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Another Revolution Afoot in Egypt: Top-Notch Science

Egypt has launched a national project akin to the Aswan Dam. It's called the City of Science and Technology — part Caltech, part Max Planck Institutes in Germany, part Tech Park in Turkey. Investment in education is the best way to cure fanaticism.

Op-Ed by Ahmed H. Zewail

Cairo — Nearly 100 days after the revolution, Egypt is very different from the country I experienced when millions were on the streets calling for the fall of Hosni Mubarak's regime. Despite a myriad of problems, now there is a new energy, or, as the Egyptians say *hawa gadid* — a new air. The big question is how to channel this energy to forge a new Egypt that is democratic and sustainable, both politically and economically.

The key to moving forward is building confidence among the people with an immediate high-profile project that captures their imagination and symbolizes what the future can bring. Just as the Aswan Dam did that for an earlier generation, the new "City for Science and Technology" now underway can do that for today's hopeful youth.

In the 1960s, I personally lived the resounding impact of President Nasser's vision of constructing the Aswan High Dam as a "national project" for controlling the Nile irrigation and the production of electricity. As the young journalist Emad Ahmed wrote in a recent essay on "Egypt's Bridges" to the future, the post-revolution national project for Egypt comparable to the Aswan Dam must be education.

Every family in Egypt understands this. They have personally experienced the deteriorating education system over the past 30 years of Mr. Mubarak's reign.

Especially for the “Youth of Facebook” who ignited the revolution, the focus on a breakthrough in education that can bring Egypt back to world-class status is in accord with the principles and spirit of their movement — which they fear could be overtaken by “politics as usual” rooted in the past.

Vision of a new generation

As Mr. Ahmed has written, two dominant visions have shaped the Egyptian political imagination over the past 60 years. The first has been the socialist party or al-Hisb al-Ishtraki, which came with Nasser's 1952 "revolution." To today's youth, that vision represents the past.

At the moment, the most organized force is the Muslim Brotherhood, or *Akhwan al-Muslimin*. For Ahmed, they represent the transitional present. From a historical perspective, the Akhwan also are part of the past, as they were founded in 1928, even before Nasser's time. Their appeal comes mainly as a result of their effective religious message and organized charity work, and because they resisted the regime for so long.

The youth movement is aware that old visions can not take Egypt into the future. So in the months since Mubarak was overthrown with the Army's admirable support, the youth, along with a broad spectrum of ordinary Egyptians, have kept that spirit alive by continuing to go to Tahrir Square on Fridays in what is called *millioniah*, or gathering of a million people. They coined a name for each gathering — a Friday of change (*takhier*), of anger (*khadab*), of correction (*tas'hih*). Their demand is that the road to democracy be paved through the establishment of proper constitutions, elimination of old-regime influence, and achievement of justice and equality. Their expectation is a quick remedy to a better economic status.

After so many years of inertia and dictatorship, however, the reality is that these changes will take years. In the meantime, the people need a compass of hope that unites the country and instills confidence and pride.

A project to unify and instill pride

On June 3, a totally different Friday dawned on the country. It was a “Friday of hope” for Egyptians. The day before, a national campaign was launched to build the new City of Science and Technology, following the unanimously-approved legislation by the Cabinet of Ministers and a decree of support from the Supreme Council of the Armed Forces.

This “city of the future,” as it already being called and which is being built on 300 acres on the outskirts of Cairo, has a transparent governance structure and is completely independent from government regulation. The board of trustees that has

already been formed includes six Nobel laureates, the current president of Caltech and former president of MIT, and a number of influential Egyptians such as Mohamed El-Erian, CEO of PIMCO, who has already made a large personal donation to the city. Sir Magdi Yacoub, the renowned heart surgeon based at Imperial College in London, is also a member.

It is not surprising that the project has been enthusiastically embraced by public opinion. Ibrahim Issa, a prominent journalist and one of the leaders of the Tahrir protests, has said, "It is the only important thing proclaimed since the revolution." Ahmed Moslemany, a popular TV commentator, has announced to millions of his viewers, "it is the only way to the modern world".

For 12 years, since I was awarded the Nobel Prize for Chemistry, I have been laboring to get this project off the ground, only to be frustrated by bureaucrats lacking vision and Mubarak's indifference. The "new air" of the revolution has breathed new life into the project.

Our goals and plans

Our goal is to develop a nonprofit institution of higher learning that is merit-based (no wasta or connection), and our model is a hybrid of Caltech, an institution I am familiar with for more than 30 years, the Max Planck Institutes, and Turkey's Tech. Park. The objective is to revive the production of new knowledge by Arabs and to bring the advances of science and technology to the market and society in this Arab awakening epoch.

Our aim is to demonstrate that "Egypt can." This, by itself, will have a huge impact on regaining national pride.

Even with the present economic hardship, Egyptians have decided to invest in the future, with billions of dollars in land and buildings for the project. In weeks we have already nearly collected the first \$100 million in our campaign for a \$2 billion endowment that will ensure the long-term success and independence of the project.

Our hope is that the international community — the Gulf States, the G-20 ,and the G-8 (which pledged \$20 billion at the Deauville summit this year) — will create a genuine partnership with Egypt to invest in the education of our youth so that the gains of the revolution can be consolidated with benefits to the region and the world.

A regional bridge to the future

The benefits for all are clear if this region that is so important to the world can at last make progress and develop.

When the people of Egypt fulfill their dream of democracy and sustained growth, it will go a long way toward opening the broader Middle East and North Africa market of close to 400 million people for business.

Investment in education and economic prosperity is the best way to cure fanaticism and for establishing a just peace in the Middle East. An institution such as the City of Science and Technology will surely be a center of enlightenment and global cooperation.

The Egyptian revolution, which had no ideology but peaceful change, demonstrated clearly that the assertions that Muslims and Arabs are incapable of participating in the modern world or that they are in violent conflict with Western civilization were unfounded. Like everywhere in the world, people of the Middle East aspire to liberty and justice. They wish to have a better life and a decent education for their children.

After more than 50 years of supporting undemocratic autocracy in the region, nothing would more successfully win the hearts and minds of Egyptians than real support for this tangible bridge to the future for a people who have liberated themselves with dignity and civility.

Ahmed Zewail was awarded the Nobel Prize for chemistry in 1999.

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