked diligently to change behavior on this issue even before the campaign began.

For me, and for the Commission, this campaign also helped with a broader goal. Our work helped people understand that sustainability could have meaning beyond its conventional environmental associations. By treating the obesity epidemic as an issue of sustainable health, we helped people understand the broader social significance of sustainability. Today, this concern for the future resonates across many different avenues of human activity, offering the opportunity to have positive effect on our future well-being.

Environment

I have just returned from a twilight stroll with two of my grandchildren, the twins Tamar and Yael. As we walked, the sun was setting, autumn breezes began to blow, the crisp air caressing their heads, and the horizon appeared closer than ever. I pushed the double baby carriage quickly as the two of them watched me, babbling and smiling contentedly. The quiet was exalted—a perfect evening, worry-free.

When I look at them, I feel the confidence they place in me, the confidence of those who know that all is well and will be well for ever and ever, for eternity. I see in their eyes the security they feel in the world and in me. We have just celebrated their birthday. They have just completed their first year upon this planet.

In my imagination, I see them as 20-year-olds, happy, beautiful and intelligent. The year is 2027. The world is calm. Peace and tranquility prevail everywhere. The environment has been preserved. All the dire prophe-

cies predicting that global warming, extinctions and greenhouse gases would destroy our planet have been averted. Tamar and Yael are privileged to live in a sustainable world—the fruit of the future images that we created 19 years ago, in 2009.

In this vision, we have listened to calls coming from the future, the voices that pleaded with us: “Please, watch over this planet so we will be able to live on it in health, happiness and security.” We succeeded in changing the direction the Earth was heading back then, in 2009, abolishing the existential threat to ourselves and our planet. We acted out of the innate human instinct that preserved and still preserves the existence of the human race—our concern for our children, our concern for future generations.

Watching my grandchildren, I imagine what would happen if someone dared to threaten them now. I would give my all to prevent any hurt to them. What would I not do to keep even a hair on their heads from harm, to keep their tiny fingernails from being scratched? I ask myself: What am I really prepared to do today to ensure that the world will look like a paradise when they reach the age of 20? What are any of us really prepared to do for our children so they will have air to breathe and water to drink in 2027? What are we prepared to do to keep the oceans from rising and submerging the coastal cities in which we live?”

When I was the Commissioner for Future Generations in Israel’s parliament, I often encountered opposition and cynicism. My biggest wonder was with the mothers and fathers acting this way. After all, when the threat is immediate, each one of us is prepared to die in order to protect our children’s lives. This is human nature, to endanger our lives in order to preserve the lives of future generations. The same is generally true for other life forms, as well.

But if the issue is a threat that is not immediate, we tend to discount, to forget, to prefer short-term interests. We live in a culture of “eat, drink and be merry, for tomorrow we die.” We find that we are blind and deaf. We find that we conduct ourselves in a way that leads to absolute self-destruction.

Even when we know with almost complete certainty that, in a number of years, our lives and the lives of our children and grandchildren will be in real danger, some of us still choose to ignore the reality, to live in the moment and to tell ourselves that “everything will be all right.”

If we do nothing, it will not be all right. This book is first and foremost meant as a wake-up call for all of us and for decision-makers. It is a plea: Let's not create a reality in which our children will ask us in another 20 years: "Where were you? Why didn't you think of us? Why did you allow the world to act in a way that would clearly lead to a real threat to our lives? Why did you stupidly and shortsightedly prefer short-term interests?"

And, worst of all: "Why were you apathetic?"

We all know more or less what needs to be done today. We all know that the economic interests of the polluters and of all those who harm the environment are no longer the leading interests. We all know that the tide is turning before our eyes.

All we have to do is show flexibility and the ability to be far-sighted. We must forcefully and rapidly divert the ship's steering wheel in the direction that will make possible healthy lives for us and our children in the future. Every additional day the world goes on as it is today brings the end nearer. Every additional day we emit such a crazy amount of CO₂ into the atmosphere brings us closer to the point of no return.

Let's not create a situation in which we wake up too late. Let's make a life of joy and health possible for Tamar and Yael and for all the children of their generation. If we don't create a life of joy, health and love for ourselves, for those around us, for our children and grandchildren, in the end, we really won't care whether the world continues to exist.

Only when we ourselves demonstrate a true love for life and the world in which we live will we act with all our might to preserve it. Threats alone won't help in this matter.

And, so, I call on all of us, out of a love for life and the world, to make sure this amazing thing called the human race, which lives on this planet, Earth, will continue to exist forever and ever. If we are to reach this goal, if we are to preserve the future for Tamar and Yael and all the children of the universe, we must take seriously all of the vast array of elements that influence and shape the environment. Every tree that is cut down, every life form that becomes extinct, every river that is polluted or dries up, and every piece of land that is taken over for building irretrievably changes the environment of the future's children.

At the Commission for Future Generations, it was clear to us that we should be intensively involved in legislative processes addressing the preservation of the environment and natural resources as well as the subjects of planning and building. Two of our key conditions for intervention—to be involved only in those areas in which influence on future generations was clear and in which we saw a way to be effective—were frequently satisfied when these issues arose in parliament. This was, in part, because a future-oriented voice was so badly needed in this domain.

In its mere 60 years of existence, Israel has achieved much. It is considered to be a developed Western state with a flourishing economy and impressive development momentum. Yet these considerable achievements, in one of the most crowded states in the world, have taken a heavy toll in terms of a problematic view of the future and considerable environmental costs.

Israel's founders were people of well-formulated ideological vision. Unfortunately, it cannot be said that the fulfillment of their vision was achieved in a sustainable fashion. The needs of future generations were postponed because of the existential need to found the state under difficult circumstances. Policymakers saw the territory as a desolate expanse that needed to be made to bloom. Pioneering was expressed in concepts such as building a whole settlement in one night. The lyrics of the poem our pioneers sang to their homeland are revealing: "We will dress you in concrete and cement ..."

These pioneers viewed construction as the essence of the founding vision. The outlook was one of "conquering the land"—with respect both to the enemy and to the environment itself. Hundreds of thousands of new immigrants lived by this ideology without comprehending or looking forward to the future consequences of the rapid development.

Thus, the state's first decades were marked by unsustainable development. The needs of the hour led to increasing consumption of natural resources, the discharge of pollutants and pressure on the land as a result of development and construction. Urbanization, rapid economic development, the growth of transportation and other phys-

ical infrastructure, accelerated industrialization and intensive agricultural practices destabilized and harmed the reciprocal relationship between man and nature.

Infused throughout this ideological vision and its manifestation was a perpetual sense of danger, which continues to this day. Residents of Israel live with the feeling that our enemies, who desire our destruction, are objecting to the very existence of the State of Israel.

These existential questions, and the related threats to the state's security and economy, have delayed future-oriented thought. They make it difficult to engage in positive and integrative thought that might envision the land as one that is quiet and free of struggle and one in which personal dignity and liberty are preserved along with natural resources and the landscape.

Many development projects at the national level are not the fruit of long-term thinking; nor do the majority of decisions result from thinking based on future intelligence. Fears, short-term considerations and immediate interests deeply influence policymakers' approaches to environmental quality. As a result, awareness of environmental problems in Israel is still low, and there is little supervision or enforcement of environmental laws.

The country is faced with many difficult and serious environmental problems that demand appropriate treatments and rapid responses. These include: a serious lack of open spaces; pollution from transportation, industry and energy production; pollution of the sea and coast; pollution of water sources and rivers; noise pollution; an increase in the amount of waste with no way to process it; pollution of the land; radiation; and more.

The Commission's environmental work

Preserving the environment has long been seen as the core of sustainable thinking. At the Commission for Future Generations, this moral imperative translated as well into legal opportunity, as the environment, natural resources and the issues of planning and building

represented three of our 12 mandated areas of activity. As in our other work, we were guided by the core principles of taking the part of future generations and taking a leading role in advocating for a sustainable course of action.

Indeed, our guiding principles were almost identical to the principles of sustainability defined at the United Nations' 1992 Rio summit, improved at the 2002 Johannesburg summit and approved by the majority of the states of the world. Our environmental work ranged widely, both inside the parliament's legislative process and outside in public circles. We intervened in proposed environmental legislation that had an impact on future generations, such as the Clean Air Act and the Park Ayalon Act, the former being passed in 2008 and the latter involving the transformation of a former garbage dump in the Dan region into a metropolitan park (which has since been named "Ariel Sharon Park"). We participated regularly in Knesset committee meetings dealing with proposed legislation, met with authorities relevant to the deliberations and presented positions and opinions based on long-term considerations and future intelligence.

We organized and participated in conferences on environmental topics, worked closely with environmental organizations and academic authorities, and did all we could to advance the environmental agenda in the press and in other communications. With the appointment of a director for the subject, the Commission became identified—rightly—with the theme of environmental defense.

Protecting Israel's coastline

Our work to protect Israel's coastline will serve as a representative example of much of our activity in parliament. Though the characters in this tale are all Israeli, and the focus is on this small country's Mediterranean coast, I believe readers will easily see resemblances to similar power struggles fought in parliaments worldwide. This is a story of the deep conflict of interests between environmental concerns and the driving forces of capitalist society.

Although the Commission was established three years after the first discussion of a measure calling for coastal protection, we ultimately played a substantial role in the struggle over the design of the law, pushing to preserve a clean coastline, as natural as possible, for future generations. I believe much can be learned by a close examination of our process and that lessons can be drawn about managing environmental change and designing sustainable policies in other parliaments around the world.

Israel's coastal resources are among its most endangered because of their limited extent and the perpetual desire to develop them.

The length of Israel's Mediterranean coast is only 197 kilometers. Of that, 49 kilometers are closed to the public and designated for security and infrastructure use. Much of this use could easily exist in non-coastal areas. Add to this the areas that have already been approved for construction, and we find that the public has the use of only 58 kilometers of open seashore. Take into account the sharp increase in Israel's population, and we are left with the equivalent of just 0.8 centimeters of beach for each resident of Israel.

Even the limited coastal lands that remain in the hands of the public are under perpetual threat from the following forces, among others:

- wasteful use of the coastal resources;
- real-estate and other physical development;
- sewage runoff;
- quarrying and mining of sand and gravel;
- pollution of the water and coastline; and
- destruction of the coastal cliffs.

As we looked at the situation, we were appalled. Natural treasures unique to coasts were being destroyed. The danger of extinction loomed for many species of plants and animals as well as many habitats. And why? Many planning and building laws were being broken or ignored, and what laws existed were out-of-date or incomplete. The make-up of planning and building committees were biased toward special interests. Israel's planning institutions, then and now, include the National Planning and Building Council and its subcommittees,

which act primarily as judicial and planning bodies that prepare outline plans and decide on appeals together with the regional and local committees. The law stipulates a hierarchy of authorities with oversight on the preservation of open areas. As a result, environmental bodies are referred to at every level of planning. Existing plans had failed, and there was an absence of a clear and unified system of rules.

In the past, the courts, and primarily the Supreme Court, have attempted to stop this erosion with their rulings. The Supreme Court determined the unique status of the shores while emphasizing their limitations and problematic exploitation. But it was too little, too late ...

From every aspect of future thinking, Israel clearly needed an unambiguous and immediate plan to stop the destruction of open coastal areas. Legislation on this issue was required, and the need for a comprehensive and responsible law that would obligate the authorities to protect and preserve the coastal environment for future generations was unmistakable.

First metamorphoses of the Protection of the Coastal Environment Law

Environmental organizations initially set the legislative engine in motion out of a feeling of being helpless to protect the coastal environment. The urgent need to protect the coast with a law that would bypass the planning authorities was expressed by these groups (and by the public at large) after a worrisome sequence of coastal thefts for the benefit of construction and development.⁴

4 Highly controversial areas of concern have included: the marina in Herzliya, which involves the construction of residential buildings at the expense of a strip of beach in the center of the country; the giant Hof Hacarmel towers on Haifa beach; and the "kiosk affair," in which owners of a three-story, illegally constructed building on coastal land maintain that the object is a simple kiosk.

Critics argued that the authorities and institutions entrusted with preserving the shores had failed in their duties and were allowing development that encroached on the nation's already limited coastal resources. Thus, in November 1999, the private bill "The Mediterranean Coasts" was presented to Israel's parliament. This was formulated by a leading nonprofit environmental organization, Adam, Teva, V'Din, (The Israel Union for Environmental Defense), and contained the signatures of 30 Knesset members drawn from all parties represented in the legislature.

The bill emphasized the urgent need for preservation of the coastal land resource in the face of the variety of elements threatening it. It defined a 300-meter-wide strip of land as coastal area and limited the power of the authorities to approve of uncontrolled building on this strip. Heavy fines would be imposed on anyone who broke the law and used the coastal land illegally.

In January 2000, the bill won the endorsement of the Ministerial Committee for Legislation. At the end of the same month, it was brought for a preliminary reading and passed by a majority of 63 in favor with only one against. It subsequently went for first reading to the Internal Affairs and Environment Committee.

The intention of the members of Knesset who supported the bill this time around was to pass the private bill on its first reading but go no further, thus pressuring the government to present a bill of its own that was as similar as possible to the private bill. This tactic is often used with complex issues that need systemic intervention by various institutions and bodies. The Commission's involvement in this process began at a relatively late stage. I first participated in a committee meeting on May 27, 2002, a short time before the completion of the bill's preparation for first reading.

The bill expressed many of the central principles supported by the Commission for Future Generations, including preventing the continuation of shore closings and guaranteeing free movement along their lengths. My stand was disseminated to those working on the bill in an opinion prepared by the Commission, the first of two published during the debate on the bill, based on the following proposals:

- to the greatest extent possible, new infrastructure should be built only alongside existing infrastructure; there should only be building elsewhere if the particular circumstances make it unreasonable to do otherwise;
- planning bodies should be barred from approving any private development plans in areas designated for tourism, summer vacations, lodging or holidays;
- shoreline assets should be surveyed to gather information about shore accessibility; this should include mapping of the passages, paths and access routes open to the public, while noting artificial and natural barriers along the shore; any new development plans should be delayed until completion of the survey;
- free access to the shore for a 100-meter-strip from the water-line should be allowed to all, except at beaches closed at various times for religious reasons, areas restricted for safety or security reasons, and areas where access was legally limited; and
- fees for accessing the shore itself should be barred, except at nature preserves and natural parks.

We found substantial support for these principles. In many cases, they significantly influenced the essence of the legislation, although not all the recommendations were ultimately adopted. In the meetings preparing for the first reading of the private bill, a number of issues were raised. But most pressing—from our perspective—was the issue of property ownership. The Commission strongly recommended that the coastline be defined as public property dedicated to the public good. Without such a provision, we believed, developers who had bought land (but not yet used it) would be able to base their appeal on the country's Basic Law, which enshrines the protection of private property. I, however, was firm in my stance that some private ownership must be relinquished in order to preserve open public space on the coastal strip:

“... with respect to the expectation: People buy land all over the country, each person with his own speculations and expectations. The state has no obligation to adapt itself to people's speculations as long as they have not been legally approved ...”

The committee chair pressured members to finish the bill for a first reading and promised that these issues would be discussed when the bill was prepared for its second and third readings. They acquiesced, voting ended and the bill was prepared for its first reading.

The shore as public property

Two months after the committee voted, the private bill passed its first reading. As promised, the Knesset left it at this stage while the government developed its own bill. The next discussion took place in September 2003, this time on the government's bill.

In the meantime, we at the Commission had focused heavily on the issue of property and the right to ownership that had dominated discussion at the end of the last round of debate. Though we knew we were taking a controversial stance, we felt that designation of the coasts as public property was crucial to the bill's ultimate ability to protect the landscape.

We also saw larger issues at stake. The Israeli legislature had raised the right to private property to the level of a basic right anchored in the Basic Laws within the framework of the Basic Law on Human Dignity and Freedom. In order to truly protect the coast against opposing claims to the right of property, the legislature would have to use the language of rights.

Only in this way would courts have the authority to back public rights and reject private individuals' claims of having bought coastal land with the expectation of getting building permits in the future. Lacking this legal protection, the right anchored in the Basic Laws would always trump the right that wasn't.

In the year that passed between deliberations on the two bills, the previous Knesset was dissolved and a new Knesset was elected. The change in governments halted formulation of the government bill "Protection of the Coastal Environment—2003 ."

At the opening session of the Internal Affairs Committee on the government bill, Miki Haran, the executive director of the Office for

Environmental Defense, spoke. In her remarks, she sided with the intent of the private bill and with the importance of having legislation that protects the coastline and preserves it as a public asset.

At this meeting, when the principles of the bill were presented, I chose to highlight the chance to create a transformation in awareness with this new law and emphasized the responsibility we had to preserve the country's assets on behalf of future generations:

"... I think that this is one of those rare opportunities in which the Knesset can make a truly significant amendment to an existing bill. When our children, some of whom are here today and some of whom have yet to be born, ask us what kind of country we left for them, this will be one of the prime questions, if not the most important one."

Later in my speech, I focused on our insistence that beaches be defined as public property.

"... The people who oppose this law are here because they suspect that, if there are amendments to this bill, it will be voted down. It would suffice for us to write that the beaches are public property in order to secure something very significant in my eyes ...

Terms such as 'public benefit' are very attractive, but we know exactly what they entail. There will be battles fought over whether or not something is beneficial. We know very well how every head of a local authority will state one thing or another is for public benefit. We will have to have court cases and deliberations. But if we build a true fence, a strong fence that defends the coasts, we won't have to deal with all the other things later."

The conflict here quickly became evident. The government opposed our position, because it wanted to reduce the cost of the law and avoid compensation payments to private bodies who had already acquired ownership of the land.

Miki Haran vigorously opposed our stance, both because it had an innovative aspect—which, in my opinion, has never been examined in depth—and because she wanted to reach agreement on the legislation. She felt, with justification, that her ministry was not strong enough to pass amendments like the ones we proposed.

With these opposing visions now aired, the conflict between the government and the Commission became public. We had supporters for our position among the legislators. However, the committee chairman decided to drop the private bill and proceed with the government bill. I chose to support this stand, hoping I would be able to amend the government bill in the course of deliberations.

We made concessions. We agreed that the bill would not apply to rights granted before the passage of the legislation in order to assuage the government's fear of paying compensation. I was prepared to compromise in order to pave the way for our amendments. However, the committee chair decided to leave the most controversial topics—including that of property rights—for a later day.

The committee debates resumed after a month-long recess. At the Commission, we used the time to prepare an additional opinion about the bill, sharpening our stand on the issue of treating the coastline as public property. I said that:

“Our unequivocal recommendation holds that, because property rights are constitutional, we must establish the coasts as public property. Refraining from this decision will imply that the legislature did not intend to give constitutional status to the public rights over its coast and, as a result, this right is likely to retreat in the face of every artificial right and fall with every passing breeze.”

With our position clear, I returned to the committee deliberations. Attending the first discussion, for which property rights were on the agenda, were Minister of National Infrastructures Joseph Paritzky and Minister of the Interior Avraham Poraz, two members of the government who had helped design the bill and would be responsible for implementing it. It should be noted that the minister of environmental protection, who was ill at the time, was not present during the debates, which weakened the parliament's position.

To my surprise, Minister Poraz announced that his ministry now opposed the bill as a whole. He offered an alternative: the creation of a Committee for the Protection of the Coastal Environment, which would be subordinate to the Ministry of the Interior and similar in format to the existing construction committees.

I immediately objected. Although I couldn't anticipate what would happen several months later, I felt that the appointment of a committee, particularly with the problematic composition presented, would prevent true protection of the coast. After all, the bill had originally been meant to bypass the existing planning committees, which had failed in their roles to protect the coast. Now, the minister was suggesting that we should simply create another planning committee and leave the power with his ministry.

I understood that he feared the bill would cut away part of his office's jurisdiction. But this minister, whom I respected so much, was essentially choosing to ignore the public good in order to protect the authority of his ministry.

Although we clashed in the committee room, our disagreement gave me an opportunity to start a direct conversation with the ministers. While the sides were negotiating in the committee room, I met with the minister of the interior in the hallways outside, and we came to an agreement that I would support his proposal to create a new committee. However, this committee would have to be made up of professionals and experts with balanced views whom I felt would actually act to ensure the protection of the coasts.

Looking back, it seems to me that neither I nor anyone else on my staff or on the Knesset committee could have anticipated what would happen only a few months later.

The minister of the interior's "fast one"

Over the next several months, the Internal Affairs and Environment Committee discussed the bill periodically, systematically addressing the remaining outstanding issues while waiting for the minister of the interior to submit his official reservations. I maintained close relationships with several legislators who took a similarly "hawkish" line with respect to protecting the coast from private interests. In spite of differences of opinion among us, we kept in close contact both within

and outside of the committee and usually took a common stand in the power struggle with the bill's designers.

In late spring, I made another presentation to the committee about the importance of treating the coast as public property.

My chief concern—"the core of the problem," as I claimed—was dealing with those who were interested in using future land rights solely on a speculative basis. I argued that, in such cases, the policy must change. The state has the power to create a new reality by changing policy, I said. The new reality would make landowners understand that their expectations for the land were not so inviolable as to trump state intervention; for the good of the public, their expectations would not be realized.

After a short discussion about property rights, the committee moved on to the question of how the state should treat previously approved development plans that conflicted with the spirit of the law. Government representatives worried about having to compensate entrepreneurs; I suggested the government could provide alternative non-coastal land as compensation, and the committee chair indicated that he intended to pass the bill with or without government support.

The dramatic turning point happened a week later. On June 14, the committee met again with the minister of the interior. On the table was his ministry's alternate proposal—but one that was unrecognizable and different from the version that had been discussed thus far. Shock waves rippled through the committee members; in a moment, a year of work on the bill had become more or less irrelevant.

Chairman Shtern did well in defining this unusual situation in his opening remarks: "I believe that if we ask a historian to investigate what happened [an event in which the government presents a bill worded to its liking and then, later, changes it until it's unrecognizable], it will turn out to be unprecedented."

The difference between the two bills—one originally drafted by the government, the second now brought to us by Minister Poraz, a member of the government—was conspicuous. They differed from each other in purpose and in meaning.

The bill that had been discussed in the past year set for itself three primary goals:

- first, to protect the coastal environment and its natural treasures, to rehabilitate them and preserve them as a natural resource of unique worth, and to limit and prevent harm to them;
- second, to preserve the coastal area and coastal sand for the benefit and pleasure of the public, including future generations; and
- third, to establish principles and limitations of management for sustainable development and use of the coastal area.

In its proposal, the Ministry of the Interior set out different goals:

- to protect the coastal environment and its natural and heritage treasures, to restore and preserve them as a natural resource of unique value, and to prevent and reduce as far as possible any damage to them;
- to protect the coastal environment and the coastal sand for the enjoyment of the public, including future generations; and
- to establish principles and limitations for the sustainable management, development and use of the coastal environment.

One does not need to be an expert in legislation to understand that this tiny addition “and reduce as far as possible” pulled the rug from under the basic principle of the law. The real implication of this addition was that damaging the coastal environment and its natural and heritage treasures would not be prohibited but, rather, that damage to them should be decreased as much as possible. This was a far less significant protection than the government actually intended to provide, leaving no real barrier to stand in the way of those seeking to use the coast for their personal benefit.

The different approach also changed Article 3, which defined the legal standing of the coast and which was, to my mind, perhaps the most important article in the bill. The version we discussed over the past year had run as follows: “The coastal area and the coastal sand are all public property and are dedicated to their present and future benefit.”

In the new proposal, the issue of the coast's standing was deleted, and in its place was inserted the issue of limiting damage to the coastal environment: "The body authorized to give a license or permit for activity within the coastal area will do so as much as possible in a way that will limit the damage to the coastal environment."

In addition, the new bill removed language under which new development could be approved only under a principle of "necessity" and reduced the definition of coastal area from the original bill's 300 meters to just 200 meters in the new bill.

In his statement to the committee, Poraz cited technical matters in explaining why he had made such sweeping changes at such a late stage. Few appeared convinced. It seemed clear the minister had deliberately chosen to wait until late in the legislative process before springing the surprise of a completely different bill.

He did this in full awareness of the rules of the political game and with the understanding that, at this stage—after a year of nerve-wracking deliberations and close to the legislative session's end—he held all the cards. He could threaten to veto the measure or at least significantly delay the process; legislators' desire to pass the bill would overpower the objections of those opposed to the ministry's stance.

Poraz continued with an explanation of his main changes, including the change in the status of the coast and the creation of the new committee tasked with protecting this natural resource. In this way, coastal development would still take place within the framework of regular planning, he said, but under the control of a committee that was "greener than regular planning committees but ... not completely green."

The proposal expressed a balance between the desire to protect the coast and "the state's need for development and our desire for advancement," he avowed.

In practice, it was clear that the creation of the proposed new committee, under the auspices of the National Planning and Building Council, eviscerated the original bill's intention: to give a special status to the coast and to remove responsibility for its development from the regular planning institutions, which, as has been said, had received

much criticism for their inability to protect coastal areas. As Committee Chair MK Yuri Shtern later stated, “All this legislation resulted from a failure to plan.” We saw the planning committees surrendering to pressure, both from the local authorities who have an interest in the development projects and from various economic groups.

The result was bitter, recriminatory debate that exposed deep rifts between the legislature and the executive, with each accusing the other of overstepping bounds. “In a democratic regime, there are centers of decision-making. Usually, they are not interfered with,” Poraz told committee members. “I don’t think that you have the moral right to say that you can judge things better than the planning bodies.”

To settle tempers, the committee chair imposed a set of guidelines for continuing the deliberation. Under these, the definition of the law’s goals and the criteria by which a special committee or planning body would work would be appended to the definitions in the original bill without waiving the issue of “necessity.”

But the session proved a decisive turning point. Outside committee halls, arms were twisted. The ministries of the Interior and the Environment announced an “agreement” backing the new proposal—in large part, it was believed, because the minister of the environment was ill and was represented by an assistant who lacked the political power or sectoral knowledge to serve as a counterweight to Poraz.

While abroad, I received a phone call from Minister of Justice Yo-sef Tommy Lapid, who asked me to soften my positions. Because he had initiated the legislation creating the Commission for Future Generations, he had been asked to see to it that the Commission refrained from any additional “disturbances” as the new coastal proposal advanced. In our conversation, which was far from easy, I explained that Minister Poraz had completely caved in to the positions of the people in his ministry and that he was sacrificing the good of the coast to the desire of the bureaucrats to preserve their authority.

A month and a half later, on July 26, 2004, committee members returned to the issue, this time to discuss a compromise bill that had been approved by the government. But what a compromise! The new

coastal committee remained, replacing the language treating the coast as a public good and allowing development only under the principle of necessity. Where they had given way was on the coastal zone, which had been restored to 300 meters.

The feeling in the room remained hostile. In the opinion of some of the participants, the compromise gutted the bill of meaningful content.

I was given the floor after the government's representatives presented the main parts of the compromise. Once more, I expressed my opposition to the bill, which, in my opinion, lacked the components necessary for true coastal protection.

From this point, the bill moved slowly forward. At a subsequent meeting, which I did not attend, the Commission's environmental chief criticized the proposed coastal committee's suggested composition and its ability to give exceptional approvals for coastal construction projects. The meeting ended with the general feeling that the version of the bill would simply make the coastal area subject to the benevolence of weak government clerks—a far cry from what we had all hoped to achieve.

When the bill was finished, the final compromise version was not fundamentally changed. The way was paved for the creation of a Committee to Preserve the Coastal Environment (CPCE), absent any declarative guiding principles like the ones contained in the original bill.

On November 11th of that year, the law came into force, and the Knesset committee where so much debate had taken place was reassembled for a celebratory meeting. A conciliatory mood prevailed, and the previously harsh criticism of the compromise was replaced with cautious congratulations.

After having once referred to the new law as a "farce" in the media, I decided to refrain from attacking the new law but, instead, suggested we allow time to show how effective it would be in protecting the coastal environment. With the committee chair and MK Omri Sharon, I discussed the possibility of passing a series of amendments to the law to make it conform to the original bill.

Looking back: disappointment and consolation

Time has indeed provided surprises. In the five years since the law came into effect, the CPCE has met a number of times, and the majority of its decisions have thus far been balanced. Indeed, I would even say the law has brought about a slight improvement of the coastal environment.

From this short perspective, one can say that, in spite of my disappointment and that of others who worked to create the law in its final form, the measure has partially succeeded in protecting Israel's coastal lands from the predations of building and development that had previously posed such a threat.

I believe that the discussions and debates we had contributed to this. The passage of the law, the public's growing awareness of the issue and the general flood of environmental awareness into the world community in general all helped influence the new coastal committee.

However, the disappointing debate leads to some sobering conclusions. There was strong desire and energetic activity behind the original bill on the part of the Commission for Future Generations, individual legislators and influential organizations; yet we could not achieve a law that would absolutely guarantee the rights of the whole public and future generations. Even at the beginning of the third millennium, Israel remains behind some of the world's developed nations on matters of this kind.

This history shows how little importance the state's high-level decision-makers attribute to environmental issues and sustainable development, especially when opposing economic interests are at stake.

Our partial success might be attributed to a pair of factors. First, the Commission lacked any formal power to influence government ministries and their leaders. As an appointed body, the Commission for Future Generations cannot be an authority that vetoes bills or their formulation. Second, the coalition backing a more environmentally minded law did not maintain a united front. Internal interests too often took precedence over collective needs, which played to the benefit of the opposing government interests.

In this respect, the climax was the support of the green organizations for Minister Poraz's bill in complete opposition to the needs of the environment and future generations. But legislators, too, lacked the political strength to stand up to the government ministries and were forced to retreat at decisive stages.

From all this, we learn that the path to instilling futures thinking among decision-makers remains a long one. Thinking that is based on the "here and now" is still stronger than independent thinking, which concerns itself with the needs of the future rather than outside interests and considerations.

Nonetheless, it would be wrong to ignore the indirect successes that came out of this project. In the course of the legislative process, a significant change occurred in the terminology used by decision-makers, even when this was only partially expressed in action. Concern for the needs of future generations and the principles of sustainable development became part of common parlance.

I recognize, too, that this is part of a long process in which the Ministry for Environmental Protection, the environmental organizations, legislators possessing an environmental awareness and the Commission for Future Generations are all partners.

Five years after passing the Protection of the Coastal Environment Law, the Knesset is now flooded with bills and laws that have been written using the principles of "traditional" sustainable development. The desire to protect the environment and to make it healthier for ourselves and future generations has created the momentum behind this wave of legislation.

Battles with and between stakeholders on individual issues remain necessary, but we can see that this traditional mode of policy-making is, in essence, simply an expression of a survival mentality. Real solutions to problems will come by creating a genuine change in consciousness among decision-makers and stakeholders. Only in this way will we succeed in breaking out of the cycle of environmental battles.

As long as policies are analyzed in the currency of money and power, environmental organizations will be at a disadvantages—that

is, until the change in awareness so essential to our world arrives, and we come to hear the voices of environmentalists and sustainable thinkers in all sectors.

These voices are beginning to be heard today. In the issue of coastal protection, I have no doubt that the law and the public awareness it created represent just one stage of development. Already, we are witnessing additional proactive processes to benefit the coastal environment, such as recruiting youth groups to clean up the beaches, the invention of innovative solutions for preserving the coastal cliffs, and more.

But, in order for sustainable thinking to prevail, the voices of future-oriented thinkers must be given expression across all sectors.

Epilogue

It's 3 a.m. in India, where I am on the beach.

The sound of waves lapping upon the beach—soothing and embedding nature's rhythms inside me.

The sensation of being one with the universe enfolds me.

In my imagination, I hear Mother Earth's voice calling us to create for our planet a desirable future, a loving future, a future of well-being for humanity and for the planet.

This book tells the story, one of several kinds, of the human existential instinct awakening to our responsibility to coming generations and the planet.

This is the story of the era in which the awakening consciousness of humanity's basic life force, of the driving force of sustainability, is spreading like fire in a field of dry thorns.

This is a period in which the human species is beginning to free itself of the chains of consciousness that divide and discriminate between people. It is a period in which we are creating a realm of conscious understanding that we are all one and that creating a desirable future cannot leave any one of us behind.

The fabric that joins all of the creatures living on this planet is growing stronger, and the network that is connecting many people in this plane of awareness is transforming the concept of a global village into an existing reality.

The story of the Commission for Future Generations in Israel's parliament is a unique tale of a concrete human attempt to bring the concepts of sustainability into the world of deeds.

While it cannot be said that the Commission brought about all of the hoped-for change in consciousness within the Knesset, at the same time, the Commission represents a spirited human attempt. In

its originality of concept in calling the Commission to life, the Knesset showed courage. And, in our success in influencing legislation and bringing a new concept into the legislative realm, we see an unprecedented event.

I am pleased to see that the idea is already being imitated in other parliaments of the world—and I anticipate that this is only the beginning.

And now from the general to the personal: My term as Commissioner of Future Generations clarified my vocation, the one I must serve as effectively as possible.

Every morning, I anticipate with great eagerness the way in which existence is bringing this vocation into contact with the world of action.

I believe this point of contact will be generated by the Centre for Sustainable Global Leadership in Israel, of which I am a co-founder. It is my hope that the Centre will soon become home to the Future Global Leadership Academy, which will train promising mid-career leaders with great potential in creating global transformation. With future intelligence comprising the core of the curriculum, we will help future leaders internalize a holistic leadership approach in the intellectual, physical, emotional and spiritual dimensions.

I invite those of you who share the ideas in this book, those of you who walk a path connected to the one outlined in the mission of this book, and those of you who are prepared to be a partner in the processes of creating sustainable global future leadership to contact me at my website, FutureIntelligence.org. I invite you to join me as supporters, donors, contributors and stakeholders in this initiative.

Those of us who are alive today have a great privilege—to experience and to create the space that will build the sustainable infrastructure for the future of humanity.

It is my great personal privilege to live in this era and to be part of this new global movement with all of you—my partners upon this planet.

Shlomo Shoham, January 2010

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References

- Bell, Wendell. 1997. *Foundations of Futures Studies: Human Science for a New Era*. New Brunswick: Transaction Publishers.
- Bell, Wendell. 2002. "Making People Responsible: The Possible, the Probable, and the Preferable." In *Advancing Futures: Futures Studies in Higher Education*, edited by J.A. Dator. Westport, Conn: Praeger.
- Caspi, Micha. 2004. "Backgrounder on Obesity" Research and Information Center of the Knesset. www.knesset.gov.il/MMM/data/docs/m00725.doc (available in Hebrew only; accessed December 2009).
- Dator, J.A. 1979. "The Futures of Culture/Cultures of the Future." In *Perspectives in Cross-Cultural Psychology*, edited by Anthony Marsella, et al. New York: Academic Press.
- Dator, J.A. 2002. "Introduction: the Future Lies Behind! Thirty Years of Teaching Futures Studies." In *Advancing Futures: Futures Studies in Higher Education*, edited by J.A. Dator. Westport, Conn: Praeger.
- Fancher, Raymond. 1985. *The Intelligence Men: Makers of the IQ Controversy*. New York: W.W. Norton & Company.
- Frankl, Viktor E. 2006. *Man's Search for Meaning*. Beacon Press, 2006.
- Friends of the Earth Middle East. 2002. *Shadow Report to the Government of Israel's Assessment of Progress in Implementing Agenda 21*, presented at the World Summit for Sustainable Development, Johannesburg 2002. <http://www.foeme.org/publications.php?ind=37> (accessed August 30, 2009).
- Fulwider, Valere Byrd. 2004. "Future Benefits? Tax Policy, Advertising, and the Epidemic of Obesity in Children." *Journal of Contemporary Health Law Policy*, Winter.

- Fynn. 1974. *Mister God, This Is Anna*. New York: Ballantine Books.
- Gardner, Howard. 1993. *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.
- Gibran, Khalil. 1996. "On Children." In *The Prophet*. Hertfordshire: Wordsworth Editions.
- Goleman, Daniel, Richard Boyatzis and Annie McKee. 2002. *Primal Leadership: Realizing the Power of Emotional Intelligence*. Boston: Harvard Business School Press.
- Goleman, David. 2006. *Social Intelligence*. New York: Bantam Dell.
- Gottfredson, L. S. ed. 1997. "Intelligence and Social Policy." *Intelligence* 24, no. 1.
- Hacohen Kuk, Avraham Yitzhak. 1927. *Olat Re'aya*. Jerusalem: Mosad Harav Kuk.
- Hawkes, Carolina. 2004. "Marketing Food to Children: The Global Regulatory Environment," World Health Organization, <http://whqlibdoc.who.int/publications/2004/9241591579.pdf>. (accessed December 2009)
- Hicks, David. 2002. *Lessons for the Future. The Missing Dimension in Education*. London: Routledge.
- Israeli Ministry of Foreign Affairs. 1995. "Israel 2020: A New Vision." Israel Environment Bulletin 18, no. 2: Spring 1995. <http://www.mfa.gov.il/MFA/Archive/Communiques/1995/ISRAEL%202020-%20A%20NEW%20VISION%20-%20May-95> (accessed August 12, 2009).
- Jerome, Jerome K. 2007. *Idle Thoughts of an Idle Fellow*. Middlesex: Hesperus Classics.
- Kelly, Matthew. 2007. *The Dream Manager*. Burbank, Calif.: Hyperion.
- Korczak, Janusz. 2006. *Loving Every Child: Wisdom for Parents*. Edited by Sandra Joseph. Chapel Hill: Algonquin Books.
- Leigh, Andrew. 2003. "Thinking Ahead: Strategic Foresight and Government." *Australian Journal of Public Administration* 62, no. 2: 3–10.
- Lissau, Inge et al. 2004. "Body Mass Index and Overweight in Adolescents in 13 European Countries, Israel and the United States." *Archives of Pediatrics and Adolescent Medicine* 158, no. 1.

- Merton, Thomas. 1969. *The Way of Chuang Tzu*. New York: New Directions.
- Munger, Lee J. 2004. "Is Ronald McDonald the Next Joe Camel? Regulating Fast Food Advertisements Targeting Children in Light of the American Overweight and Obesity Epidemic." *Connecticut Public Interest Law Journal*, Spring.
- Osho International Foundation. 1999. *Creativity: Unleashing the Forces Within*. New York: St. Martin's Press.
- Passig, David. 1997. "Imen Delphi: A Delphi Variant Procedure for Emergence." *Human Organization. Journal of the Society for Applied Anthropology*. Spring 56, no. 1: 53–63.
- Passig, David. 1998. "An Applied Social Systems Procedure for Generating Purposive Sound Futures." *Systems Research and Behavioral Science. The Official Journal of the International Federation for Systems Research*. Winter 15, no.1: 315–325.
- Passig, David. 2000. "The Future of the Future in the State of Israel." In *Israel 2000*, edited by Sara and Meir Aharoni. Mekassem: Kfar Saba.
- Passig, David. 2004. "Variations to the Imen-Delphi Procedure Aimed at Helping in the Emergence of Communities of Interests." *Journal of Organizational Transformation & Social Change* 1, no.2-3: 95–109.
- Polak, Fred. 1961. *The Image of the Future: Enlightening the Past, Orienting the Present, Forecasting the Future*. New York: Oceana Publications.
- Silbernagel, Michelle, and Marina Skumanich. 1997. "Foresighting Around the World." Seattle: Battelle Institute.
- Slaughter, Richard. 1991. "Changing Images of Futures in the 20th Century." *Futures*, 23, no. 5: 499–515.
- Spearman, Charles. 1904. "'General Intelligence' Objectively Determined and Measured." *American Journal of Psychology* 15: 201–293.
- State Comptroller and Ombudsman. 1958. *State Comptroller Law, Chapter One*. 5718-1958 (consolidated version) <http://www.mevaker.gov.il/serve/site/english/emevaker.asp> (accessed August 28, 2009).

- Sustainable Development Education Panel (SDEP). 2000. *What Sustainable Development Means for Schools*. House of Commons Education and Skills Committee.
- Toffler, Alvin. 1970. *Future Shock*. New York: Random House.
- UK Dept. of Health. 2002. *Health Check, Chief Medical Officer (CMO) Annual Report*. United Kingdom Dept. of Health.
- United Nations. 2000. *Plan of Implementation of the World Summit on Sustainable Development*. http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/ (accessed December 15, 2009).
- Veith, Ilza (transl.). 2002. *The Yellow Emperor's Classic of Internal Medicine*. Berkeley: University of California Press.
- World Health Organization. 2006. *Obesity and Overweight Fact Sheet*. <http://www.who.int/mediacentre/factsheets/fs311/en/index.html> (accessed November 2009).

Appendix

Partial list of objectives and activities of the Commission for Future Generations (2002–2006) in the following areas:

Sustainable development

- Sustainable Development Bill (2003)
- Inclusion of the rights to sustainable development in the proposed Israeli Constitution
- Active in developing the government's national strategy for sustainable development
- Provided assistance to the C-level staff committee of government offices for implementing the government's decisions on sustainable development
- International activities targeting the establishment of the rights of future generations

Health

Health and the environment

- The Israeli Clean Air Act
- Held a clean air workshop for the Knesset's Committee on the Interior and the Environment
- Held a workshop on the links between health and the environment for the Committee on the Interior and the Environment

- Held a conference on health and the environment in cooperation with the Porter School of Environmental Studies (University of Tel Aviv)
- Enhanced long-term thinking in health services to strengthen preventive medical services and public health
- Published an opinion on well-baby clinics—transferring responsibility for well-baby clinics from the Ministry of Health to the HMOs
- Participated in a committee determining the future character of well-baby clinics

Public health

- Enhanced work with the state organization for the care of mothers, children and adolescents
- Advocated stipulating the responsibilities of those conducting medical experiments on human subjects
- Advocated giving preventive medical services higher priority in future medical research
- Addressed pupils' health
- Co-launched the national program for preventing obesity
- Established a steering committee to deal with the obesity epidemic, including representatives from government offices, the IDF, the HMOs, pediatricians, the Israel Medical Organization and the Central Parents' Committee
- Established a committee of directors of HMOs to address obesity issues
- Conducted comprehensive comparative research on national programs around the world addressing obesity
- Promoted legislation on the topic of excess weight within the framework of the task force of the Ministry of Health (e.g., Amendment of the Ordinance on Public Health (food); Trans-fatty acids (2005); the Consumer Protection Act addressing food advertising directed at children (2005))

Sustainable education

- Structured the vision of future education in Israel (Education 2025)
- Advanced strategic thinking in education
- Strengthened the view that the education system is the foundation for the future of the State of Israel
- Participated in the legislative team of the national task force for the advancement of education in Israel (Dovrat Committee)
- Presented the topic of education for sustainable development and its importance within the framework of the Dovrat Committee
- Reported on pre-school education in the educational system (Inverting the Pyramid)
- Promoted legislation on education and children's rights (e.g., Law for Mainstreaming Children with Special Needs; Special Education Law (amendment number 7); Free Education for Sick Children Law; Public Library Law; Amendment of the Long School Day and Enrichment Studies (1997); Evidence Amendment Law—Protection of the Children)
- Promoted legislation in the spirit of the Rotlevy Report
- Promoted the Fund for Children at Risk, a social insurance bill (2004)
- Proposed codex amendment to the law on transparency of information and its impact on the rights of the child (2002)
- Supervised drafting of bill on educational institutions for toddlers (2004)
- National insurance
- Birth grant
- Children's stipend
- Targeted instilling values of sustainable education by establishing a youth parliament, creating an educational leadership initiative for Tel Aviv and introducing education for sustainable development in kindergartens

Economy

- Examined the national economy and government policies in terms of sustainable development
- Promoted balanced development that considers all externalities (direct and indirect) from a macroeconomic perspective and seeks to improve intragenerational and intergenerational equality
- Promoted the design of a long-term, future-oriented budget, analyzing how to achieve it and allocating the appropriate resources for this purpose
- Acted to help create a sustainable, transparent budget built on a multi-annual budget of the government offices that demands that performance and productivity be measured
- Acted to establish the use of a multi-annual budget (held roundtables on the issue) and to create awareness of linkages between managing a sustainable budget and managing a policy of sustainability in all areas of government
- Promoted legislation for a clear, transparent budget that enables parliamentary supervision of its content and execution
- Promoted the state's economy basic law bill (i.e., amendment—budget deliberations, appropriation acts and reconciliation legislation)
- Amendment proposal to the Knesset codex (i.e., reconciliation legislation for achieving budgetary objectives)
- Published an economic estimate of externalities and their inclusion among the considerations used to assess every economic activity
- Published reports on the Budget Laws, reconciliation legislation and appropriation acts
- Acted in the Knesset to minimize the use of reconciliation legislation
- Promoted the bill for an economic plan to heal Israel's economy (entailed legislative amendments for achieving budgetary targets and the economic policy for the years 2003 and 2004)
- Advocated the creation of legislation that combines the obligation to submit and publicize existing surveys with complete transparency in free-trade agreements

Environment, natural resources, planning and construction

Air pollution

- Presented to the Knesset's interior and environment sub-committee a detailed opinion on dioxins and their damaging effects on human health (recommendations adopted)
- Presented a position paper on the Clean Air Act, which was appended to the bill's explanatory material
- Managed a workshop led by Joel Schwartz (Harvard University) on clean air sponsored by the committee for the interior and the environment.
- Conducted a workshop led by Lind Burnham (U.S. Environmental Protection Agency) on the relationship between human health and the environment within the framework of the Knesset committee for the interior and the environment
- Held a "Health and the Environment" conference jointly with the Porter School for Environmental Studies of the University of Tel Aviv, which aimed to raise awareness within the medical community of environmental health issues and call decision-makers to act
- Endeavored to institute binding regulations on air pollution
- Endeavored to establish a center for research on electromagnetic radiation and promoted a non-ionized electromagnetic radiation law

Preservation of open spaces

- Promoted the Open Spaces Bill to establish consistent standards and provide the few remaining open spaces in Israel legal protection
- Presented an overall planning opinion on the Trans-Israel Highway, including a request to re-examine alternate routes for section 18 of the highway

- Initiated the Ayalon Park Act (2005) to zone the proposed area exclusively as a park and implement more stringent rules for zone changes
- Promoted the Coastal Preservation Law (2004)
- Advocated in the Knesset the Mediterranean Coast Act (proposed member's bill) and presented a paper on the protection, management and preservation of the coast
- Advocated in the Knesset the Preserving the Coastal Environment Act (government bill)
- Presented a position paper, "Coasts—Public Assets," on both proposed bills
- Proposed the Preservation of the Coastal Environment Law (2005) and initiated a rewording of the amendment to include the coast of the Bay of Eilat
- Held the Land, Capital and Government Conference addressing open spaces as a scarce resource with the participation of government ministers, Members of Knesset, scholars, public figures and representatives of NGOs
- Presented position paper on land policy recommending a Basic Law of sustainable development be established in which the development of open spaces is prohibited if it does not meet the principles of sustainable development and if no essential national need for the development is established
- Promoted a sustainable Jerusalem (opposition to the Safdi plan)
- Acted to prevent restrictions from being placed on the committee for the preservation of agricultural land and open spaces

Health and environment linkages

- Promoted Environmental Information Bill (2003), which would permit open access to environmental information held by local authorities and private bodies
- Initiated bill to forbid adding fluoride to drinking water (2003)
- Promoted Healthy Educational Environment Bill (2003), which aimed to protect children exposed to environmental hazards in their places of study

- Acted to oppose a planned coal power plant in Ashkelon
- Presented a position paper addressing punitive damages in environmental laws

Environmental education

- Activity within the framework of a steering committee that was established by the National Council for the Environment in order to formulate policy recommendations for environmental education for decision-makers

Science, development and technology

- Instilled futures thinking
- Drew upon scholarly and professional expertise and knowledge in scientific research within the framework of legislative work that impacts future generations
- Strengthened scientific research as a support for strategic thinking
- Promoted futures thinking in the Chief Scientists Forum of the governmental offices
- Promoted a ban on genetic intervention (amendment, 2004)

Public and international activities

- Participating member in the U.N.'s 2002 World Summit on Sustainable Development, in Johannesburg
- Participating member of the U.N. Commission on Sustainable Development (CSD)
- Participating member of the Parliamentary Assembly of the Black Sea Economic Cooperation (PABSEC) conference addressing sustainability in the Mediterranean
- Conducted a mock trial for the Knesset's Future Thinking Week
- Participated in the Forum of Managers of the Future at the Israel Center for Management
- Promoted Green Leaders for the city of Tel Aviv
- Conducted a mock trial with the participation of the Organization for Life and Environment

- Active participation in various public events in order to instill an awareness of sustainable development

The Knesset Law (amendment) for the Commission for Future Generations

(unofficial translation)

Knesset Law (Amendment no. 14), 5761-2001

Addition to Section 8

The following will be added to Knesset Law 1994,⁵ following clause 29: Section 8: Knesset Commissioner for Future Generations

30. Definition

In this Section, “particular relevance for future generations” refers to an issue which may have significant consequences for future generations in the realms of the environment, natural resources, science, development, education, health, the economy, demography, planning and construction, quality of life, technology, justice and any matter that has been determined by the Knesset Constitution, Law and Justice Committee to have significant consequences for future generations.

31. Knesset Commissioner for Future Generations

The Knesset will have a Commissioner who will present it with data and assessments of issues that have particular relevance for future generations. He will be called the Knesset Commissioner for Future Generations.

32. The role of the Knesset Commissioner for Future Generations

The Knesset Commissioner for Future Generations:

- i) Will give his assessment of bills debated in the Knesset that he considers to have particular relevance for future generations;
- ii) Will give his assessment of secondary legislation brought for authorization of one of the Knesset Committees or for consultation

5 Legal code 5754-1994, p. 140; 5761-2001, p.114

with one of the Knesset committees that he considers to have special relevance for future generations;

- iii) Will present reports to the Knesset from time to time, at his discretion, with recommendations on issues with particular relevance for future generations;
- iv) Will advise MKs on issues with particular relevance for future generations;
- v) Will present to the Knesset, once a year, a report on his activities in accordance with this law.

33. Independence

In the performance of his duties, the Knesset Commissioner for Future Generations will be guided purely by professional considerations.

34. The status of the Knesset Commissioner for Future Generations

- i) The Knesset Secretariat will pass to the Knesset Commissioner for Future Generations all bills introduced in the Knesset.
- ii) The Knesset Committees will pass to the Knesset Commissioner for Future Generations all secondary legislation introduced for their approval or for consultation with them, excluding only those matters defined by law as confidential.
- iii) The Knesset Commissioner for Future Generations will notify the Knesset Speaker periodically about laws and bills that he considers to have particular relevance to future generations; the Knesset Speaker will inform the chairmen of the Knesset committees responsible for the areas covered by the laws or bills.
- iv) The Knesset Commissioner for Future Generations will notify the Knesset Committees regarding secondary legislation passed to him in accordance with sub-paragraph (b) in which he finds particular relevance for future generations.
- v) Knesset committee chairmen will invite the Knesset Commissioner for Future Generations to debates on bills or secondary legislation that he has declared to have particular relevance for future generations in accordance with sub paragraphs (c) and

- (d). The Committee chairmen will coordinate the timing of the debate with the Commissioner, allowing reasonable time—at his discretion and in accordance with the issue—for the collection of data and the preparation of an evaluation.
- vi) Once the Commissioner has given his evaluation regarding a bill, a summary of this evaluation will be brought before the Knesset plenum as follows: If the evaluation was given prior to the first reading of the bill—in the explanatory notes to the bill; If the evaluation was given after the first reading—in the appendix to the proposal by the committee presented to the Knesset plenum for the second and third readings.
 - vii) The Commissioner is permitted to participate in any debate of any Knesset Committee, at his discretion; If the debate is secret by law, the Commissioner will participate on the authorization of the Committee Chairman.
 - viii) A report in accordance with clause 32 (3) will be presented to the Committee responsible for the area of that issue; the Committee will discuss it and may present its conclusions and recommendations to the Knesset.
 - ix) An annual report in accordance with clause 32 (5) will be presented to the Knesset Speaker and introduced in the Knesset; the Knesset will hold a debate on it.

35. Acquisition of information

- i) The Knesset Commissioner for Future Generations may request from any organization or body being investigated as listed in clause 9 (1) – (6) of the State Comptroller Law, 1958 –5718 (consolidated text) any information, document or report (hereafter – information) in the possession of that body and which is required by the Commissioner for the implementation of his tasks; the aforesaid body will give the Commissioner the requested information.
- ii) If a Minister whose Ministry is responsible for the area which includes the organization or body under investigation considers that passing over the information in accordance with the instructions

of subclause (a) may put at risk the security of the State, the foreign relations of the State or public safety, he is permitted to give instructions not to hand over that information; however, if part of that information may be revealed without risk, that part would be handed over to the Commissioner as aforementioned.

- iii) Information in accordance with this clause will not be handed over if this is forbidden by any law.
- iv) The instructions in this clause do not prejudice the obligation to transfer information to the Knesset and to its Committees in accordance with Basic Law: the Government and in accordance with Basic Law: the Knesset.

36. Appointment of the Knesset Commissioner for Future Generations

The Knesset Commissioner for Future Generations will be appointed by the Knesset Speaker, with the authorization of the Knesset House Committee, from among the candidates recommended by the Public Committee appointed in accordance with the instructions of Clause 38, in accordance with the procedure determined by this Law.

37. Qualifications

Any Israeli citizen and resident who fulfills the following criteria may serve as the Knesset Commissioner for Future Generations:

- i) holds an academic degree in one of the areas listed in Clause 30;
- ii) has at least five years' professional experience in one of the areas listed in Clause 30;
- iii) over the two years previous to the presentation of his candidacy was not active in political life and was not a member of any political party; for this purpose, anyone who did not pay party dues and did not participate in the activities of any party institution will not be considered as a member of a party;
- iv) has not been convicted of any charge which, by its essence, severity or circumstances, would make him unfit to serve as the Knesset Commissioner for Future Generations.

38. Public committee

The Knesset Speaker will appoint a Public Committee that will examine the qualifications and suitability of candidates for the position of Knesset Commissioner for Future Generations and will recommend two or more of them to the Knesset, noting the number of committee members who supported the candidacy of each of them; the Committee may include its comments regarding each candidate; the names of the candidates recommended by the Committee will be published in "Reshumot."

The Public Committee will have six members to be composed as follows:

- i) Three members of the Knesset: The Chairman of the Knesset House Committee, who will serve as the Chairman of the Public Committee, The Chairman of the Knesset Science and Technology Committee and the Chairman of the Knesset State Control Committee;
- ii) Three faculty members from institutions of higher education, experts in various fields from among those listed in Clause 30, to be selected by the Knesset House Committee; for this purpose, "an institution of higher education" is an institution recognized or having received a permit in accordance with the Council on Higher Education Law, 1958.

39. The work of the public committee

The Public Committee will determine the procedure for the presentation of candidates for the position of Knesset Commissioner for Future Generations as well as the procedures for the work of the committee and for examining candidates, with the stipulation that the decision to recommend a candidate to the Knesset Speaker for the position of Knesset Commissioner for Future Generations is passed by a majority of at least four members.

40. The timing of the election

The appointment of the Knesset Commissioner for Future Generations will be made, if at all possible, not earlier than ninety days and not later than thirty days from the completion of the term in office of the serving Knesset Commissioner for Future Generations; if the position of the Commissioner is vacated before the end of his period in office, the appointment must be made within forty-five days from the day the position falls vacant.

An announcement of the appointment of the Knesset Commissioner for Future Generations will be published in “Reshumot.”

41. Term of office

The Knesset Commissioner for Future Generations will serve for five years from the day of his appointment; and the Knesset Speaker has the right to appoint him for a further term of office.

42. Restrictions on activity

During the period following his term in office and during the following year, the Knesset Commissioner for Future Generations will not be active in political life or be a member of any political party; for this purpose, anyone who did not pay party dues and did not participate in the activities of any party institution will not be considered as a member of a party.

43. Budget

The budget for the Knesset Commissioner for Future Generations will be established in a separate budgetary clause within the Knesset budget.

44. Conditions of employment and staff

The Knesset House Committee will institute instructions regarding appropriate conditions of employment for the Knesset Commissioner for Future Generations and regarding a team of professional and administrative staff to be placed at his disposal.

The Knesset Commissioner for Future Generations is permitted to get help from Knesset employees for the discharge of his duties, as needed.

45. Completion of term in office

The term of office of the Knesset Commissioner for Future Generations will end: at the end of the term of office; with his death or resignation; with his removal from office.

46. Removal from office

The Knesset Speaker may, with the agreement of the Knesset House Committee, remove the Knesset Commissioner for Future Generations from office on one of the following conditions:

- i) He has committed an act inappropriate to his position;
- ii) He has become permanently unable to fulfill his duties;
- iii) He has been convicted of an offence that, by its essence, severity or circumstances, make him unfit to serve in the position of Knesset Commissioner for Future Generations.

The Knesset Speaker will not remove the Knesset Commissioner for Future Generations from office until the Commissioner has been given the opportunity to present his case to the Knesset Speaker and to the Knesset House Committee.

47. Suspension

The Knesset speaker, at the suggestion of the Knesset House Committee accepted by a majority of its members, will suspend the Knesset Commissioner for Future Generations if there are criminal processes against him as stated in Clause 46 (a) (3) until the end of the processes.

The House Committee will not propose, nor will the Knesset Speaker authorize, a suspension until the Knesset Commissioner for Future Generations has been given the opportunity to present his claims to them.

48. Temporary substitute

The Knesset Speaker will appoint a temporary substitute for the Knesset Commissioner for Future Generations from among the staff as aforementioned in Clause 44 (a).

If the position of the Knesset Commissioner for Future Generations has fallen vacant, and until a new Commissioner takes office, or if the commissioner is out of the country, has been suspended or is temporarily unable to fulfill his duties, his substitute will fulfill his duties and use the authority given to him by this clause.

2. The first appointment

The Knesset Commissioner for Future Generations will first be appointed within six months from the day this law is enacted.

The Commission for Future Generations Original Bill vs. Current Law

Comparing the original bill with the law that was actually enacted shows us that the Commission was originally planned to be a more independent body with a broader range of responsibilities and authorities.

Comparing the two versions shows us the following:

	Original bill	Current law
Status of the establishing law	A new, separate and specific law	A chapter within the Knesset Law
Legal definition	Statutory corporation (sec 5)	A unit within the parliament
Main function	To represent the special interests of future generations in the parliament and government	Express opinion regarding the implication of laws on the interests of future generations Advise the members of Knesset on issues of particular relevance to future generations
Election of the Commissioner	By the majority of members of parliament in a secret vote	By a public committee part professional and part political; Final decision by the Speaker
Fields of authority	Open list of any subject that is of special interest for future generations. Examples of areas included are: economy, environment, demography, science, quality of life	A closed list of 12 fields, including nearly all subjects, but excluding defense and foreign affairs
Status vis-à-vis the government	Authority to demand relevant information of any minister Obligation upon every minister to consult with the Commissioner prior to any issuing of regulations, according to the authority invested in him, that relate to a law that was found by the Commissioner to have special interest to future generations	Authority to demand information of any controlled establishment under the State Comptroller Act
Commission's budget	To be determined by the Knesset Finance Committee, according to the Commissioner's suggestion; to be published with the State budget	Part of the Knesset budget, determined by the Knesset administration
Definition of "future generations"	Those who will become part of the state's population at any time, and that have not yet been born	Not defined.
Intervention in the legislation process	General instructions regarding appearance by the Commissioner in different committees, after informing chairman	Detailed instructions of the process

The differences between the original bill and the enacted law had, as discussed, considerable impact on the Commission-to-be, particularly with regard to the Commission's relationship with the executive branch. Under the enacted law, the Commission would act mainly within the Knesset's legislative process, although the need to develop content and values under this law remained.

Legislation in the Israeli Parliament

Abstract⁶

The main function of the Knesset as Israel's legislative authority is to pass laws. Legislation can be initiated by the government (government bills), a single Member of Knesset, a group of Knesset members (private members' bills) or a Knesset Committee. A bill can propose an entirely new piece of legislation, or it may propose an amendment to, or the cancellation of, an existing law. Every reading of a bill is adopted or rejected by a vote of the Knesset members present in the plenum at the time.

Government bills

A government bill is presented to the Speaker of the Knesset by the minister concerned, and the Speaker places it on the Knesset table. During the deliberation, the minister or a deputy minister in his ministry presents an explanation of the law. At the end of the debate on first reading, the plenum can decide to reject the bill or to refer it to a committee for preparation for second reading. The committee that was assigned the task of dealing with the bill is entitled to propose amendments, as it may see fit, as long as these amendments do not diverge from the subject of the bill. With the approval of the House Committee, the committee can combine bills or split a bill into two or more bills. Once the committee has completed its work, it returns the bill to the plenum for second and third readings. The debate on second reading is opened by the chairman of the committee that dealt with the bill. The voting on second reading is performed article by article. At this stage, the bill may be returned to the committee if it is necessary to draft the reservations that were adopted in second reading or be put immediately to the vote in third reading. Until the bill is adopted in third reading, the government is entitled to withdraw it.

6 The information provided here is derived from the Knesset's website: <http://www.knesset.gov.il/main/eng/home.asp>.

Committee bills

A bill presented by a committee is dealt with in the same manner as a government bill. Unlike government bills and private members' bills, committee bills can only deal with the following subjects: basic laws and laws dealing with the Knesset, elections to the Knesset, Members of Knesset or the State Comptroller.

Private members' bills

Bills presented by a Member of Knesset or a group of Knesset members are presented to the Speaker of the Knesset by the proposer(s). The Speaker and his deputies decide whether to approve placing the bill on the Knesset's agenda. A bill that is racist in its essence or rejects the existence of the State of Israel as the state of the Jewish People shall not be approved.

A bill that has been approved to be placed on the Knesset agenda is usually placed on the Knesset table at least 45 days before it is brought to the plenum for preliminary reading. The plenum can remove it from its agenda or refer it to a committee for preparation for first reading. As of the stage of first reading, the legislative process is similar to that of a government bill. A private members' bill can be withdrawn until the end of the deliberation in the committee after the first reading.

Since July 2002, any bill whose annual budgetary cost is over NIS 5 million and is not supported by the government can only be adopted with the votes of at least 50 Members of Knesset at every stage of the legislation.

Every Knesset member has a quota of bills that he is entitled to bring for preliminary reading during each Knesset session.

Data regarding private members' bills

As of the 11th Knesset, the number of private members' bills has increased drastically. Despite this fact, the percentage of private members' bills adopted from among those placed on the Knesset table keeps falling. The main reason for this is that the number of "declarations of law" bills presented only in order to attract attention is progressively growing.

Legislation of Basic Laws

The process of legislating basic laws is no different than that of legislating an ordinary law. Even though the “Harari proposal” of 1950 assigned to the Constitution, Law and Justice Committee the task of preparing a constitution for the state, most of the basic laws were presented to the Knesset as government bills. Only Basic Law: the Knesset was by the Constitution, Law and Justice Committee. Basic Law: Human Freedom and Dignity as was as Basic Law: the Government, which was passed in 1992, were the initiatives of Members of the Knesset.

Publication in the Official Gazette

From the establishment of the state and until September 2002, two series of the Official Gazette publications were published in connection with legislation: one of all the bills towards first reading (“The Official Gazette: Bills”), and the second of bills that passed all the stages of legislation and entered the law book (“The Official Gazette: the Book of Laws”). In each of the series, the bills, on the one hand, and the laws, on the other, were numbered chronologically.

As of October 2002, the bills’ series was split in two, and now there are separate series of Knesset bills—in other words, private members’ bills and committee bills (“The Official Gazette: bills—Knesset”) and government bills (“The Official Gazette: bills—government”). Since the splitting into two series, the various bills have started being re-numbered.

United Nations Declaration on the Responsibilities of the Present Generations Toward Future Generations

The General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting in Paris from 21 October to 12 November 1997 at its 29th session,

Mindful of the will of the peoples, set out solemnly in the Charter of the United Nations, to ‘save succeeding generations from the scourge of war’ and to safeguard the values and principles enshrined in the Universal Declaration of Human Rights, and all other relevant instruments of international law,

Considering the provisions of the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, both adopted on 16 December 1966, and the Convention on the Rights of the Child, adopted on 20 November 1989,

Concerned by the fate of future generations in the face of the vital challenges of the next millennium,

Conscious that, at this point in history, the very existence of humankind and its environment are threatened,

Stressing that full respect for human rights and ideals of democracy constitute an essential basis for the protection of the needs and interests of future generations,

Asserting the necessity for establishing new, equitable and global links of partnership and intragenerational solidarity, and for promoting intergenerational solidarity for the perpetuation of humankind,

Recalling that the responsibilities of the present generations towards future generations have already been referred to in various instruments, such as the Convention for the Protection of the World Cul-

tural and Natural Heritage, adopted by the General Conference of UNESCO on 16 November 1972, the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity, adopted in Rio de Janeiro on 5 June 1992, the Rio Declaration on Environment and Development, adopted by the United Nations Conference on Environment and Development on 14 June 1992, the Vienna Declaration and Programme of Action, adopted by the World Conference on Human Rights on 25 June 1993, and the United Nations General Assembly resolutions relating to the protection of the global climate for present and future generations adopted since 1990,

Determined to contribute towards the solution of current world problems through increased international co-operation, to create such conditions as will ensure that the needs and interests of future generations are not jeopardized by the burden of the past, and to hand on a better world to future generations,

Resolved to strive to ensure that the present generations are fully aware of their responsibilities towards future generations,

Recognizing that the task of protecting the needs and interests of future generations, particularly through education, is fundamental to the ethical mission of UNESCO, whose Constitution enshrines the ideals of ‘justice and liberty and peace’ founded on ‘the intellectual and moral solidarity of mankind’,

Bearing in mind that the fate of future generations depends to a great extent on decisions and actions taken today, and that present-day problems, including poverty, technological and material underdevelopment, unemployment, exclusion, discrimination and threats to the environment, must be solved in the interests of both present and future generations,

Convinced that there is a moral obligation to formulate behavioural guidelines for the present generations within a broad, future-oriented perspective,

Solemnly proclaims on this twelfth day of November 1997 this Declaration on the Responsibilities of the Present Generations Towards Future Generations

Article 1—Needs and interests of future generations

The present generations have the responsibility of ensuring that the needs and interests of present and future generations are fully safeguarded.

Article 2—Freedom of choice

It is important to make every effort to ensure, with due regard to human rights and fundamental freedoms, that future as well as present generations enjoy full freedom of choice as to their political, economic and social systems and are able to preserve their cultural and religious diversity.

Article 3—Maintenance and perpetuation of humankind

The present generations should strive to ensure the maintenance and perpetuation of humankind with due respect for the dignity of the human person. Consequently, the nature and form of human life must not be undermined in any way whatsoever.

Article 4—Preservation of life on Earth

The present generations have the responsibility to bequeath to future generations an Earth which will not one day be irreversibly damaged by human activity. Each generation inheriting the Earth temporarily should take care to use natural resources reasonably and ensure that life is not prejudiced by harmful modifications of the ecosystems and that scientific and technological progress in all fields does not harm life on Earth.

Article 5—Protection of the environment

1. In order to ensure that future generations benefit from the richness of the Earth's ecosystems, the present generations should

- strive for sustainable development and preserve living conditions, particularly the quality and integrity of the environment.
2. The present generations should ensure that future generations are not exposed to pollution which may endanger their health or their existence itself.
 3. The present generations should preserve for future generations natural resources necessary for sustaining human life and for its development.
 4. The present generations should take into account possible consequences for future generations of major projects before these are carried out.

Article 6—Human genome and biodiversity

The human genome, in full respect of the dignity of the human person and human rights, must be protected and biodiversity safeguarded. Scientific and technological progress should not in any way impair or compromise the preservation of the human and other species.

Article 7—Cultural diversity and cultural heritage

With due respect for human rights and fundamental freedoms, the present generations should take care to preserve the cultural diversity of humankind. The present generations have the responsibility to identify, protect and safeguard the tangible and intangible cultural heritage and to transmit this common heritage to future generations.

Article 8—Common heritage of humankind

The present generations may use the common heritage of humankind, as defined in international law, provided that this does not entail compromising it irreversibly.

Article 9—Peace

1. The present generations should ensure that both they and future generations learn to live together in peace, security, respect for international law, human rights and fundamental freedoms.

2. The present generations should spare future generations the scourge of war. To that end, they should avoid exposing future generations to the harmful consequences of armed conflicts as well as all other forms of aggression and use of weapons, contrary to humanitarian principles.

Article 10—Development and education

1. The present generations should ensure the conditions of equitable, sustainable and universal socio-economic development of future generations, both in its individual and collective dimensions, in particular through a fair and prudent use of available resources for the purpose of combating poverty.
2. Education is an important instrument for the development of human persons and societies. It should be used to foster peace, justice, understanding, tolerance and equality for the benefit of present and future generations.

Article 11—Non-discrimination

The present generations should refrain from taking any action or measure which would have the effect of leading to or perpetuating any form of discrimination for future generations.

Article 12—Implementation

1. States, the United Nations system, other intergovernmental and non-governmental organizations, individuals, public and private bodies should assume their full responsibilities in promoting, in particular through education, training and information, respect for the ideals laid down in this Declaration, and encourage by all appropriate means their full recognition and effective application.
2. In view of UNESCO's ethical mission, the Organization is requested to disseminate the present Declaration as widely as possible, and to undertake all necessary steps in its fields of competence to raise public awareness concerning the ideals enshrined therein.

The Author



Judge (ret.) **Shlomo Shoham** served as the first Commissioner for Future Generations and as a legal advisor to the Constitution Law and Justice Committee in the Israeli Parliament.

Shoham was a lecturer in the law faculties of the universities of Tel Aviv, Jerusalem and Bar-Ilan on a range of subjects on human rights and criminal law. He has also taught emotional intelligence at the executive MPA program at the Hebrew University, in Jerusalem, and meditation and bio-energy for thousands of people worldwide.

In recent years, Shlomo was an honorary fellow of the Bertelsmann Stiftung, and it is within this framework that he wrote this book.

Shoham teaches future-oriented educational leadership at Levinsky College and holistic leadership to teachers at Reidman College, in Tel Aviv.

He is the founder of the Centre for Sustainable Global Leadership, which will train promising, outstanding mid-career leaders with the greatest potential to create global transformation. With future intelligence at the core of the curriculum, the Centre will help the world's future leaders to internalize a holistic approach and embody leadership at the intellectual, physical, emotional and spiritual levels.

Ret. Judge Shoham invites those of you who walk a path connected to the mission of this book to contact him at his website, FutureIntelligence.org, and to join him as supporters, donors, contributors and stakeholders in this initiative.

