Gene editing:



In a fog of war

How did an Indian Air Force Mi-17 helicopter get shot down by the IAF? What are the protocols in place to distinguish enemy from friendly aircraft?

DINAKAR PERI

The story so far: On the morning of February 27 this year, as jets of the Indian Air Force (IAF) and Pakistan Air Force were engaged in a dog fight over the Naushera sector in Jammu and Kashmir, an IAF Mi-17 helicopter with two pilots and four personnel took off from Srinagar air base. It crashed within 10 minutes at Budgam killing all the personnel and a civilian on the ground. As the fog settled, it was suspected that the Mi-17 may have been shot down by friendly fire. A Court of Inquiry (CoI) was ordered to ascertain the facts of the incident.

How are aircraft identified?

There are a range of methods used to identify friendly aircraft. These include visual sightings, radio transmission, designated entry and exit points for friendly aircraft and a transponder-based Identification Friend or Foe (IFF) system. With supersonic aircraft and long range radars, the IFF system is the predominant

In a directive last year, the IAF mandated that all aircraft coming in to land should have the Identification Friend or Foe system switched on. It was switched off in the Mi-17

method used in both civil and military aviation to identify aircraft. The IFF is a transponder-based identification device that communicates with ground radars and exchanges encrypted codes to indicate that the aircraft is a friendly one. Some modes of transponders also indicate the speed and specific coordinates of the aircraft

which are used by civil air traffic controllers to identify commercial aircraft. In addition, there are designated air corridors marked safe for friendly aircraft to fly. This is because during a combat situation, air defences in sensitive areas are free to fire at any violator.

What went wrong with the helicopter? The Mi-17 had crashed in an inhabited area and the Flight

Data Recorder (FDR), commonly referred to as the black box and the most crucial thing in case of any air accident, was lost. It could not be traced and officials said it may have been taken away by civilians who thronged to the helicopter. The absence of the FDR has delayed the inquiry process. In the absence of the black box which would have provided straight answers to most questions, the CoI had to pursue circumstantial evidence and rule out options to draw likely conclusions. Preliminary indications are that the Mi-17 was shot down by the IAF's Israeli-origin SPYDER surface-to-air missile system.

The CoI has found several procedural violations. The biggest of them is that the IFF system was switched off, especially when there was a high alert, and an aerial engagement was under way close by. Due to this, in the midst of the air battle over the skies close by, the Mi-17 was mistakenly identified as belonging to the adversary. In fact, last year, the IAF had issued a directive that all aircraft coming in to land should have the IFF system switched on. But contrary orders seem to have been issued at the Srinagar air base which the CoI would confirm in its report. In addition, it is not clear why the Mi-17 was called back after taking off and not diverted to a safe corridor instead.

As the investigation was under way, the Air Officer Commanding (AOC) of the Srinagar air base under whose watch the incident occurred was posted out in early May. However, the IAF has not said if it was related to the incident or other reasons.

What happens next?

The CoI is expected to submit its report soon. However, a CoI is a fact-finding body ordered by the assembling authority. Ascertaining blame is only the first step in a long process. Also, a CoI has no legal standing. After completion of the CoI, the court based on its findings makes several recommendations. Recommending action against personnel found guilty on certain counts is one of them.

Based on the facts of the case and recommendations, the authorities may go for administrative action or disciplinary action. If disciplinary action is intended, a charge sheet is framed and a summary of evidence may then be ordered. Based on it, authorities may again take a call on a court martial or other action. For instance, an error of judgement can be awarded administrative action, but a gross violation will be given a court martial. A legal branch gives its final recommendation on the punishment and the file is then sent to the Air Headquarters for final decision. A punishment under the Indian Penal Code can also be awarded. IPC is read

under Section 71 of the Air Force Act. However, with clear indications of serious procedural violations leading to loss of life, senior IAF officials have said that criminal proceedings are likely to be initiated against those responsible as soon the report comes in.

Why is China laying down gene editing rules?

After twin experiments with genetic engineering technology, the country agrees with the worldwide scientific community that it needs to be used with care

The story so far: In a bid to make babies immune to infection by the human immunodeficiency virus (HIV), He Jiankui, a researcher from the Southern University of Science and Technology in Shenzhen, China, used a clinically untested gene editing tool (CRISPR-Cas9) to modify a particular gene. The tool has also been used on another woman to make a gene-edited embryo; the pregnant woman is expected to deliver in August. The announcement of the birth of gene-edited twin girls late last year set off an international furore.

How does it work?

Unusual but repeated DNA structures that scientists had been observing for some time were given a name -Clustered regularly interspaced short palindromic repeats or CRISPR. In 2012, scientists discovered that CRISPR is a key part of the "immune system". For instance, when a virus enters a bacterium, it fights back by cutting up the virus's DNA. This kills the virus but the bacterium store some of the DNA. The next time there is an invasion, the bacterium produce an enzyme called Cas9 which matches the stored fingerprints with that of the invader's. If it matches, Cas9 can snip the invading DNA. The CRISPR-Cas9 gene editing tool thus has two components - a short RNA sequence that can bind to a specific target of the DNA and the Cas9 enzyme which acts like a molecular scissor to cut the DNA. To edit a gene of interest, the short RNA sequence that perfectly matches with the DNA sequence that has to be edited is introduced. Once it binds to the DNA, the Cas9 enzyme cuts the DNA at the targeted location where the RNA sequence is bound. Once the DNA is cut, the natural DNA repair mechanism is utilised to add or remove genetic material or make changes to the DNA.

Was it wrong to use the gene tool?

Dr. He used the CRISPR-Cas9 gene editing technique in the twin girls to disable a gene called CCR5, which encodes a protein that allows HIV to enter and infect cells. Though no guidelines have been drawn up so far, there is a general consensus in the scientific and ethics communities that the CRISPR-Cas9 gene-editing technique should not be used clinically in embryos. There is also consensus that gene editing can be potentially used only to prevent serious genetic disorders that have no alternative treatment. While HIV cannot be cured, medicines can keep the virus under check.

Importantly, human clinical trials have not been carried out anywhere in the world to test whether disabling the gene completely prevents HIV infection and what the side-effects of doing so would be. In the absence of any clinical trial data as well as consensus to use this tool to prevent HIV infection, performing it on babies as a form of medical intervention is unethical

According to Nature, the hospital that had supposedly given Dr. He ethical approval to use the technique on pregnant women issued a press statement denying this. The hospital also "questioned the signatures on the approval form" and said no committee meeting had been held related to his research work.

Apparently, information on the consent form suggests that the parents who had participated in the experiment were never told about the problems of disabling the gene.

Can disabling the CCR5 gene prevent HIV?

Snip and change

A DNA editing technique, called CRISPR/Cas9, works like a biological version of a word-processing programme's "find and



It is generally believed that babies without a functional resistant to HIV

this year, Dr. He was fired from the university where he worked after a probe by the Guangdong health commission found that he had violated the national regulations against using gene-editing for reproductive purposes

Chinese scientist He Jiankui - AP

the process CCR5 gene will become A cell is transfected with an enzyme complex which On the other hand, contains guide the CCR5 gene is known molecule and DNAto protect the lungs, the liver and the brain cutting enzyme during certain serious infections and chronic diseases. The gene is immune system to fight the influenza virus in Guide Molecule Human clinical trials synthetic guide have not been carried molecule binds out anywhere in the world to test whether site of the DNA disabling the gene strand completely prevents HIV infection and what the side-effects of DNA-cutting An enzyme cuts off the target DNA

> The natural Changed is utilised to make changes DNA-cutting enzyme

DNA

functional CCR5 gene will become resistant to HIV infection, certain other strains of HIV use another protein (CXCR4) to infect cells. Hence, even people who are born with two copies of the non-functional CCR5 gene are not completely protected or resistant against HIV infection.

According to the draft regulation, those found violating the rules will be punished and this includes a lifetime ban on research

There is also the possibility that the gene editing tool could have caused unintended mutations in other parts of the genome, which may lead to unpredictable health consequences.

Most importantly, medicines and delivery through caesarean

section and avoiding breast feeding can prevent vertical viral transmission from mother to foetus. While women with HIV have greater chances of passing the virus to the foetus, in this case, the mother was HIV-free; the father was HIV positive.

Does the CCR5 gene have any protective role? The CCR5 gene's protective role against the West Nile

virus is well established. According to Nature, the CCR5 gene also helps to protect the lungs, the liver and the brain during certain serious infections and chronic diseases. The gene is known to prompt the immune system to fight the influenza virus in the lungs. Without this gene the defence system would fail. In the case of

makes them twice as likely to die early.

Was the gene removed in both babies?

There are two copies of the gene in every person. In the case of one baby girl both the copies of the gene were disabled but in the other baby, only one copy was disabled. So the baby with one functional copy of the gene might still be susceptible to HIV infection. The decision to implant the embryo with only one disabled copy makes the work all the more unethical. Though Dr. He claimed the babies were born in early November last year, The New York Times reported that the babies were born premature in October.

What steps has China taken to prevent misuse?

The day Associated Press broke the story, the Chinese national health commission asked the Guangdong health commission to start an investigation. On January 21 this year, Dr. He was fired from the university where he worked after a probe by the Guangdong health commission found that he had violated the national regulations against using gene-editing for reproductive

According to *The Scientist*, Dr. He's experiment violates the 2003 guidelines that prohibits the use of gene-manipulated embryos for reproductive purposes. On February 26, China posted the draft regulation requiring researchers to obtain prior approval from the government before undertaking clinical trials. Those found violating the rules will be punished and this includes a lifetime ban on research. China is now all set

What does the merger of NSSO and CSO entail?

Will the move undermine the NSSO's autonomy which has been dogged by controversies over data reporting?

PRASHANTH PERUMAL J.

The story so far: On May 23, the government announced that the National Sample Survey Office (NSSO) will be merged with the Central Statistics Office to form the National Statistical Office (NSO). Many believe that this move will undermine the autonomy of the NSSO which has been at the centre of various public controversies over data on economic growth and unemployment. The NSO will be headed by the secretary of the Ministry of Statistics and Programme Implementation (MOSPI). This is in contrast to the original plan proposed by experts to merge various statistical bodies such as the NSSO and others to create a unified statistics body that is accountable to Parliament. rather than the government.

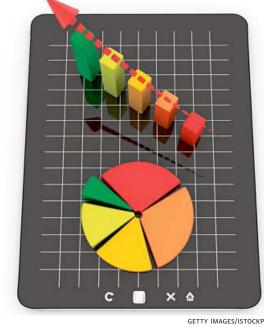
What is the issue?

In May, the NSSO came out with a report which cast serious doubt on the reliability of raw data that is used to calculate India's gross domestic product (GDP). The NSSO stated that it could not either trace or classify 38.7% of the companies included in the MCA-21, a database of private companies that is maintained by the Ministry of Corporate Affairs, whose financial numbers the government currently uses to calculate GDP figures. The NSSO found that data from the Economic Census and the Business Register were far less affected by these issues that plagued the MCA-21 database.

Many believe that the poor quality of raw company data could heavily skew the measurement of private sector business growth, which is a part of the overall GDP of the economy. When data gathered from the MCA-21 database was first used to revise earlier growth figures, sectors such as manufacturing showed significant growth in size in 2013-14. This was in stark contrast to the earlier estimates that showed an actual contraction in the size of manufacturing.

What is the government stand?

MOSPI, however, has defended the use of the MCA-21 database to calculate GDP numbers stating that appropriate adjustments are made to make sure there is no overestimation of GDP. In a clarification issued on May 10, the government stated that companies classified as "out-of-coverage" by the NSSO still contributed to the economy even though they may not fall strictly under the services sector. It further stated that the weightage given to companies that report their financial numbers is far greater and that, in reality, only about 16.4% of companies in the MCA-21 are either closed or nontraceable. The NSSO's apprehension over the MCA-21



database still adds to concerns that already exist about the reliability of GDP data that is put out by the government due to recent changes in methodology.

How is MCA-21 important to GDP?

Experts feel that the financial accounts of several shell companies that are included in the MCA-21 database could be fictitious, and thus cannot be considered as a good proxy for real economic activity. For instance, under the revised GDP series that was introduced in 2015, financial data from companies that filed their accounts with the government even just once in three years were considered sufficient to help make GDP growth estimations. Supporters of the new methodology believe that, in reality, the accounts of most shell companies reflect the financial activities of actual businesses which remain camouflaged behind these fictitious entities. So, they believe, the non-inclusion of shell companies will actually lead to a significant underestimation of the true size of the economy.

Government statisticians have for long used small surveys to gather the raw data that are required to make "blown up" estimations about the growth of the wider economy. This, however, changed in 2015 when the government introduced a new GDP series with 2011-12 as the base year (from the previous base year of 2004-05)

and introduced the MCA-21 database as the mainstay for calculating GDP figures. The fact that even data for the organised sector of the economy were unreliable has

The lack of transparency in the production of economic data can over time cause the users of such data to discount its value

raised doubts about the reliability of other data. Data on the large unorganised sector, for instance, are even cruder and can be extremely unreliable. It is worth noting that policymakers within the government depend heavily on official GDP figures to frame their policies.

Is the data collected reliable? The field of economic statistics largely involves the

estimation of trends in the economy based on sample data that is collected through surveys and other means. This usually gives rise to disagreements even among experts within the field who could have a genuine difference in opinion about how raw economic data should be collected, and about the various assumptions that should go into the calculation of GDP and other economic estimations. What has caused a rise in concerns about the reliability of India's GDP figures in the last few years, however, is the belief that the government led by Prime Minister Narendra Modi may be increasing its interference in the process of the production of economic data. Further, the divergence between official GDP figures which show that growth has fallen below 6% in the fourth quarter and high-frequency economic data which reveal how various sectors are facing a serious slowdown has cast further doubt on the reliability of government data. In January, two non-government members of the National Statistical Commission resigned over, among other reasons, the government's reluctance to release jobs data collected by the NSSO. The NSSO's periodic labour force survey, which was leaked in January, had reported that the unemployment rate was at a 45-year high of 6.1% in 2017-18.

Will the merger impact the credibility of government data?

The move will give the government greater leverage over production of key data. The lack of transparency in the production of economic data can over time cause the users of such data to discount its value. This has been the case in countries such as China where the constant tinkering with official economic data has caused analysts to lose trust in them.

ILLUSTRATION: J.A. PREMKUMAR



To Siri, with love

When a household pet turns out to be more than just a pet over a period

started melting overnight,

again hardened and I start-

days. Then bhai left for his

hostel and papa, as usual,

went to office. So it was only

you and me at home. Before

leaving, papa had tied you

with a leash near the balco-

You didn't have any food

and were asleep. By evening

I felt bad. I don't know what

happened but something

made me come near you. I

sat next to you. I gathered

courage and gently lifted

you up (you were indeed so

soft) and placed you on my

lap. You were half-awake.

When I put you on my lap,

you looked at me and went

back to sleep. I held you,

And today, a year later,

you have become one of us,

from a nuclear family of

three we have become four.

All this happened with time.

You started going with us on

long drives, started sleeping

on our bed, going with us to

liar with friends, neigh-

bours and relatives, someth-

ing of a crowd-puller. Everyone started accepting

you as part of our family.

You are no more a puppy;

you've become a young,

smart retriever. A happy,

joyful, energetic and playful

dog. Our morning kick-

starts with you, and the day

ends with you too. Every

night the way you wait for

papa at the door for him to

come back from work is

more. Thanks for coming in-

to our life and making it

more joyful. You taught us

many things, including how

to live without any condi-

tions attached. Now, a life

without you is just unima-

to god to keep you healthy

and make you smart and

It's not only your birth-

day, it's a birthday for all of

us too. You have given us a

happier new life. Thank you

very much, Siri.

ranoooh@gmail.com

happy.

On your birthday, I pray

You are a blessing, and

worth watching.

Slowly, you became fami-

stroking you.

the bazaar.

But that day you fell sick.

This went on for three

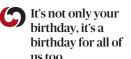
ed scolding bhai.

RANOO HARICHANDAN

Dear Siri, you turned one today. Happy Birthday Gelhu, Dholu (as bhai, my son, calls you), Mama (as mummy, or I, call you) and Sira (as papa, my husband, calls you).

I remember the day the two of them brought you home. While on their way home, papa sent me a picture of you sitting in the lap. You were a tiny white cushion. But at that time, honestly speaking, l was scared and my mind was confused. "Why did they bring him home, how will I manage when they leave for office and college respectively?"

Then you came home. Bhai was holding you, and he told me, "Mummy, please hold him and feel how soft he is, he won't do



anything to you." I wasn't expecting this. I ran to the bedroom and climbed atop the bed. Bhai came in and placed you on the floor below the bed. I had decided that after a few days I would

ask them to get rid of him. We didn't know what we should feed you with, and so you mostly had a branded cereal and curd rice. While both papa and bhai used to play with and cuddle you, I maintained my

I told bhai that at night ou won't be allowed to stay inside the home and would need to be in the balcony. He reluctantly agreed. But that night you didn't sleep. You were sitting near the balcony door and looking into the bedroom, waiting to see if someone would take you inside.

I also couldn't sleep. I was looking at you from my bed. Something inside me told me it's not fair to treat a tiny animal in such a manner. He has just come away from his mother and I have left him alone in the balcony? What harm had he done?

The next morning the ordeal started. You had messed up the whole balcony. My heart, which had

The Bard's name is invoked left, right and centre VIKRAM SINGH THAKUR

The Polish theatre scholar Jan Kott, in his influential work Shakespeare: Our Contemporary (1965) wrote, "Shakespeare is like the world, or life itself. Every historical period finds in him what it is looking for."

Kott seems to be most appropriate in twenty-first century India. It's natural for a race of people who have been fed on Shakespeare for long to go back to the wise man for his sage words. Even the Bard is always willing to help his Indian bhakts. His continuing popularity cannot be judged only in terms of his works being adapted across theatre, films and fiction but also in the way he has discreetly entered our lives to become virtually a part of our psyche.

Look at India's Who's Who and you will realise that Shakespeare is very much a part of our socio-cultural and political-legal consciousness. Even the Supreme Court of India has referred to Shakespeare on more than one occasion in judgments. Justice A.K. Ganguly of the Supreme Court in 2012 quoted from Henry IV while describing the position of then Prime Minister Manmohan Singh in the 2G spectrum sale case. He noted, "The position of the Prime Minister in our democratic polity seems to have been summed up in the words of Shakespeare - uneasy lies the head that wears a crown." He was referring to the delay caused by the Prime Minister's Office in

taking a decision that caused further delay in prosecuting Telecom Minister A. Raja. More recently, the Supreme Court, while giving its verdict on Section 377 of IPC on September 6, 2018, quoted from Romeo and Juliet, "What's in a name? That which we call a rose/ By any other name would smell as sweet."

Where art thou,

SHAKESPEARE?

Dipak Misra, as Chief Justice of India, describing the importance of identity, wrote in a judgment, "The said phrase ['What's in a name? That which we call a rose/By any other name would smell as sweet'], in its basic sense, conveys that what really matters is the essential qualities of the substance and the fundamental characteristics of an entity but not the name by which it or a person is called."

Poor Shakespeare, in whose Elizabethan England homosexuality was considered a crime on a par with murder, would be turning in his grave to know he is being invoked today in India to decriminalise homosexuality.

Not only members of the judiciary but also sportsmen and actors have taken to Shakespeare to express themselves. Sachin Tendulkar's crisis as the captain of the Indian cricket team has been described by the same quote that Justice Ganguly had used, in his biography, Sachin Tendulkar: A Definitive Biography. Deepika Padukone recently posted her picture on Instagram with a quote from Henry IV, "All things are ready, if our mind be so – William Shakespeare", in the upcoming Chha-

paak. Why should the Indian politician lag behind in this "Quote the Bard Contest"? After all, who can beat the Bard at rhetoric? And what is Indian politics today but rhetoric?

Pranab Mukherjee, while presenting Union Budget 2012 as Finance Minister, leaned on Hamlet, "I must be cruel only to be kind," only to justify the "cruel" budget and "kind" intentions of the govern-

Smriti Irani, then Minister of Human Resource Development, quoted the witches of Macbeth, 'Fair is foul, foul is fair', accusing the Opposition of twisting facts while replying in the Rajya Sabha in February 2016 on Rohith Vemula's suicide.

During the 2017 Kolkata Book Fair, Mamata Banerjee, in her enthusiasm to boast West Bengal's resonance with Shakespeare, made a startling claim that Tagore was a great friend of Shakespeare and Keats. Prime Minister Narendra

Modi, in his radio show 'Mann Ki Baat', on August 27, 2017 displayed his eclectic knowledge when he referred to the shastras, Mahatma Gandhi and Shakespeare in the same breath (a potential research project for researchers if they don't want

to make a living frying pakoras!) He quoted Portia thus: "Shakespeare in his play, The Merchant of Venice, while explaining the importance of forgiveness, has written, 'Mercy is twice blest: It blesseth him that gives and him that takes,' meaning, the forgiver and the forgiven both stand to receive divine bless-

ing." So, forgive the political

class for failing you and re-

ceive "divine blessing". After

all, we have always privi-

leged the divine over the

most basic in this country.

However, perhaps the most controversial appropriation of Shakespeare in the recent past was the formation of so-called 'Anti-Romeo Squads' by Uttar Pradesh Chief Minister Yogi Adityanath in 2017. To name the squad after the Shakespearean hero invites an interesting reading despite the Bharatiya Janata Party's

places that have non-Hindu names – Allahabad to Prayagraj, Faizabad to Ayodhya and Ahmedabad to Karnavati. The naming of the squad, however, seems a deliberate political act. Historically, Romeo is the Shakespearean hero but the word today is also used as a noun referring to an attractive, passionate male suiter. In Uttar Pradesh, however, the star-crossed lover who died

for the sake of his love has

become no less than a moles-

ter and a criminal!

keenness

to rename

It is interesting to note Juliet's 'Romeo' versus Yogi's 'Romeo.' Juliet speaks of Romeo as someone who, after his death, "will make the face of heaven so fine/That all the world will be in love with night,/And pay no worship to the garish sun." But in the words of the Uttar Pradesh Police, Romeo is asamajik (anti-social), mawaali (ruffian), chichore-type ladke (young man of a frivolous kind). In this context, Romeo, aka the potential molester, needs to be located in the politi-

cal compulsion to

borrow the villain from the other communitv/culture/religion who needs to be brought to book. Naming the squad after Romeo also suggests the absence of its equivalent in Hindu religion and culture. The assumption, it seems, is that Hindus cannot be Romeos and Romeos cannot be Hindus. A Hindu Romeo is an aberration and another instance of

the West corrupting Indian youth. The squad was criticised across various sections of so-

ciety including intellectuals, lawyers and social activists who alleged that in the name of protecting women they were harassing young men and making women more dependent in an already patriarchal society. The criticism from various quarters has led to the changing of the squad's name from 'Anti-Romeo Squad' to 'Nari Suraksha Bal'. However, as Juliet said, 'What's in a name? That which we call a rose/ By any other name would smell as sweet.' (How can I desist from quoting the Bard?)

The changing of the name doesn't suggest any change in the squad's work. One thing, however, that it definitely has achieved is to supplant the negative firangi name with a more positive Hindu term that goes well with the party's ideology. Jai Shakespeare!

vikram@aud.ac.in



A life lesson learnt: in choosing to do the right thing over demands made by friendships, it is wiser to choose the former

HEMA NAIR

n the mid-1990s, my husband and I were strug-**L**gling young doctors, still in our training jobs. The stipend amounts barely stretched till the end of the montn for our meagre nousehold expenses. It was around that time one day that I found Paul and many others like him, in a discount box in a bookstore. He was a walrus that belonged to a tribe called Beanie Babies.

These were horribly expensive stuffed toys that fit in the palm of your hand, and but for their surplus numbers and possibly age accumulated dust, would never have fit into my budget. Although we rarely ever splurged on luxuries, I thought our four-year-old, who generally favoured cars, and robots with movable joints, deserved this treat. Krish eagerly adopted Paul when we took him home.

Krish was a self-sufficient little boy who could spend hours minding his own business and playing by himself with his toys. So there one would find him, sitting on the floor with remarkable flexibility, on his bent back leg, assembling the parts of his plastic rocket made up of virtually a million pieces, being watched quietly by Paul while the two discussed the suitability of the different pieces available.

Krish grew up and Paul remained the same. Nestled in his cupboard, lying around on his table, scrunched up on his bed – he was always around somewhere. Paul made it through not less than six moves, including two years spent in storage while we were out of the country. By the time Paul made it out of the box after his hibernation, quite a few changes had occurred in the world outside. For one, Krish had acquired a little brother. After



10 years of solitude and where the lines between calm, he now had to accomright and wrong were not modate in his life a longclearly drawn. On one of cherished sibling, but a torthose boisterously creative yet perversely destructive nado nevertheless. Although play sessions that happened Krish had first rights to Paul, he was not averse to sharing, at home one afternoon, the little one and his friend deand Paul sometimes found himself in the company of cided to make movies of their play sessions on the The little one was at an age iPad. So when the friend suggested that they flush Paul down the toilet and record the deed, the little one just went along. He probably has no first-hand memory of it now, but the regret prompted by the retelling of the story is always intense.

His first lesson in lite that when it comes to choosing to do the right thing over demands made by friendships, it is wiser to choose the former. Paul was now gone forever, and it was a very sad day for the whole family, notwithstanding the fact that he was just a stuffed toy.

Krish never spoke much about that episode, but I know my boy, and I knew his hurt. The wound was probably hurting a great deal, because he even told his close friend about it. She later moved to England to complete her education, but they kept in touch.

I don't know if she actively went on a Beanie Baby hunt or if she came across one and

was reminded of Krish's loss. But a few years later on his birthday, she sent him a picture of an identical Paul that she had bought for him as his gift. It was a few months more before Paul made the long-haul flight from Heathrow to Bengaluru with some one from her family, and the last-mile journey in a courier box to our home.

I am sure Krish was very aware that it was not his Paul, but the thoughtfulness of the gesture and the utter beauty of this remarkable experience is sure to have touched his soul.

The rest of us are just even more than happy to have Paul back - nestled in his desk drawer, lying around on his table or scrunched up on his bed.

As for the little one, he is now grown older and wiser, and still plays, albeit more responsibly with Paul.

drhemanair@gmail.com

How close we really are to the edge of the precipice

There's no gainsaying what the next hour or second may bring; it will take just a moment for the bottom to fall out

THOMAS PAUL

ovember 23, 1956. My date of birth was eventful, not just because I was born on the day the Tuticorin Express derailed near Ariyalur in Tamil Nadu killing over a hundred and forty passengers, but because my dad had booked to travel on the train that day. But since I was born that day - a couple of days prematurely - he had cancelled his ticket and stayed back in Madras, now Chennai. And, in the event, escaped death.

From here it is conjecture which raises goosebumps whenever I think about it the 'what if' kind. We were a hair's breadth away from disaster, and had it struck, had my dad taken that train, I can imagine how life would have turned out for our family: mom turning single parent overnight; juggling job and

household. And how the level playing field we had had till then would have turned rough, the environment would have turned hostile, and so on. We would have inhabited a parallel universe of struggle for decades. That gets me thinking so-

metimes. We never know how close we are to the edge. Accidents ranging from getting hit while just crossing a road, to a bewildering array of natural and unnatural causes, can change lives in an instant. Currently our lives might be relatively incident-free – relative, that is, to what one sees daily in the newspapers. Heart-rending stories reside there.

Besides what befalls us accidentally, there is also the very station in life we are born into, which places some of us at a serious disadvantage from which it is difficult to emerge. What many



of us take for granted – family security, financial security, knowing that the next meal is certain, the social status, access to opportunities - are not available to a huge percentage of the population.

Whenever I feel that life could have been better, I tell myself it could actually have been worse, too - unimaginably worse. Just a casual browsing on the Net for 'Hu-

ILLUSTRATION: SATWIK GADE man Diseases' throws up tens of thousands of them. The human body is so vulnerable, causing us to doubt whether the divinity that designed us had any clue, throwing in so many diseases ranging from the debilitating to those that are just needless nuisances. If we are af-

flicted with only one or two

from the 30,000-strong list,

we should still feel thankful

we are left to tell the tale.

his little brother.

There's no gainsaying what the next hour or second may bring. Sant Kabir's 'Pal mein pralay' comes to mind. It takes just a moment for the bottom to fall out of our world, with some sudden flood, a tsunami or an earthquake, a fire in the building that catches us offguard, some falling masonry, or a road accident, in their thousands per second, all over the world. What we take for granted today might simply not exist the next day. Apart from natural disasters, social or financial disasters can arrive from nowhere.

Kindness is needed, one to another. We don't know other people's struggles, the brave face they are putting on despite their problems, the mountains they are climbing, against odds. Every time we cause hurt, especially by means of our bril-

liant ability to communicate in harsh words – our ability to surgically strike in fancy English or whatever language we are clever at. It gets passed on to others as the chain of pain. Communication skills may just be hyped.

Let us not take offence at slights, real or imagined. A grim-faced person could be dealing with serious personal problems, or it could be that the expression is but a manufacturing defect. He may not be upset with us at all. Half our 'easily offended' attitude will disappear if we realise that people have their own issues and may not be thinking of us at all.

We exhaust our lives proving points, and 'showing' others who we are, forgetting that we too are standing on the cliff's edge, just a step away from oblivion.

sagitex@gmail.com