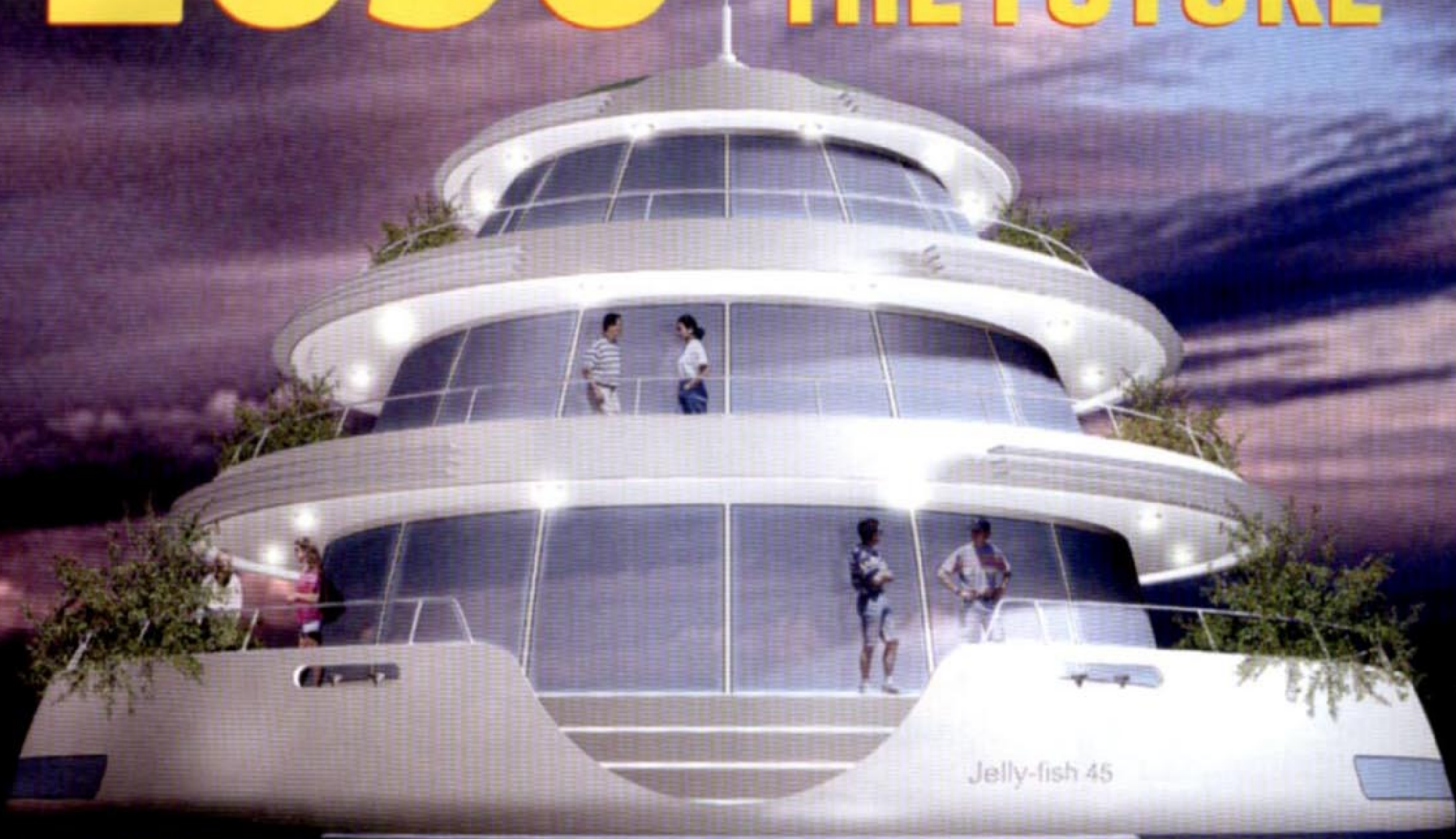


TODAY

IN ENGLISH

2050

DREAMING OF
THE FUTURE

■ **Bill Gates**
Changing our world

■ **Aldous Huxley**
Brave New World

Pratique

■ **L'anglais au BAC** : un corrigé du bac 2004

■ **Dialogues** : demander des indications,
se plaindre d'un retard

Eco-tourism

in Australia

Numéro 164 • Mensuel • May 2005

M 01596 - 164 - F: 4,90 €



Belgique 4,90 € • Luxembourg 6 € • 11 FS • Maroc 6 MAD • 7,95 SCAO • DOM 6 € • ISSN N° 1154-5992

2050 DREAM

When fiction becomes reality

By RUPERT MORGAN

Staff reporter for Today in English

FIFTY YEARS AGO PEOPLE WERE SURE WHAT THE **FUTURE WOULD BRING**. THEY WEREN'T ALWAYS RIGHT, OF COURSE. SO WHAT ARE WE **PREDICTING** FOR THE **NEXT 50 YEARS** AND WILL WE **GET IT RIGHT** THIS TIME?

Back in the 1950s, people thought they knew what the future was going to be like – thanks largely to magazine articles like this one.

By the year 2000, it was predicted, we would be travelling in flying cars, and robots would be doing most of our work. Our concern was what we would do with the new leisure^v time these advances would give us. Meanwhile, cheap and clean nuclear energy would transform our lives.

Finally, some predicted that a man-made spaceship^v would travel to the moon before the end of the century.

Home designs in the future will increasingly address our desire to return to nature, as well as today's problems of overcrowding^v and lack of space. The Jelly^v Fish 45 floating home (right) reflects both of these aspects. Scheduled to be built by the end of this year, the futuristic five-level structure will allow its occupants to live above and below sea level. The \$2,5 million high-tech home can be moored^v in various locations^v – provided there is water, of course.

Vocabulary

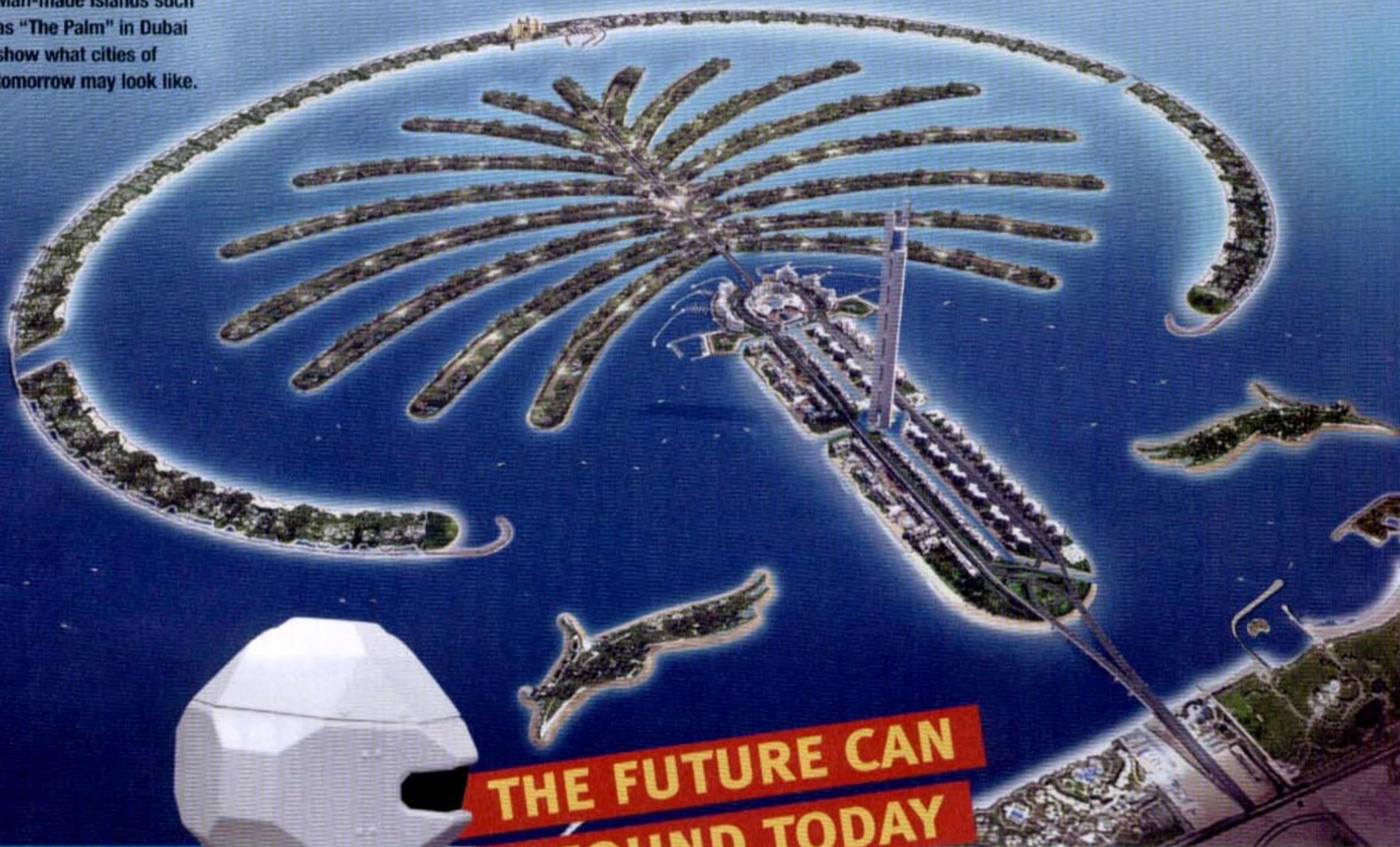
Les mots difficiles sont marqués d'un "v" dans le texte. L'accent tonique est indiqué en bleu.

| | |
|--|--|
| ▶ amazingly boring incroyablement ennuyeux | ▶ moor <i>ici</i> , amarrer |
| ▶ funnily enough ce qui est assez drôle | ▶ overcrowding surpeuplement |
| ▶ global warming réchauffement de la planète | ▶ scared effrayé |
| ▶ household chores tâches ménagères | ▶ soon <i>ici</i> , rapidement |
| ▶ jellyfish méduse | ▶ spaceship vaisseau spatial |
| ▶ leisure time temps de loisirs | ▶ stick (to ... with sth) <i>ici</i> , garder qch |
| ▶ location endroit | ▶ whatever predictions quelles que soient les prédictions |



ING OF THE FUTURE

Man-made islands such as "The Palm" in Dubai show what cities of tomorrow may look like.



**THE FUTURE CAN
BE FOUND TODAY**

Robots currently being developed will one day be able to do all of our household chores. But will we really have more leisure time to spend as a result?

Funnily enough, none of these predictions were wrong in factual terms. They were just wrong in spirit.

For instance, we got to the moon far quicker than even the optimists had predicted, but soon decided that it was an amazingly boring place. Space exploration had turned out to be very expensive and not at all like the *Star Trek* television and movie series. The idea of space as a frontier for adventure died in the early 1970s.

Nuclear energy became a reality too, at which point ordinary people realized that they were very scared of it and preferred to stick with good old fossil fuels (despite hysterical warnings from a few extremists about something called "global warming"). Now, of course, people are starting to question whether the extremists were right.

We got the robots, just as promised. They didn't walk about on two legs, like we

had expected, but they certainly did the work of millions of people. Unfortunately, for those people, being unemployed is not quite the same as having more leisure time.

TAKE A FLYING TAXI TO WORK

And even though the arrival of flying cars is still a long way away, within a few years people will be able to travel to work and back in flying taxicabs.

The point is that whatever predictions we make today about 2050 will certainly be wrong. Maybe not in fact, but in spirit – the problem is not knowing what forms of technology will become reality in the years to come, but knowing what implications they will have on ordinary people's lives.

The following examples may give you an idea of what new things we can expect to see in the future, but not necessarily how they will effect us once we are there ... ➡

MEMORY MAGIC

Brain^v implants will change how we remember ...

Arnold Schwarzenegger fans will no doubt remember his 1990 film, *Total Recall*, in which he had memories implanted into his brain^v because ... well, it was very complicated, but in the end he had to kill a lot of people to resolve the situation.

EXPANDING THE HUMAN MIND

At the time, some film critics said *Total Recall* was ridiculous Arnold science-fiction rubbish^v. However, it turns out they were wrong and Arnold was right – for this is precisely the technology being developed by a California biomedical engineering team.

The objective is to develop a computer chip^v that can be inserted into the human brain and serve as extra memory storage^v or as a way of instantly learning new skills^v such as foreign languages or quantum

mechanics. Ted Berger, the leader of the research, has successfully used a computer chip to replace the brain cells of rats in a simple neural circuit.

He hopes to be moving on to monkeys in the next few years. "It's down the road^v," he announces confidently, "but the building blocks are being put together now."

Still don't believe Arnold was right? It really is time that you stopped thinking of him as simply a movie actor, and realized that he is now the governor of the state of California. This is a very serious man, after all. Let's just hope that the *Terminator* film, where he plays a futuristic killing machine, was only his idea of a good joke. ■



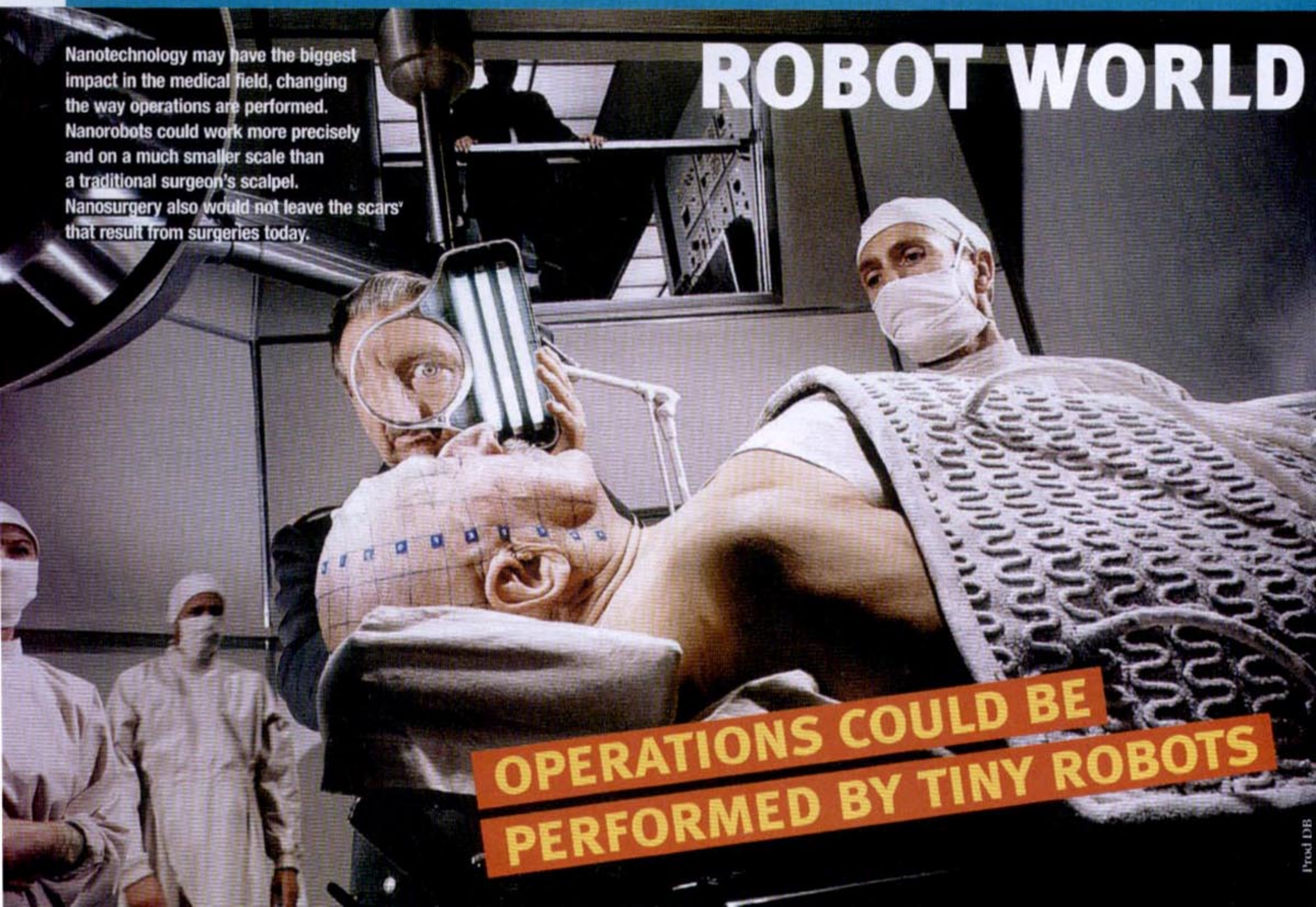
In *Total Recall*, Arnold Schwarzenegger's character receives a memory implant to take an imaginary trip to Mars. One day it may be possible for humans to do the same.

**MEMORY IMPLANTS
CAN HELP YOU LEARN**

Nanotechnology may have the biggest impact in the medical field, changing the way operations are performed. Nanorobots could work more precisely and on a much smaller scale than a traditional surgeon's scalpel. Nanosurgery also would not leave the scars^v that result from surgeries today.

ROBOT WORLD

**OPERATIONS COULD BE
PERFORMED BY TINY ROBOTS**



SPACE TRIPS

Future methods of travel will take us closer to the stars ...

Every week in the television show *Star Trek*, Captain Kirk would arrive on a new planet with three or four crew members from his spaceship, the *Starship Enterprise*. Any anonymous crew members were usually killed, especially if they were wearing red uniforms, but the survivors would teleport safely back onto the *Enterprise*.

It may surprise you to hear that teleportation has already become a reality. As of yet, researchers have only teleported a single electron – a less complex structure than a Kirk-like humanoid – but it's a start.

LONDON TO SYDNEY IN TWO HOURS

In the shorter term, other new forms of transport are already being developed. NASA has successfully tested a hypersonic aircraft, capable of travelling at just under ten times the speed of sound. In a passenger plane, this would reduce the travel time

from London to Sydney to just two hours.

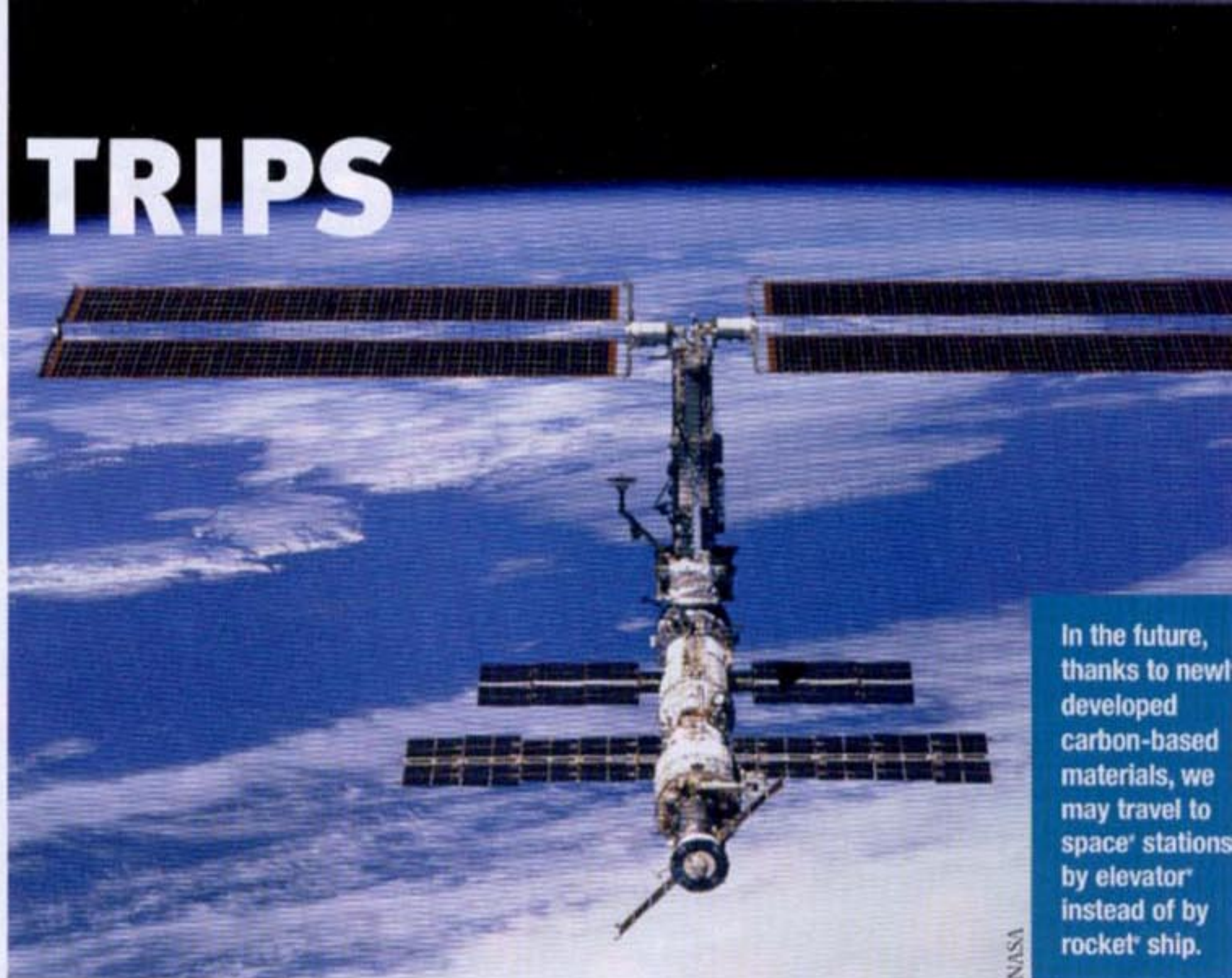
The other project NASA is seriously looking at is a space elevator that could eventually replace the rockets in use today. Using nanotechnology, Japanese scientists have created a carbon-based material many times stronger

than steel. The idea is that a ribbon of this material 100,000 kilometres long could stretch from the Earth to a geostationary space station. A solar-powered elevator would then lift materials along it to the space station at a fraction of the cost of a rocket launch.

"Six years ago there was nobody working on it," says a NASA researcher studying the idea, "Now there are hundreds of people."

No matter how we are travelling in 2050, we probably won't be in control of the vehicle; the computer-driven car is only a few years away. While this automated future will most likely be safer, people will surely look back on the freedom of the 20th-century roads with a mixture of awe and nostalgia, just as we ourselves look back at the Wild West.

We may not think it now, but by 2050 our world will seem almost as adventurous as an episode of *Star Trek* ...



In the future, thanks to newly developed carbon-based materials, we may travel to space stations by elevator instead of by rocket ship.

NASA

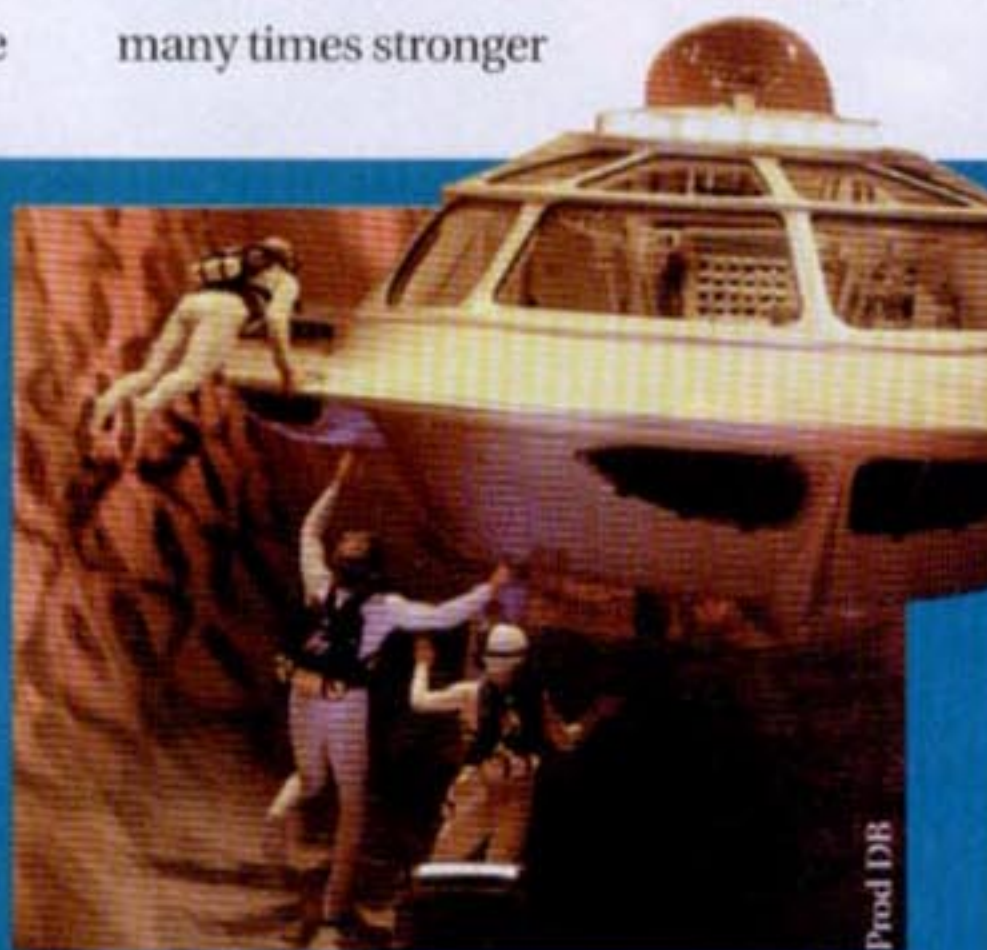
To be small is important ...

Back in the 1960s, there was a science-fiction film called *Fantastic Voyage*. In it, the beautiful Raquel Welch plays a scientist who (along with a team of other, less attractive scientists) is reduced to microscopic dimensions and injected into the body of a man. They travel through his body in a tiny, tiny submarine – encountering white blood cells and other dangers along the way – until they arrive at his brain, where they perform a delicate operation using tiny, tiny ray-guns.

It's fun, but ridiculous. Or is it? Because this, scientists believe, is pretty much how operations will one day be performed. Without Raquel Welch, unfortunately.

Nanotechnology is the science of the infinitesimally small. It includes a vast area of research, covering everything from nanorobots that could perform medical operations, to nano-particles that will create new materials with incredible properties.

Although still in its infancy, nanotechnology is the subject of great excitement,



Prod DB

with some scientists predicting that it has the potential to change our lives as significantly as electricity. The field is being taken so seriously that the United States government spent \$1.6 billion funding nanotechnology research in 2004 – the most money it has spent on any form of scientific research since the Apollo space program. Nor is it alone – the governments of Japan, India, China and Europe are all investing massive amounts in nano-research.

As of yet, nobody knows what forms of nanotechnology will become reality, let alone what impact they will have on the world in 50 years, but they all agree that it is going to be very, very big ... and small. ■

Vocabulary

Les mots difficiles sont marqués d'un "V" dans le texte. L'accent tonique est indiqué en bleu.

| | |
|---------------------------------------|---|
| ► awe crainte mêlée d'admiration | ► ray-gun fusil à rayons laser |
| ► billion milliard | ► ribbon ici, bande |
| ► blood cell globule | ► road (down the ...) ici, à portée de main |
| ► brain cerveau | ► rocket fusée |
| ► building block ici, élément de base | ► rubbish (GB) ici, nullité |
| ► chip ici, puce | ► scar ici, cicatrice |
| ► crew, équipe | ► skill compétence |
| ► elevator ascenseur | ► spaceship vaisseau spatial |
| ► funding financement | ► space station station orbitale |
| ► infancy ici, débuts | ► steel acier |
| ► launch lancement | ► storage stockage |
| ► let alone encore moins | ► Wild West (US) Far West |
| ► mixture mélange | |

The discovery of DNA was perhaps the greatest scientific achievement of the 20th century. New advances in genetic engineering could very well lead to the greatest discoveries of the next century.



When Nicky the cat (top) died in 2003 at the age of 17, his DNA was sent to a cloning lab by his owner. The result was Little Nicky (bottom) – the world's first commercially cloned pet – who is clearly identical to the original. He even has the same personality.

GENE POWER

The future's biggest controversy ...

Back in the 1950s, when people imagined the future, they thought about technology – rockets, robots and nuclear power. Ironically, the biggest scientific discovery of the 1950s was not related to machines at all, but rather to human genetics – the structure of DNA.

COMMERCIALLY CLONED CATS ARE ONLY THE START

Last year a lady from Texas paid \$50,000 for a cat named Little Nicky. Why was Little Nicky so expensive? Because it was created using genetic engineering technology by a company called Genetic Savings and Clone, and was a clone of the woman's previous cat, Nicky, who had died in 2003. This was not the first time, however, that cloning

made the headlines. In 1996 in Scotland, a sheep named Dolly was the first mammal ever to be cloned. Today scientists are already cloning human embryos. When it comes to cloning, the future is here.

When scientists take a look ahead to the next 50 years they see reason to be both optimistic and pessimistic. On the one hand, thanks to genetic engineering, diseases will be eradicated, human potential expanded, and mortality questioned. On the other, some predict a worrying rise in global temperatures by up to five degrees in the next 50 years, causing widespread starvation and destruction.

The implications of these two factors – genetic engineering and global warming –

are so vast and so unknowable, that nobody would be foolish enough to predict what will have changed by the year 2050.

Except for Arnold Schwarzenegger, of course. He had his cat cloned (as well as himself) some years ago in a movie called *The 6th Day*. The film critics, naturally, said that the concept was ridiculous.

Vocabulary

Les mots difficiles sont marqués d'un "V" dans le texte. L'accent tonique est indiqué en bleu.

| | |
|--|---|
| ► achievement réussite | ► pet <i>ici</i> , animal domestique |
| ► foolish idiot | ► previous précédent |
| ► genetic engineering manipulation génétique | ► rather <i>ici</i> , plutôt |
| ► global warming réchauffement de la planète | ► rocket fusée |
| ► headlines (<i>make the ...</i>) faire la une des journaux | ► sheep mouton |
| ► look ahead (<i>take a ...</i>) penser à l'avenir | ► starvation famine |
| ► mammal mammifère | ► unknowable <i>ici</i> , imprévisible |
| | ► widespread étendu |
| | ► worrying inquiétant |