



# Technion in China

## A Hong Kong entrepreneur joins forces with an Israeli university to spur innovations in mainland China

**THERE IS** a palpable, magnetic attraction between the rags-to-riches Hong Kong billionaire, Li Ka Shing, and Israeli hi-tech entrepreneurs. I sensed it firsthand on September 29, when a groundbreaking agreement was signed by the Technion-Israel Institute of Technology in Haifa and China's Shantou University, whose main benefactor is Li. The agreement provides for the establishment of a Technion-Guangdong Institute of Technology (TGIT) in Shantou, along with an unprecedented \$130 million grant from Li's foundation to the Haifa Technion, the largest gift the institute has ever received. The construction costs of the TGIT will be funded by Guangdong Province and the Municipality of Shantou.

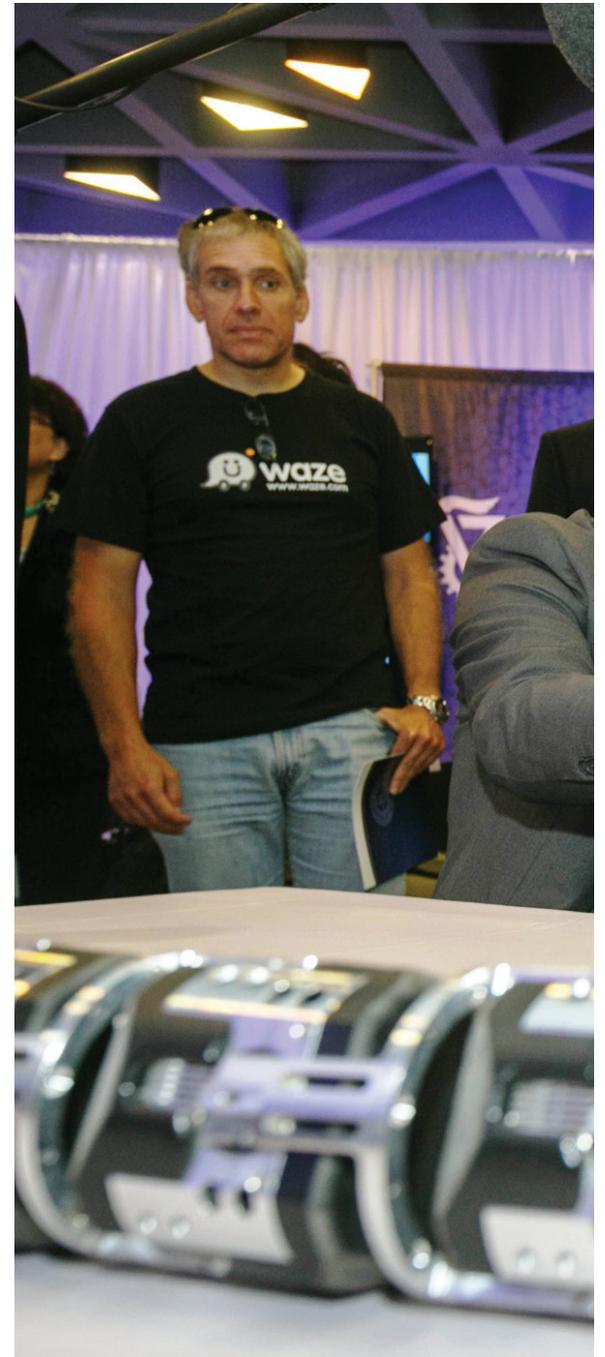
Shantou is a city on the eastern coast of China, about 300 miles northeast of Hong Kong. Metropolitan Shantou has a population of 14 million, nearly double that of Israel.

TGIT will be launched in 2014, when 40 Chinese students will come to the Haifa Technion for two years to study civil and environmental engineering and computer science. They will return to China when

the TGIT buildings and campus are completed. Haifa Technion President Peretz Lavie noted that the Li Ka Shing Foundation, the second largest of its kind in the world, exhaustively studied 70 universities before choosing the Israeli Technion for its Shantou institute. TGIT will teach its courses in English.

Between the usual speeches, the Technion Public Relations department organized a small exhibition of Technion-linked hi-tech start-ups. Li made the rounds of each, his eyes sparkling, querying the entrepreneurs about their inventions and seeing them in action.

Mechanical Engineering Prof. Alon Wolf demonstrated his snake robots, which can wriggle into tight spots to help rescue workers, and gather information from unreachable or unsafe spots in a disaster zone. Li watched paraplegic Radi Kaiuf as he used Argo Medical Technologies' Re-Walk device, invented by Technion graduate Dr. Amit Goffer, to walk up a flight of stairs. And the Chinese visitor heard how Mechanical Engineering Prof. Moshe Shoham and Mazor Robotics' robot performs delicate back surgery, for instance repair-



ing the severe 50-degree scoliosis (spinal curvature) of a young Israeli woman so she could resume competitive high-jumping.

The question that arises, however, is, is the Technion overextended?

In 2011, New York City Mayor Michael Bloomberg announced that the Technion and Cornell University had jointly won the competition to build a new science univer-



Prof. Alon Wolf explains his snake robot to Li Ka Shing and Technion President Peretz Lavie

ASSAF SHILO / ISRAEL SUN

sity on Roosevelt Island. With the Li Ka Shing gift, the Technion, with only 630 faculty members, many of whom are about to retire, is now helping to build two huge, new technology institutes 8,000 miles apart.

The Technion senior management responds that no existing Technion faculty will be diverted to New York or China, only

new hires, and that both enterprises are extremely well funded – including a recent major legacy grant from Irwin Jacobs (founder of Qualcomm) and his wife, Joan, to launch the Jacobs Technion Cornell Innovation Institute in New York City.

Whether or not Israel should be selling its brains to foreigners is a hotly debated question (“Brains for Sale,” *The Jerusalem*

*Report*, September 23). Selling Israel’s skill at developing entrepreneurial brains to other nations may become no less controversial. Should Israel help giant China innovate, when innovation is Israel’s key competitive advantage? As a retired Technion professor, I am far from objective; but I believe the answer is yes, for three reasons.

First, when two of the world's smartest investors, Warren Buffett and Li Ka Shing, give a vote of confidence to Israel by investing in it, the resulting endorsements are invaluable for other potential investors and speak louder than any other "pitch."

Second, Israel has splendid innovative imagination but lacks the ability to scale up global firms. China has immense scale and needs imagination. It is a perfect fit, for mutual gain.

## SHOULD ISRAEL HELP GIANT CHINA INNOVATE, WHEN INNOVATION IS ISRAEL'S KEY COMPETITIVE ADVANTAGE? THE ANSWER IS YES

Third, Israel must find ways to boost its exports to China, as trade between the two countries is very one-sided. In 2012, Israel imported \$5.3 billion worth of goods and services from mainland China and another \$900 million from Hong Kong (excluding diamonds), second only to imports from the US. Israel exported only \$2.4 billion to China, leaving a trade deficit of \$3.8 billion. In contrast, Israeli exports to the US, Israel's best customer, totaled \$10.8 billion, compared with only \$8.6 billion in imports from the US.

How can Israeli exporters do more business with China?

I spoke with Yael Einav, who heads YChina, a company that promotes Israeli business development and joint ventures in China. She told me that the three main obstacles to successful business deals in China are impatience (Israeli firms seek quick wins), poor targeting (industries and markets the Chinese government is not keen on promoting and strengthening), and Israeli arrogance and ignorance of Chinese culture. She advises Israeli clients to prepare thoroughly and deeply understand Chinese needs and interests. Simply showing the Israeli flag is not enough. The TGIT agreement took infinite patience and years to mature and its origins date back to 1999, with Li Ka Shing's first investments in Israel.

Neither Israel nor China has a sterling reputation for protecting intellectual prop-

erty (IP). As China tries to shift from "Made in China" to "Invented in China" (the *raison d'être* of TGIT), Einav notes, it has declared that by 2020, it will be highly ranked globally in protection and management of IP. As China creates its own IP, it has a strong interest in protecting it, as well as that of other nations.

The 85-year-old Li looks far younger than his age. He is very quiet but is an attentive listener, according to 2011 Nobel Laureate Prof. Dan Shechtman, who met with him at the Technion, along with the 2004 Nobel Laureates Profs. Ciechanover and Hershko.

And he is no newcomer to Israel. In 1999, his company, Hutchison Whampoa, gained control of Israeli cellphone company Partner. A decade later, he sold his interest to Ilan Ben-Dov for a large profit, just before cellphone profits plummeted, after former communications minister Moshe Kahlon opened the industry to new competition. Through his investment company, Horizons Ventures, Li has invested in several Israeli start-ups – Cortica (analysis of image content), Wibbitz (video summaries from text), Hola (Internet acceleration), Magisto (video editing) and Waze (mobile navigation). Apparently, Li's profits from Google's \$1.3 billion acquisition of Waze helped fund his large gift to the Technion.

**AT THE** signing ceremony in Tel Aviv, Li mentioned Waze. According to Li, "Waze's mission of 'outsmarting traffic together' is itself a fine example of how by uniting our efforts and leveraging the combined power of disruptive technologies, we will be able to pursue breakthroughs and achieve developments that will create the most profound improvements in people's lives everywhere. I am proud to play my part in bringing this vision to reality."

Li Ka Shing's life story is inspiring. He was born in Chiuchow, just north of Shantou, in 1928. When World War II broke out, he and his family fled to Hong Kong, where his father soon died of tuberculosis because he could not afford medical care. At age 15, Li was supporting his whole family. After working for a plastics company, he launched his own firm, Cheung Kong Industries – an alternate pronunciation of the Yangtze River, chosen because it "aggregates countless streams and tributaries" – and transformed it into a real estate development firm. He invested several

billion dollars in Hong Kong real estate, at a time when owners were bailing out in fear of the impending Chinese takeover of the British colony. Li knew instinctively that the savvy Chinese would not kill the Hong Kong goose that laid golden eggs – and he proved right.

He has two sons, Richard and Victor, who help run his businesses and investments, and he calls his foundation "My Third Child," noting that "by treating my private foundation as my third son, I could allocate more assets to it and enable it to benefit more people."

He has given close to \$1 billion to build a leading university in Shantou, near his place of birth.

Li has a simple explanation for his achievements. "Your desire for success," he explains, "must be greater than your fear of failure" – a quality he clearly shares with Israeli entrepreneurs. His personal wealth today is estimated at over \$31 billion.

In the 2013 Global Innovation Index, Hong Kong ranks 7th in the world; Israel ranks 14th. Mainland China ranks 35th. It makes eminent good sense that a Hong Kong entrepreneur should join forces with an Israeli university to spur mainland China's innovation.

Here is how Li Ka Shing summarizes his vision. "One of my mentors and a very dear Jewish friend once shared with me the meaning of the Hebrew words, *tzedaka* and *tikun olam*," he says.

"These beautiful words encompass both the idea of commitment to charity and the idea of commitment to making the world a better place. So if I could wave a magic wand, this would be my considered wish: I would wave it to enable change-makers to maximize their effectiveness; I would bring them together in great institutes like the Technion and the new Technion campus soon to be built in Shantou with the support of the Guangdong government and, in particular, Governor Zhu. I would watch with satisfaction as the grace of education unlocked the confluence of their genius and potential... enabling the finest young minds from Israel and China to create a continuing series of solutions-revolutions, addressing the biggest challenges facing mankind in the 21st century." ■

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