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His world and welcome to it

rld-renowned industrial designer Ron Nabarro predicts a ture with body-scanners at home, urban agriculture, and ldings that generate their own energy. His own specialty? Devising products that prevent 'unnatural encounters' between technology and aging baby boomers

By Efrat Neuman

When Prof. Ron Nabarro received the World Technology Network Award last July, the judges who awarded him the prize wrote that his innovative work in design would have far-reaching implications for our future lives. Even after receiving 20 awards in the course of his career in industrial design, the Dutch-born Israeli was thrilled.

"In journalistic terms, this is the Pulitzer Prize," he explains. "Suddenly you are told that you are on the same list as Paola Antonelli, curator [of the department of architecture and design] at the Museum of Modern Art in New York, or Japanese designer Issey Miyake, who won in previous years. This is the foremost authority in world design. You don't get any money for it, but it's a very prestigious place to be."

Nabarro, 64, was the only winner in the design category, and he received the prize for his work on what is called age-friendly design – such as cellular phones for older users. The award presenters noted that, "Nabarro has brought older-age related needs and factors as primary considerations into his research and work in the design of products, services, contents and mature lifestyle management. He helped companies and service providers to better understand and provide for the needs and requirements of older consumers ... In the world of design it is quite difficult to find real humanistic values as real considerations."

Forty years ago, as a graduate of the second class at Jerusalem's Bezalel Academy of Arts and Design that had the opportunity to major in industrial design, Nabarro discovered that looking for work was an uphill battle because no one even knew what the field was.

"I'm one of those who plowed the first furrows," he recalls. "When I graduated in 1970, the public image of Bezalel was copper-relief art and olive-wood camels. Being a Bezalel graduate meant you were an artist. Even in the school of design no one knew what an industrial designer was; they were called bottle designers. When I looked for work I had to say, 'Hi, I'm a designer and I know how to do this hocus-pocus and make life more beautiful.' I was treated as the 'person in charge of beauty.' I remember calling a company in Jerusalem and they said, 'When we get to the nickel trimmings and the logo, we'll call you.'"

Despairing of his job search, Nabarro decid ed to strike out on his own, as a consultant, an got his first break from Bellers Ovens in Rosl Ha'ayin. "I designed the panel with all the button for the ovens, one button for this kind of flame another for the other kind."

Designing a successful product demands mor than creative ability, he notes. You also need a cli ent who recognizes the potential and is willing t engage in dialogue.

"I worked for an Israeli manufacturer, EMKA which made toasters. The owner was a nice Pol ish Jew named Arieh Kaminsky – a man with dream: He would travel to trade shows to see th competition, and he wanted me to design a toast er like the one made by Bosch. Kaminsky wa creative and forward-thinking.

"I designed a toaster for him that was eventuall known as the Grillux 2000. Every Israeli household had one. It was a formative event. A grill with a pan that you could put things in, and plates that could be used on both sides and removed for washing. It was a smart solution, because you could use one for meat and the other for dairy. Kaminsky was a good partner, amazingly creative.

"Then Kenwood told him they would put their name on it, and market and export it as a Kenwood toaster. It was the first Israeli consumer product to be exported in large quantities. At an exhibition in the mid-1970s, it won the prize for boldest design."

To date, in collaboration with engineers, marketing professionals and others, Nabarro has designed hundreds of products used in Israel and abroad, for fields as diverse as high-tech, medical equipment and artificial intelligence. Alongside his practical work he also moved into academia, serving as dean of the school of design and art at the Holon Academic Institute of Technology, establishing the graduate program in industrial design at the Technion – Institute of Technology in Haifa, and lecturing at educational institutions and at conferences in Israel and around the world.

'All about feelings'

What's the difference between product design and industrial design?

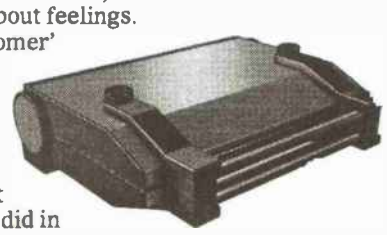
Nabarro: "There are many young designers who design an item such as a new armchair. However, they are not industrial designers, because what they do is not mass design – making items marketed by the millions – rather [they create] maybe 10, 20 or 30 pieces. Industrial design takes into account a range of considerations that have to do with mass production and do not apply to a limited product or series – and that has an economic significance, because every one-tenth of a cent counts. When you make a limited series, it doesn't matter much if the cost is a dollar more or less."

What have been the most significant recent changes in industrial design?

"In the past, when we came to the task of designing a product, we asked what the user needed. Today we ask what the product does to the user – what kind of feeling he or she gets from it. If I am designing a lock, what I am really designing is not a lock, but a sense of security. This is very different compared to my first years as a designer. Then people only wanted a product that looked good.

"Today, when you design medical equipment, you ask questions such as: 'How can we make the patient less anxious? Can I add to his or her sense of security?' How the product looks has become secondary. Even if we take the iPhone, for example, we find that it is a brilliant exercise in design. Basically, it does exactly what other products do, and still people salivate over it. It's all about feelings.

"I started out as a young 'baby boomer' thinking that we needed to fix the world. Since then the design world has undergone many changes. Technological developments and growing social awareness have totally revolutionized design, and it now plays a role far beyond what it did in the past. Today no manufacturer will tell you, 'We'll call you when we get to the nickel trimmings.'"



Do designers get a percentage of the sales, or a fixed fee?

"In Israel the business model is that you get paid for a project and that's it. Abroad, where the pay is relatively low, you also get a percentage later if the product succeeds."

And what's the going rate?

"It's different with every designer. I'm not complaining about what I get paid, which is considered high for the industry."

What other trends are emerging in your field?

"There are fascinating things happening, such as the whole subject of sustainable design. On the most basic level, it aims to use recycled materials or plans a product so that its components can be easily recycled. On a higher level, people are talking about how we might, for example, reduce the amount of energy used in manufacturing. The Western industrial world is behaving today as if it had the resources of four and a half planet Earths, and we don't. So there's talk about conserving energy and solar energy, and design is part of that, because it touches everyday life. Architecture will change, cars will change, everything.

"Over a decade ago I designed an HIV-detection kit for Orgenics [a local biotechnological firm]. I designed a plastic box, because the kit needed to be refrigerated. The marketing director phoned from Germany in hysterics and asked that production be halted. It turned out that if the company were to bring plastic boxes into Germany, [the Germans] would need to recycle them or ship them out of the country afterward, because that's the law. Today, when I sit in various forums, I know what's going on around me, and that did not used to be part of the designer's job."

How will this world look 10 years from now?

"I believe that in a decade at most – but if you ask me, long before that – we'll be able to stand in front of the mirror in the morning and have a full body scan. Our toothbrush will check the state of our teeth and blood, the system will tell us what kind of health we are in and if there is a problematic mole on our back. In order to perform that kind of scan, insane amounts of information have to be gathered."

And it will probably cost a lot of money.

"It will be cheap, because it will be a mass solution. It's in the interest of our HMOs that we have such a system at home. The whole conception of the HMO will change; already there is much more emphasis on prevention. When you get to 55, you get a letter from your HMO telling you that you are eligible for a free flu shot. It's cheaper for the HMO to install something in your home that will alert you to medical problems ahead of time than to pay for hospitalization and surgery. Hospitals are dangerous places for the elderly."

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Designing for older users

Ron Nabarro was born in the Netherlands to Holocaust-survivor parents. His mother, who came to Holland from Vienna, met his Dutch father there, and when Nabarro was four the family moved to Israel. He grew up in Rehovot, was a paratrooper in the army and went on to Bezalel, then the only design school in Israel.

Among other things, Nabarro is a judge in international design competitions such as the "red dot award." He was part of a team that established a research and development center for the elderly in China. He also helped to found SeniorTouch, Ltd., which consults manufacturers on the needs and limitations of the consumer who is over the age of 55, with the aim of taking them into account during the design and development stages.

"When I am designing for an older user, it's important to me that he or she does not feel embarrassment, privately and in front of his children," he explains, "when they have to explain how things work to him and solve his problems for him."

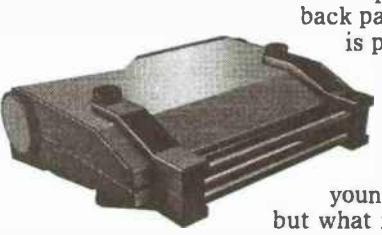
What's the market potential for age-friendly design?

"If you talk about age 55 and up, the estimate for the U.S. is around 79 million people, and for Europe it is 56 million – and that's if you ignore the growth in China. All of these people have an unnatural encounter with technology. The potential is mammoth for product marketing. Every five seconds in the U.S. and Europe, a baby boomer passes the age of 60. In the Western world these are usually well-off people, who are willing to pay good money for products that won't make them feel they are old already.

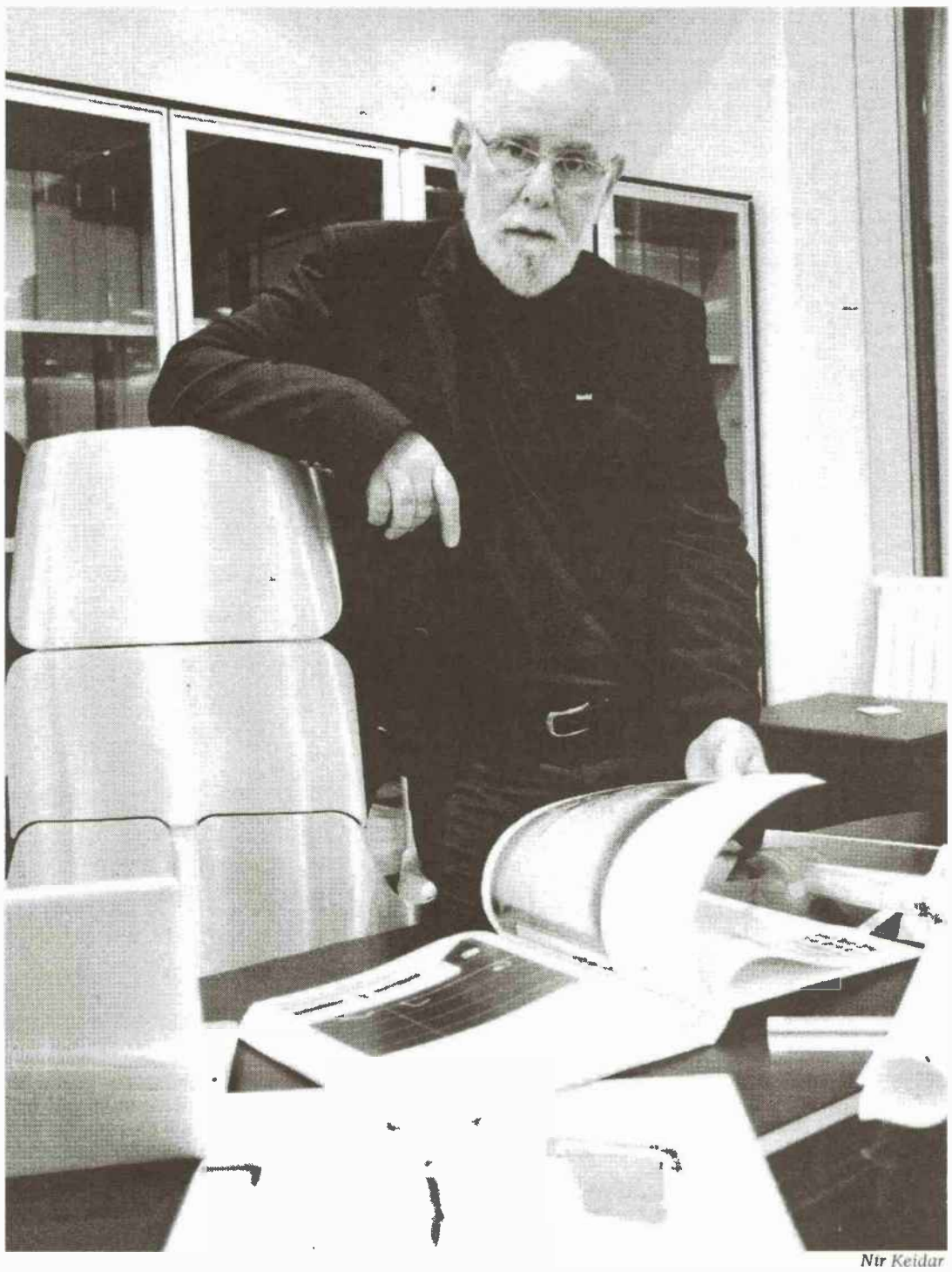
"A young person who picks up a TV remote and can't get it to work will proceed by trial and error. An older person will say, 'I must be doing something wrong.' Part of my philosophy is that an age-friendly product must be successful on the first try. Otherwise it is very likely to be abandoned."

Can you give some examples of age-friendly products?

"Whirlpool, for example, has developed a washing machine that is absolutely ordinary, other than the fact that it stands on a podium, which raises it by 35 centimeters. The goal is to make putting in and removing laundry easier. Fifty percent or more of the population suffers from lower back pain, and a certain percentage is pregnant. You have to understand that an age-friendly product is an excellent one for young people too. There is no age discrimination here. What's good for the young is not good for the elderly, but what is good for the elderly does work for young people. Those same baby boomers have sold their big houses because the kids have moved out, and they are buying new apartments to start Chapter 3 or 4 of their lives, and so they go to buy a new washing machine. At least one of them will be happy not to bend down.



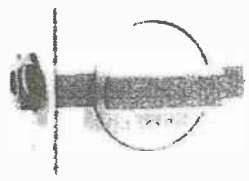
"Personally, I can't read the instruction sheets that come with medication. I've had many people tell me in embarrassment that they use a magnifying glass, because the type is too small. The young graphic designer who designed that document thought about how to make it attractive, not about its functionality. Even I fell into the trap when I bought a nicely designed new microwave oven. It is made of stainless steel, and the lettering on it is small and black. If the lighting isn't good, I can't read it easily. This is the kind of unpleasant encounter that the designer can prevent. That person in his sixties wants to retain his quality of living, and he is willing to invest a lot in that.



Ntr Keidar

Nabarro. "Technological developments and growing social awareness have totally revolutionized design, and it now plays a role far beyond what it did in the past."

"There is a designer in Singapore who developed a small cup that you can put over your eye [to help you] put in eye drops. It's enough that your hands tremble, and you can't put the drops in without spilling them. No one wants to feel they are growing old. I can't help what people see when they look in the mirror, but it's my job to minimize the negative feeling that occurs when a user meets a product. On the other hand, you don't want products that scream out 'I was designed for the elderly,' because then people won't buy them. The designer needs to design an attractive product that nevertheless offers a solution to the limitations of older people."



How do you think the market will develop?

"In 10 years, computers will have the capabilities of a human brain. This market is going to be super-interesting, in terms of technology and what it can offer both older and younger people. Manufacturers in China understand the potential much more than they do in Israel. For example, I am working with a Chinese company to find a solution for replacing the filter on the air conditioner without having to climb a ladder. The importance lies in the very fact that the world's largest A.C. manufacturer is beginning to pay attention. The company understands that there are consumers who may decide not to buy the product because they have a problem. In Western Europe and the U.S., 136 million citizens are people willing to pay for a microwave they can operate without having to open the manual every second.

'When I am designing for an older user, [my work] starts with the fact that the user is embarrassed, privately and in front of his children, who have to explain how things work and solve his problems for him.'

"The design I learned at Bezalel is not all that relevant anymore. Industry, society and designers have the responsibility of proposing solutions for the elderly population, which will only get bigger, since life expectancy is on the rise. Today we are bringing in nursing-care aides from Romania and Thailand, but in less than eight years there will be a robotic solution for that.

"Many companies are already thinking about that. There are terrible incidents of people falling down in their bathrooms. Hospitalization and rehabilitation for elderly people who suffer a fall cost the U.S. government $7 billion a year. From the age of 60, every individual has an average of two falls a year. It's time to put on a new hat – to make products that are not only beautiful, but accessible and friendly to all users."

Where do you see us in 2050?

"There's talk about climate problems, and that's no picnic. Already architects are drawing up plans for what we will need to do when the sea level rises and we are all flooded. There are plans for using the water at high and low tide to generate energy. The new architecture will take the form of buildings that generate their own energy and can treat their own water. There will even be urban agriculture, which will use buildings to grow crops. Yes, it is definitely going to be interesting."