

HC's practical directives to address terrible air quality

Whose problem is it anyway?

Poor air quality has been a perennial problem for Dhaka, with unabated pollution from many quarters. While there was significant improvement during the various lockdowns last year when there was no traffic and other polluters had suspended their activities, everything has gone back to square one with the reopening of the economy. The dry season that winter brings has multiplied the problem, causing serious health problems, especially for vulnerable groups. Respiratory and other diseases are largely attributed to this deterioration in air quality. In this bleak scenario, we welcome the High Court's stern directives to three authorities to ensure spraying of water on city streets on a regular basis.

Specifically, the HC has given its directives to the Fire Service and Civil Defence to use its vehicles to spray water, especially in busy entrances to the capital; to Wasa to ensure sufficient water supply to Dhaka city corporations for spraying the streets, and to Dhaka north and south city corporations to spray water on the streets along with the small trees so that they can survive.

What's more, the HC has ordered the authorities concerned to submit separate reports regarding compliance with these directives in 30 days. According to the Air Quality Index, the average AQI in Dhaka was 117.4 in October and 194 in November last year, while an AQI value up to 50 is considered acceptable. This shows just how bad the air we breathe has become.

We cannot help but ask why it is that the High Court must intervene and give directives for something that should have been a matter of grave concern for the authorities. Spraying on streets to reduce the dust generated, especially during the dry season, should have been started a long time ago as a part of routine maintenance. It seems keeping the air quality at a breathable level is no one's problem and hence the High Court must step in to give directions to the specific authorities concerned.

And it is not just about spraying water on the streets that the HC has intervened. Last year in January, another HC bench had ordered the government to reduce air pollution in and around the capital, and asked the Department of Environment to shut illegal brick kilns in five districts, including Dhaka. It had also asked the authorities to seize those vehicles emitting black smoke beyond the permissible limit in Dhaka city. It has banned unfit vehicles from plying the roads. Have these directives been followed through? Unfortunately, as reports have shown, there are still many unfit vehicles on the road emitting toxic fumes and brick kilns in areas where there is a high density of people.

We sincerely hope that all the directives of the HC that are geared towards protecting people's fundamental right to life, which has been severely compromised by the high levels of air pollution, will be taken seriously and complied with. It is the government's responsibility to ensure that all the authorities concerned follow through with these measures.

Remove the illegal structures built on canal

The lives and livelihoods of thousands of villagers depend on it

ON Bharani khal in Dhankhali union under Kalapara upazila in Patuakhali, illegal structures are being built that are preventing the normal flow of water in the canal. There are about 10 villages that depend on the canal's water. About 5,000 farmers of these villages cultivate several thousand acres of agricultural land through this single canal. Unless the authorities act immediately, the farmers will suffer severe water shortage and the villages could potentially face food scarcities as a result.

According to a report published in this newspaper on Thursday, at least 70 structures have been built on occupied land and a list of 70 occupants has been submitted to the upazila land office to evict the structures. However, the occupiers are so influential that the land office has failed to take any action against them. Locals have said that besides construction of these illegal structures, people have been setting up nets in the canals in the name of fishing, which is further obstructing the flow of water, making life difficult for farmers and villagers who use the water from the canal for other household chores. But despite these complications, locals are fearful of protesting against the influential land grabbers, while the local land office is not taking any effective action even after being informed of the matter.

Farmers have already been facing severe water-logging in the rainy season due to the obstruction of the canal's water. And the Kalapara Upazila Assistant Commissioner (Land) said that immediate action will be taken after the matter is investigated. But then, why is it taking so long for the issue to be resolved? And where were the authorities when, not one, but 70 illegal structures were being built on the canal?

The lives and livelihoods of farmers and villagers from 10 villages are at stake here. Therefore, we must urge the authorities to stop wasting any more time and remove the occupiers immediately. Those responsible for the illegal occupancies must also be punished in order to deter any such acts in future.

LETTERS TO THE EDITOR

letters@thedailystar.net

High prices on highways

There are many restaurants around our highways which charge exorbitant prices for simple food items. They seem to operate without following any rules and regulations, since they know that commuters on long journeys are bound to eat in these restaurants. Such unethical practices by unscrupulous businessmen must stop. The authorities should check the food prices in highway restaurants and take steps against greedy businessmen.

Md. Sirazul Hossain
English Department, Dhaka College, Dhaka

Learning, unlearning and relearning



SHAMSAD MORTUZA

GROWING up in the 80s, one of the silliest things we used to do was to play loud music in our cassette decks. Two-in-ones revolutionised our teenage years; the loud noise became synonymous with our existential crises. I often wonder what we were trying to say, screaming, Samantha Fox's "Touch me," Madonna's "Papa don't preach!," Baltimore's "Tarzan Boy," or Pink Floyd's "We don't need no education." Now, my YouTube list often takes me back to those silly days and makes me realise how tolerant and flexible our parents were. Imagine the hormonal rush of all teens of an entire area engaged in a beatbox competition from their cribs covered with posters of Michael Jackson, Phoebe Cates, Rambo and Led Zeppelin, and filling the air with rebel songs without any apparent cause! We were like free range organic chickens compared to the kids today, who are being processed to be lords in their own farms.

Back then, we would form clubs and libraries; we would steal flowers from our neighbour's gardens to join the morning rallies on Ekushey; prepare wall-magazines on Victory Day or Independence Day; go on a moon sighting spree before Eid Day; or throw paint on our targets on April Fool's Day. We were exposed to a wide array of cultural bytes. Through this process, we acquired the ability to engage in divergent thinking, and while doing so, the life skills of creativity, curiosity and flexibility were inculcated in us. They became a part of our essential selves, and only today they are being touted as essentials.

Creativity is a buzzword, which is being promoted as a 21st century skill that we must first unlearn and relearn. If you ask me, the issue of relearning and unlearning underlies a major flaw in our education system. Somewhere down the road, our formal schooling system has messed up our creativity big time. Looking back, I know why we were playing those songs so loud. They were voicing our inner rages, concerns and desires. We did not want to be "another brick in the wall". We did not want to be preached to. We wanted to be back with nature like a jungle boy or be touched to know that we were alive. But with the advent of airpods, our Generation Z is simply listening to themselves. There is no real network, except for virtual ones. Their creativity is more individualistic than collaborative as they are constantly being pressured to carve their own niches, find their own jobs through start-ups, and become their own bosses. It's about time, we reinvent creativity in our education system to address the issue of creativity of

our next generation. We can take our cue from one of the pioneers in this field.

Undoubtedly, one major exponent of creativity in education in our part of the world is Rabindranath Tagore, the founder of Shantiniketan. He was among the first to point out the negative effects of formal schooling. For him, the traditional teaching in India was mechanical and responsible for killing the passion, creativity and individualism of a student.

In contrast, the rich and artistic experience that he had in his Jorasanko household gave him the subconscious learning that shaped his artistic attitudes towards life. In his essay *My Reminiscences*, Tagore wrote, "Most members of my family had some gift—some were artists, some poets, some musicians—and the whole atmosphere of our home was

water to compare it to the way his mind was connected with the world. The lesson became a life lesson that underscored the use of imagination for making sense of the world.

With the onrush of visual information—Netflix, YouTube, Instagram—our children are being supplied with infographics. They do not have to use their imagination even when they fall in love for the first time. They will never know how it feels to wait for the letter of a pen-friend in an age of instant messenger services. Their needs have changed, so have their creativity. Then again, it would be wrong to say that our children are not creative enough. Their creativity is of a different scale. A simple browse through the urban dictionary tells us how creative our



ILLUSTRATION: BIPOB CHAKROBORTY

permeated with the spirit of creation." This creative atmosphere was developed by the patriarch Debendranath Tagore himself. When Tagore was 12, his father took him to the Himalayas during which the child Tagore realised, "The chains of the rigorous regime which had bound me snapped for good when I set out from home." One simple step out of the familiar taught him to use imagination to deal with the unfamiliar. He learnt to look at nature as well as to look into the lives of the people around him. This sojourn was instrumental for Tagore's relearning process.

Tagore recalled how his imagination flourished when he first encountered the lilting rhyme *jol porey, pata norey* in Vidyasagar's primer *Borno Porichoy*. He felt that the sound pattern touched him beyond the purpose of the spelling lesson. He visualised the way the leaf was touched and moved by the drop of

younger generation has been in codifying its emotions. Who would have thought of cryptic expressions such as "lol", "ty", "rofl" or "btw" otherwise?

As educators, the challenge for us then is to understand what moves a child. Our job is to do what Vidyasagar has done earlier for Tagore: create a platform or an interface that will open the creativity of a child. The children need to be given the right text and context that will excite their imagination. They need to be given right educational materials that will encourage them to make sense of the world. Expecting them to merely memorise information that can be processed through the machine will never appeal to them. For instance, nobody needs to memorise the times table anymore, but everybody needs the computational skills to understand the sequential growth during an act of multiplication.

Recent studies show that creativity

The children need to be given the right text and context that will excite their imagination. They need to be given right educational materials that will encourage them to make sense of the world.

can be taught and cultured. A genius is not born, a genius can be made. For that we need to create the right atmosphere. Debendranath Tagore is a case in point. Only someone who is willing to learn what moves a child can move the system. Let us unlearn and relearn before we teach what to learn. At the same time, let us allow our students some freedom to realise what they want to learn before we hit the undo button to delete what they have been learning all this while.

Often, we mix up the issues of learning with teaching. Teaching cannot happen without learners. But in the school of life, learning can happen without teachers. As educators, our job is to make learning rewarding and exciting so that they continue to learn even when the teaching sessions are over. At a policy level, we need to keep the final outcomes in mind. As teachers, we need to instill passion in them, encourage them to get interested in problem solving. We need to expose them to various tools. Excite them about what they learn and how they learn.

Let's see, for instance, how Facebook works and remains attractive to our young generation. For instance, we don't ask our children to go to Facebook and spend some time there. Still they are drawn to it. It is probably because Facebook presents itself as an interface that offers a seeming freedom over the creation and curation of the content. We need a similar creative model that will make learning flexible, imaginative and innovative.

In our current emphasis on preparing the next generation for the knowledge economy as well as for the Fourth Industrial Revolution, we often perceive a pedagogical model that thinks of changing the lifestyles while giving them the right skillsets to become leaders. I think it's also important to allow them to find their own vocations, career paths and life-interests. For that, they need to be exposed to various models of innovations and creativity, like we were in the 80s.

Shamsad Mortuza is Professor of English (on leave), University of Dhaka and Pro Vice Chancellor, University of Liberal Arts Bangladesh (ULAB). He can be reached at shamsad71@hotmail.com.

Man and Machine

Jumpstart with AI: What should be our first step?



MOYNUL ZABER

THIS column is about humans and the interactions that this intelligent mammal have with machines. Humans have been using tools since the dawn of civilisation. However, the industrial revolution of the 18th century accelerated the replacement of muscle with machines. At the dawn of the 21st century, we are foreseeing the replacement of the mind with machines. Similar to the disruption that the invention of the steam engine brought in the 19th century, recent information technology inventions are disrupting our societies. One of these, Artificial Intelligence (AI), is set to change our relationship with the machines for good. Some of us are anticipating a clash of civilisations—our own with the mechanised new.

Unfortunately, technology is in its nascent form—hence, confusions loom over our mental horizon. Some portend the loss of jobs and even believe in the "take-over" of an algorithmic super intelligence, while others cheer the hope of technology-enabled more peaceful societies. Let us not brand them as futuristic thoughts. The rise of social media, use of image and video surveillance, amassing private data for malicious use, influencing people's lives with "misinformation" and "disinformation" are now part of the everyday newsfeed. With technology at a nascent stage, while usage picked up, the need to explore how these technologies interact with our personal, social and political lives is of paramount need. In this column, we want to explore this relationship and how this may change our lives—not in the future but now. This column is about how the new disruptive technologies are shaping the way we act, react and regulate our personal, social and political lives.

In 1950, Allan Turing in his ground-

breaking essay asked a simple question "can machines think?" If a machine can think it can behave intelligently, and perhaps one day surpass the intelligence of the human creators as well. This idea of "superintelligence" has been a potential source of inspiration for a plethora of science fiction writing. It engrossed and frightened many fiction writers so much that Issac Asimov in his 1950 science fiction *I, Robot* put forward "three laws of Robotics". These laws were meant to help design robots that despite having "superintelligence" will never cross the line to harm humans. On the scientific side, Turing proposed a simple way to find the answer to his original question—he

human intelligence but because they can carry out tasks that would otherwise require human intelligence, time and effort to an unsustainable extent. AI systems are scalable and designed to take decisions from a vast amount of data. These AI algorithms are gradually replacing and complementing traditional algorithms that had computationally solved many of our problems.

Scalability and the capability to harness insights from data have made AI an essential and complementary tool for policymakers and service providers aiming to achieve social good. Various AI tools are being used for crisis response, economic empowerment, alleviating

human interaction in an algorithm can be potential sources of bias that can be a reason for AI failure. A massive amount of data are fed into the machine to recognise certain patterns. Unstructured data from the web, social media, mobile devices, sensors and IoT devices make data absorption, linking, sorting and manipulation difficult. Hence, if data are not carefully curated then the dataset may be fraught with incomplete or missing information or may be inaccurate or biased. This may cause an inadvertent revelation of sensitive data. Even after the removal of personal data from one dataset, another dataset may have it that the AI system may reveal.

The drivers of AI-risks can manifest in the forms of the individual (such as accidents and privacy violations), societal (such as manipulation of the political system), and organisational (such as discrimination against race) risks. Over the years, we have seen several cases of AI failures that resulted in the loss of lives, compromise of national or organisational security, damage of reputation, regulatory backlash, criminal investigations and diminished public trust. Bangladesh needs to start thinking about how we will embrace the AI surge.

In 1972, the office of technology assessment (OTA) was established in the US to provide congressional members with objective and authoritative analysis of complex scientific and technical issues. However, a Republican-controlled senate dismantled it in 1995, calling it an "unnecessary agency". The idea survived in Europe in the form of the European parliament technology assessment (EPTA). With the science-unfriendly policies adopted by the US in the Trump era, many are feeling the necessity of reinstating the agency. Perhaps we should be thinking of establishing an office of technology policy to aid the parliament and the chief executive's office to understand the policy challenges that AI and other new disruptive technologies are bringing forth.

Moynul Zaber, PhD is Senior Academic Fellow at United Nations University, EGOV. Email: zaber@unu.edu



PHOTO: COLLECTED

proposed an "imitation game". Popularly termed as "Turing test"—a human interrogator is tasked with distinguishing between a human and a machine.

There is an international competition called the Loebner Prize that annually awards prizes to computer programmes that are most "human-like". To date, there has not been a winner that has truly passed the test. We are far from designing "artificial superintelligence". In reality, we may need decades to achieve the capacity to manifest the capability to build "general AI" that refers to human-like AI. What we now have can generally be termed as "narrow AI"—systems that are intelligent not because they imitate

educational challenges, mitigating environmental challenges, ensuring equality and inclusion, alleviating health, reducing hunger, information verification and validation, infrastructure management, public and social sector management, and even security and justice.

AI is an umbrella word that shelters different types of algorithms. These algorithms and processes have multiple issues where scientists need to be careful about. One such thing is overfitting. Sometimes, the algorithms designed fit the training dataset so well that in the real world, they fail to give the right solution. Apart from these, data, algorithms, and