

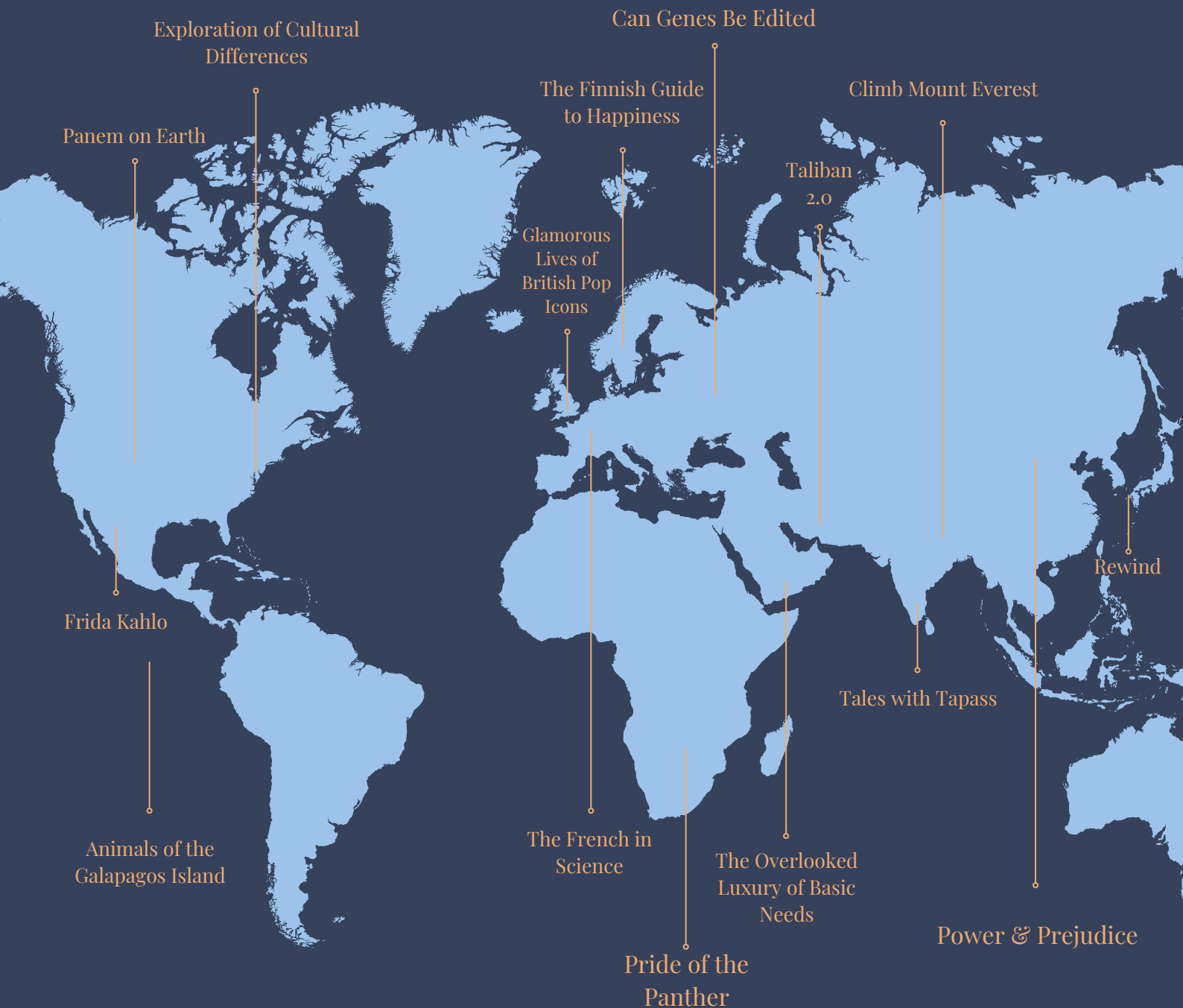
CARPE DIEM CHRONICLES



SEPTEMBER 2021

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Coruscant, The
Capital of the Galaxy



Dear Reader,

We are most excited to present the second edition of our 2021-22 series. It's almost funny to be able to say we poured our literal blood, sweat and tears into this issue, but it is definitely an edition we are most proud of. This issue is particularly special because of what it represents to us.

Travel was once a way to experience the world. With the pandemic that was amongst one of the many things that came to a stop. For most of us the most travel we've done in the past two years was from our house to the grocery store. So in this unprecedented time we thought to bring the world to you.

I wish I could say that this issue was filled with the rosie joys of the world, but unfortunately this year has seen societies crumble not just due to the pandemic. Inventure encourages us to nurture sensitivity and that includes the world around us. This issue aims to develop a greater sense of political and cultural sensitivity as we learn about the world around us, the good and the bad. So dive into what is bound to be an intriguing edition of the Carpe Diem Chronicles.

*Best,
The Editorial*





Taliban 2.0: Life Under a “Moderate” Regime

By Sushmita Sundar

The Taliban have taken over Afghanistan. But the new government is immediately met with challenges. The most potent one of them comes in the form of protests that have popped up across the country. A country otherwise divided by ethnicity, language and culture has taken to the streets as one. The citizens of Afghanistan protest on a myriad of issues including women's rights and the new Taliban regime. Most of them proudly carry with them the tricolour flag of the country, a symbol of Afghanistan before the Taliban.

The protesters' cry for change, however, is met with bullets and whips. The Taliban armed with their AK-47s and whips ferociously clamp down on the protesters, attempting to silence a nation that is uncertain of its fate.

But the men we see on the streets are mere foot soldiers following the orders of high command. The real man behind these violent attacks is Sirajuddin Haqqani, the new Interior Minister (and one of FBI's most wanted men). He was one of the 33 members of the Cabinet that was announced on 9th September.

A Cabinet that the Taliban promised would be inclusive and representative of all Afghans. But the Cabinet that was presented had very little representation of any ethnic minority group and did not feature a single woman.

What we saw instead was the Taliban handing

over seventeen of top positions in its government to UN sanctioned terrorists. They went from bombing Universities and foreign embassies in the country to essentially running it.

This begs the question, can a government which promises to ensure “lasting peace, prosperity and development” achieve its goal when its ranks are flanked with terrorists?

Another glaring problem that this Cabinet has is the lack of women. The Taliban which promised to “uphold the rights of women under the Sharia law” are now whipping them

on the street for simply pointing out this issue.

When questioned about this on television, a Taliban spokesperson said "A woman can't be a minister. It is like you put something on her neck that she can't carry. It is not necessary for women to be in the cabinet – they should give birth."

This is the same Taliban that not two weeks ago were praised for reinventing themselves and becoming more moderate due to the simple fact that they sat down for an interview with a woman. That same woman has now fled the country. And you can't really blame her.

The Taliban is doing everything in their power to erase women from public space. Recently they banned women from playing sports because they "do not need" to play sports.

It's not just women in sports that are under attack, education has also come under some scrutiny. As educational institutions begin to open the Taliban have begun segregating the men and women. Curtains have been drawn in the middle of classrooms to create a division. All the women are also being forced to cover themselves in an Abaya when they step out. It doesn't seem long before more extreme measures are taken.

Nobel Prize Laureate, Malala Yousefzai who herself has faced the ire of the Taliban due to her fighting for her right to education has expressed a lot of concern regarding the situation of women in Afghanistan. *"Nine years later, I am still recovering from just one bullet. The people of Afghanistan have taken millions of bullets over the last four decades. In the last two weeks, we've been able to help several of them and their families get to a safe place. But I know we can't save everyone,".*

And she is right. The world's hopes for a moderate Taliban are wearing thin day by day. In fact, the term "moderate Taliban" is a laughable oxymoron at this point.

The USA had previously declared "We will judge the Taliban by its actions, not words,". Most countries seem in agreement with this stance. The Taliban on the other hand have shown us how they plan to act. Brute force and the law of the gun seem to be their mantra. Now the question is, does the world think such actions warrant a response on their part? Do they think that the people being repressed in Afghanistan are worth it?

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THE OVERLOOKED LUXURY OF BASIC NEEDS

the World's Worst Humanitarian Crisis.

- Manya Dubey

As I write this, Yemen is on the brink of famine. In the country, the current level of hunger is unprecedented as it continues to prove a heavy hardship, despite receiving ongoing humanitarian assistance. Over one-quarter of the 30 million population has been classified as malnourished. 12 million children are in need of food, water, shelter and medicine. Yemen is extremely fragile, with prominently malnourished and food insecure civilians.

“A famine is a widespread scarcity of food, caused by several factors including war, inflation, crop failure, population imbalance, or government policies,” the boy read out to his class. “Good, we’ll continue with draughts next class,” the teacher announced. The entire room, oblivious of its true sentiment, dispersed for lunch hurriedly as the bell rang. Complaining about memorising this for his exam, the boy laughed with his friends as they sat collectively around the lunch table, trading their food. Simultaneously, one of 360,000 kids that didn’t receive the treatment she needed to battle acute malnutrition, was gone. Just as unfairly as she was introduced to the world, her only memories of which were the globe being an ocean with a constant circumlocuting tide of overwhelming hunger, fear and inequality. Her family mourned, but continued to, themselves, starve. Their indignance dissipated to desperation.

However, the state in Yemen has not yet been declared a famine; but make no mistake, the living standards the citizens are subjected to, are exactly that of an alarming crisis. “If we wait for famine to be declared, it will be too late as people will already be dying”, a statement by humanitarian aid read. 16 million people are in need of basic healthcare and/or do not have access to safe drinking water. Two in three Yemenis regularly don't know where their next meal is coming from. Though there is food available in some cases, many Yemenis cannot afford to buy nourishment because they have been displaced from their homes due to conflict.

“Yemen is one of the worst places to be a child,” the UN has said.

Imagine laying eyes on your child, caressing the bones that so significantly stand out on her chest, having to make sure that you don’t accidentally touch the tube through which your daughter is being fed because god forbid that her source



of sustenance was somehow disturbed. All while you, yourself suffer some sort of malnourishment, like the rest of your family does. Despite not having enough energy to walk, hopelessly yearning for a job just so you could provide for your baby girl- who has now overcome malnourishment, only to contract tuberculosis. Imagine having to sell all earthly possessions for a spoonful of rice. Unfortunately, this is the bitter truth and reality for Rahmah, a 6-year old Alaa's mother.

Covid-19 has affected us all. Schools and offices have shifted online, theatres, malls and restaurants have been shut down, social distancing has been implemented and we just simply don't leave our homes without wearing a mask. This is our new normal. But while we face minor disruptions, Yemen is undergoing a worsened contour of what was already the hub of the largest humanitarian crisis. "Perhaps no country is more vulnerable to COVID-19's depredations than Yemen. Even before the virus' arrival, the country was grappling with "the largest the humanitarian crisis in the world as a result of a civil war now grinding into its sixth year," says Jens Laerke, a spokesperson at the UN. This virus could be the straw that breaks the camel's back. This was highlighted when Abdulla Bin Ghooth shared his story where despite having reported multiple symptoms, his friend was de-hospitalized with only an oxygen cylinder. This friend received no external aid and consequently died 3 days later.

With every new sunrise, Yemenis continue to battle an epidemic, a pandemic, a famine, and a war. Rural and remote areas make it physically, intellectually, economically and socially isolated from the rest of the region. Civilians are caught in an endless cycle of violence and diseases- "They're locked in Yemen. No country is giving them asylum or making a humanitarian corridor. They count the days and wait to die," states a detailed NatGeo article, guided in part, by primary data.

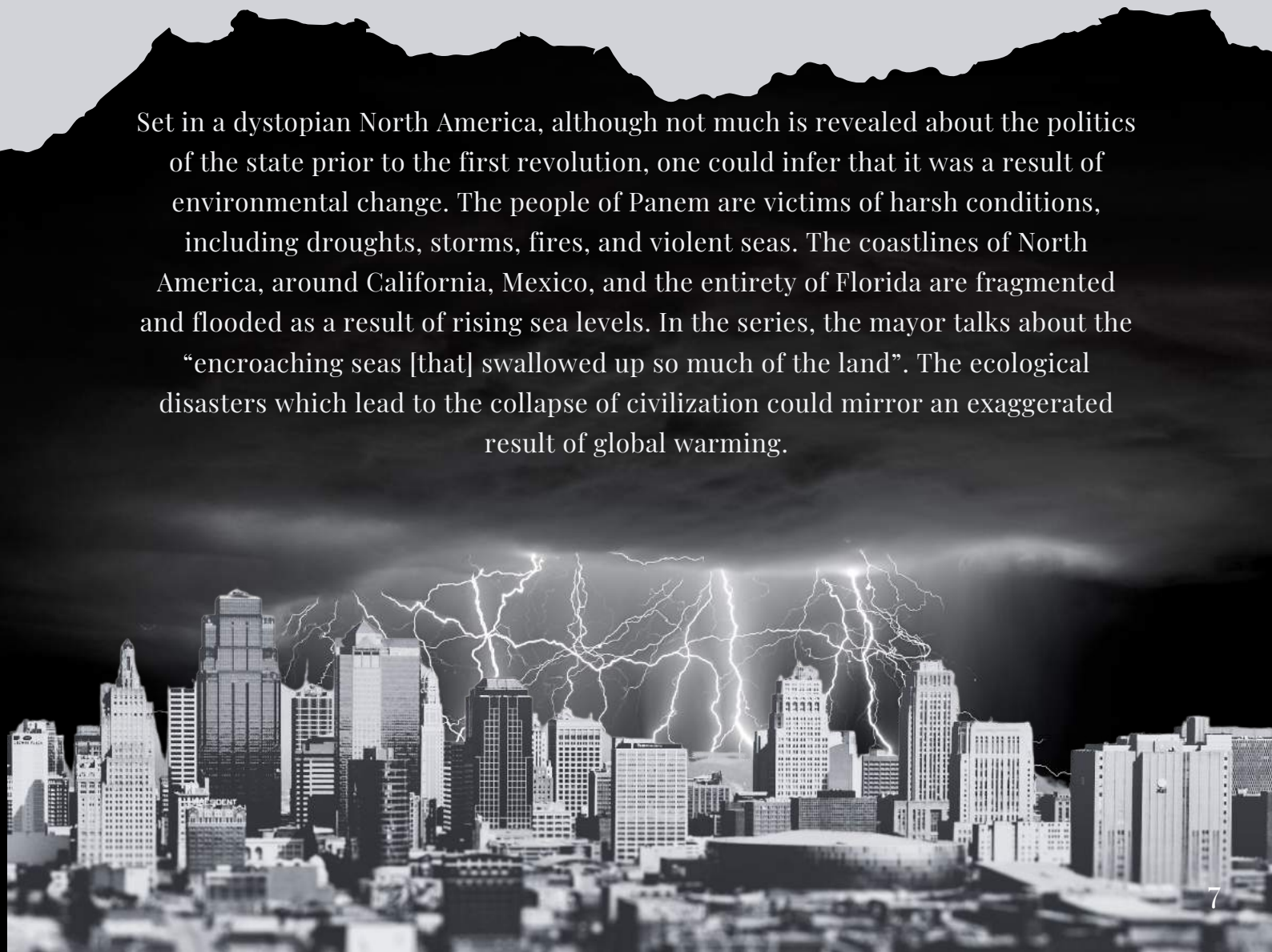
Panem on Earth

Different worlds, Similar stories

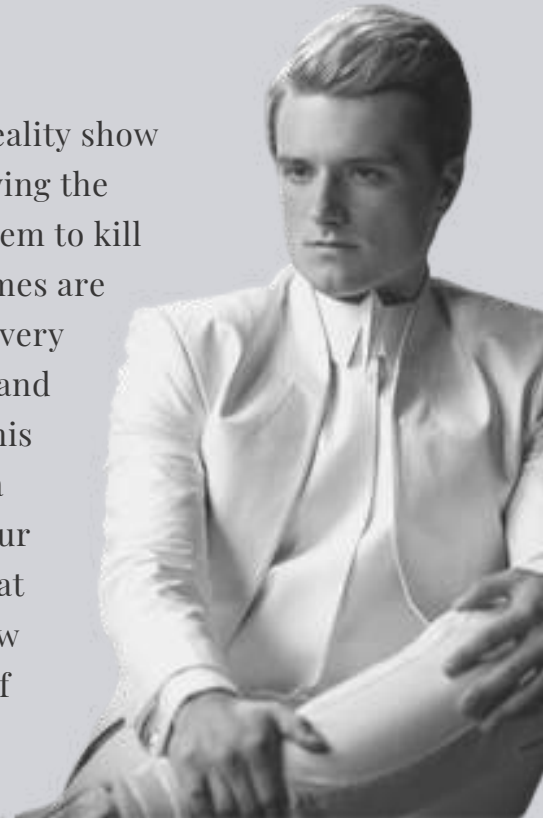
Rhea Chaudhary and Pragya Bhatt

Fascism, social exploitation and a system of extreme violence perpetrated by an autocratic government. Sound familiar? Many of you have read the “Hunger Games”, a dystopian novel which takes place in the sovereign state of Panem. Most would be enthralled by the plot wherein children from the 12 districts are forced to fight to death. Or perhaps it was the multi-dimensional characters which caught your attention. However, Suzanne Collins uses the series to tackle serious socio-political issues like poverty, oppression, and the effects of war – creating a parallel between her fictional world and the real one. The calamitous state of Panem could be a futuristic vision of planet Earth’s coming years.

Set in a dystopian North America, although not much is revealed about the politics of the state prior to the first revolution, one could infer that it was a result of environmental change. The people of Panem are victims of harsh conditions, including droughts, storms, fires, and violent seas. The coastlines of North America, around California, Mexico, and the entirety of Florida are fragmented and flooded as a result of rising sea levels. In the series, the mayor talks about the “encroaching seas [that] swallowed up so much of the land”. The ecological disasters which lead to the collapse of civilization could mirror an exaggerated result of global warming.



The brutal Hunger Games are nationally broadcast in a way a reality show would be televised. The authorities glamourise the event by having the participants dress up and attend interviews but later compel them to kill each other while everyone watches for 'entertainment'. The games are watched "at homes and community halls around the country, every television set is turned on." A detachment between the Capitol and the districts is apparent. The Capitol is desensitised towards this display of brutality and sees these children as mere aspects of a game. However, to the Districts, they are family. This reflects our society where in Reality TV shows, the media tends to forget that these are genuine people. Similarly, we dress them up, interview them and script their characters to produce a distorted sense of the truth. Suzanne Collins directs us towards a future in which violence is projected for entertainment.



The Capitol's use of censorship also draws parallels to current affairs. Communication between districts is controlled by public authority. The people of Panem are barred from criticising the government, creating a system of surveillance and censorship. The Capitol also keeps an eye out to guarantee that everybody adheres to the laws and nobody upsets the status quo. This extreme surveillance of the districts resembles the Pegasus scandal which took place in India in July 2021. A list of over 300 opponents of the Bharatiya Janata Party had been leaked, claiming they were victims of apparent surveillance, with the use of the Israeli spy software, Pegasus. Prime Minister Narendra Modi and Home Minister Amit Shah have been accused of bugging devices to achieve a political and social edge. This potential example of extreme control and scrutiny to protect the people's perception of the government, echoes the criticism made by Collins about the result of censorship and espionage.



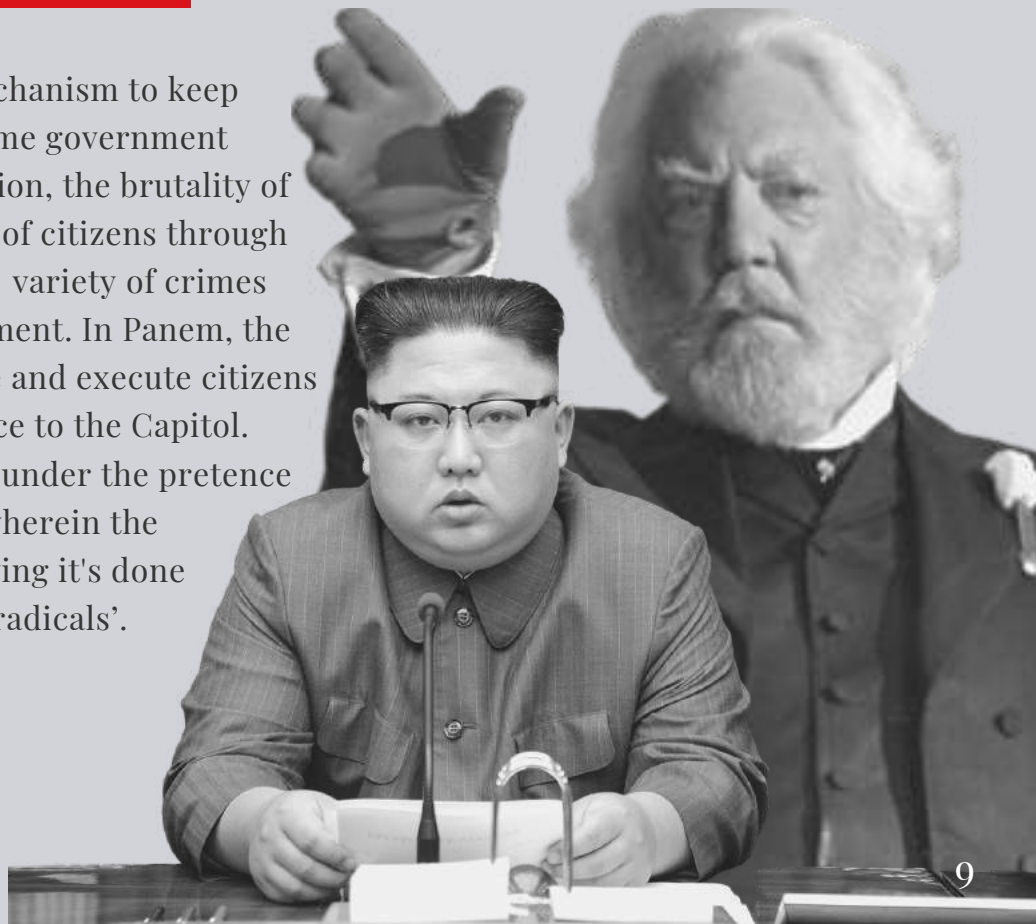
Lastly, Collins uses the totalitarian, extreme right-wing structure of Panem to reflect on the effect of extreme government policies. The disparities between the Capitol and struggling districts strongly parallels the American society and the concept of billionaires with access to the majority of wealth, influence, and power. The Capitol could represent areas where most of the wealth is concentrated, such as Beverly Hills or Calabasas, which creates a complete contrast to the impoverished neighboring areas.



The spread of mass fear as a mechanism to keep people under control mimics some government policies in North Korea. In addition, the brutality of policing bodies and persecution of citizens through capital punishment is used for a variety of crimes including criticising the government. In Panem, the peacekeepers publicly persecute and execute citizens in the districts that show defiance to the Capitol. This is carried out in both cases under the pretence of patriotism and nationalism, wherein the public is blinded by ideals believing it's done as a form of protection against 'radicals'.



Contrarily, the effect of communism and extreme left-leaning policies is also criticized in the series. Although in Mockingjay, the third book of the series, District 13 seems to be an effective, ideal society, Collins uses the figure of President Coin to display the corruption behind state ownership and radical socialism. In both cases, chauvinism ignites uprisings, while establishing a cycle of violence that the government perpetuates.



Furthermore, both societies function under a single leader. In Panem, President Snow has unlimited authority over the country. He is tended to in every conceivable way and is heartless with regards to self-preservation. North Korea works similarly. Despite resembling a seemingly more agreeable government, leader Kim Jong-un holds complete power.

In the Hunger Games, it is mentioned that everyone was isolated from one another during 'The Dark Days'. The fictional Treaty of Treason included the Hunger Games in order to intimidate the people and eliminate any further plans of scheming against the government, by keeping them in constant fear. In North Korea, there are brutal punishments to keep people in line. In Panem, individuals are separated into districts by birth and communication between the districts is banned, which is paralleled by the rampant classism and casteism in North Korea and India.

Katniss Everdeen, the main character, detests the government and the brutality for which the games stand. The Games are indifferent to individuals, serving a "higher authority". The people of the nation, without the government and oppression, are more imperative to her. She believes without the Capitol, peace and harmony would be established. Overall, Suzanne Collins creates a dystopian land, which comments on the world and politics as we know it.

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SPAIN, MADRID

1918 -1920

WORLD WAR 1 AND THE SPANISH FLU

World War I (WWI) was one of the most horrific wars in human history. Spain was considered the most neutral European country during this war. During this time the world talked about Spain because of its neutrality and because of Spanish influenza (flu). The Spanish flu was one of the deadliest viruses of all time and I thought it would be an interesting topic to discuss because of the ongoing COVID-19 pandemic. The Spanish flu infected more than 500 million people around the globe from 1918 to 1920. It killed around 30 to 50 million people. I decided to discuss this topic because of the relationship between the Spanish flu and WWI.

WHERE DID THE SPANISH FLU ORIGINATE?

Did you know that the first few cases of the Spanish flu were detected in Kansas, USA? Although nobody is really sure where the Spanish flu really originated, it did not originate in Spain!



HOW DID THE SPANISH FLU SPREAD TO THE WORLD?

Viruses normally spread through contact and airborne particles. In the early 20th century there were no passenger planes, so travel options were very limited. The most common options to travel were by ship or road. This was very time-consuming and very expensive so people used to travel very rarely. Hence, the chances of the flu spreading to the world would have been very less. Unfortunately, WWI was going on and there was a lot of movement of soldiers around the world. These soldiers passed on the flu throughout the world.

During WWI, Germany, Austria-Hungary, Bulgaria and the Ottoman Empire (Central Powers) fought against Great Britain, France, Russia, Italy, Romania, Japan, and the USA (Allied Powers). Since Spain did not participate in the world war, one might wonder how this flu came to Spain? I think that the reason for this could be that Spaniards who were working in other countries where WWI was going on, and returned to Spain because they thought it would be safer, brought the flu to Spain with them. Another reason could be that Spanish reporters who went to different countries to cover WWI also brought the flu with them and spread it around the country.

WHY IS IT CALLED THE SPANISH FLU?

There is a really important relationship between WWI and the Spanish flu. The number of soldiers that died due to this disease was actually more than how many died due to WWI. However, the countries at war were not reporting correct facts about the deaths caused by the Spanish flu because they wanted to maintain the morale of their soldiers. If people knew how dangerous this flu was, they would not join the army. Since Spain was a neutral country they were reporting all the true facts about the Spanish flu. As it appeared to be more prevalent in Spain, people thought that it had originated in Spain itself. This was why it was called the “Spanish flu”.

The fact is that the countries that lost WWI (Central Powers) actually had a higher death rate because of the Spanish flu than the countries that won (Allied Powers). This might have contributed to the Central Powers’ loss.

COMPARISON OF COVID 19 AND THE SPANISH FLU

Similarities

COVID-19 and H1N1, which caused the Spanish flu are both viruses. COVID-19 and the Spanish flu both turned into pandemics.

Differences

The flu spread because of WWI and COVID-19 spread because people were traveling for work and holidays.

The Spanish flu mostly infected children and young adults who were thought to be healthy, because the Russian flu, which ended around 1892 had already infected many old people making their immune systems strong. Also, the shape of the spikes on the tip of the H1N1 virus could not easily grab onto the lungs of older people. COVID-19 strikes older people because they have weaker immune systems and this virus has different shaped spikes, which grasp older people's lungs more easily.

HOW DID THE SPANISH FLU END?

To protect themselves from this virus, people wore masks when they were outside. They maintained self-hygiene and social distancing so they would not give it to others. Yet, the Spanish flu never really ended! People became immune to it and it mutated many many times and is now called the common flu.

I don't know when the Covid-19 pandemic will end, but we can surely take the right decisions to combat it based on what we learnt from the Spanish Flu and it will be easier now since we are more scientifically and technologically advanced than the world was then.

COUNTRY: CHINA | CAPITAL: BEIJING | YEAR: 2020-2021

POWER & PREJUDICE

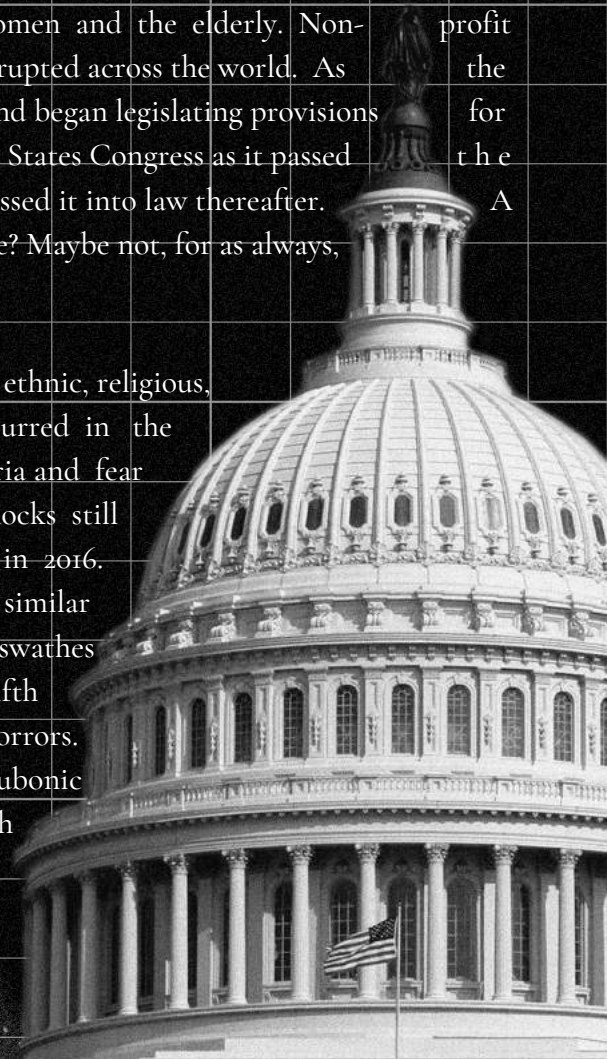
A closer look at the COVID-19 pandemic in the context of the rise of the Republic of China and its potential for conflict with the United States of America.

By Kabir Burman

"I call it the China Virus." The crowd erupted, jeering and heckling as Donald Trump spoke of the pandemic while addressing another rally of thousands in hopes of securing the upcoming election. This was not the first time he had said it and this most certainly would not be the last. Soon, the internet was swamped with tweets, messages, and comments which expressed great animosity limited not only to the Chinese government; but also towards the greater Asian population as a whole. These individuals now faced two viruses at the same time, one being the Coronavirus and the other being the rise in hate crimes. Cases ranged from the likes of sneers in public and physical altercations to racially motivated shootings such as the one seen at the Spa in Atlanta.

As reported by the Stop AAPI Hate Organisation, over 3,800 incidents were reported over the last year alone with a vast majority of these crimes being perpetrated against women and the elderly. Non-profit organizations, influential figures swung into action and protests soon erupted across the world. As the people marched on the roads, elected officials and bodies took notice and began legislating provisions for their safety. A rare sight of bi-partisanship was witnessed at the United States Congress as it passed the COVID-19 Hate Crimes Act and the new President, Joe Biden, soon passed it into law thereafter. A struggle, a fight, and a resolution- a perfect story arc wouldn't you agree? Maybe not, for as always, there is more than what appears on the surface.

This is not the first time a community has been marginalized due to its ethnic, religious, or racial background. Looking at the United States, the same occurred in the aftermath of the 9/11 attacks with great tragedy being dealt with hysteria and fear of the "other". Back then it was the Muslim Community, with aftershocks still visible decades later as seen in Trump's infamous "Travel Ban" back in 2016. Delving deeper into History, the AAPI community also faced similar conditions in the aftermath of the attack on Pearl Harbour. With vast swathes of these populations deemed to be potential spies, saboteurs, or fifth columnists; they were relegated to internment camps and faced great horrors. Whether it be the targeting of Japanese migrants for the outbreak of bubonic plague or the COVID-19 virus being termed as the "Kung Flu", such rhetoric allows for the rise of stigma and scapegoating. Yet, many have made note that these are elements limited to facets of a larger story.



That tale of course is the rise of China. In the 1970s, China as a country was a place of widespread poverty and desolation. Enter Deng Xiaoping, coming into power hoping to turn around some 150 years of humiliation in China and its decline as a historical superpower. Looking overseas, he witnessed the power of Capitalism in South Korea, Taiwan, and Singapore; inspired by these immense economic miracles, he finally brought an end to the failed Maoist Economic Doctrine. Instead, he turned to this new economic system but did so in a manner that it would not disrupt the one-party rule that had been created. Thus, resulted in the greatest economic rise ever seen on the planet with 99% of China's 1 billion population being pulled out of poverty by 2018. Hard to believe as it may be, these are brutal facts that are even harder to ignore.

At the same time, one must also consider the challenges arising from China's awe-inspiring rise to power, primarily being the effects this will have on the United States and the international order— an order of which America has been the principal architect and guardian. The past 100 years have been what historians now call an "American Century." As a result, American citizens have become accustomed to their place at the top of every pecking order. Thus, the very possibility of another nation that could be as powerful as the United States, or even stronger, strikes many Americans as an assault on who they fundamentally are as an individual. Herein, we are presented with a challenge: an apparently unstoppable rising China accelerating towards a seemingly immovable America, on course for what could be the most catastrophic collision in history.

Some 2,500 years ago, a great thinker by the name of Thucydides, when commenting on the Peloponnesian War in Greece stated that it was: "It was the rise of Athens and the fear that this instilled in Sparta that made the war inevitable." Hence, this ascension of one causes a reaction of the other to create an atmosphere of pride, arrogance, and paranoia which eventually leads to conflict. One can see examples of the same occur throughout history with rising powers such as Athens, or Germany 100 years ago, or China today; threatening to displace a dominant power such as Sparta, or Great Britain 100 years ago, or the US in the 21st century. But conflict today is not limited to bows, arrows, and spears as it was before; in its place are guns, bombs, and nuclear missiles— capable of destroying life as we know it on planet Earth.

A few decades ago, a collection of sagacious representatives, politicians, and leaders gathered, determined to mould the second half of the 20th century unlike its first. Together, they created the international banking system, recovery programs, and a new order of diplomacy. Its results? Decades of peace and prosperity allowed for the evolution of mankind. Yet, as the Dragon takes its place on the world stage, will the Eagle allow for its co-existence or will they resolve conflict? Will we walk in the predetermined footsteps of history into our damnation? Or will we dare to go beyond and rise above our differences to create a peaceful, brighter, and better future?



COUNTRY: WAKANDA | CAPITAL: BIRNIN ZANA | YEAR: 2018

PRIDE OF THE PANTHER

■ SCORING ■ AFRO-FUTURISM

A review and closer look at the success of the Original Soundtrack of Black Panther as scored by Ludwig Göransson

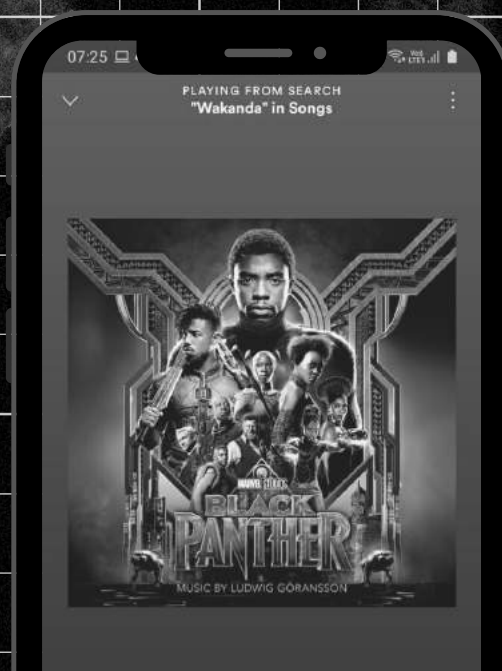
By *Kabin Burman*

"Griot is the African word for storyteller, so if you're a musician you're a storyteller."- said Ludwig Göransson in an interview from Song Exploder. Nothing else exemplifies this better than Göransson's score in the movie Black Panther. The film received a tremendously positive response with viewers applauding the black-dominated cast and was the first Marvel film to win an Academy Award- with wins for Best Original Score among three others. Being an ardent fan of the Marvel Cinematic Universe myself, in my opinion, it was the soundtrack that truly made the film stand out.

Having worked with the director, Ryan Coogler, several times before, Göransson began work on the score as early as 2016. Coogler wanted to use authentic African sounds, a first for a superhero film, and trusted Göransson to balance this with the "anthemic" quality of a traditional superhero score. Being a Swedish composer, Ludwig decided to travel to the continent of Africa to obtain a better understanding of their music. First, he visited the West African country of Senegal, where he met Baaba Maal, a Grammy-nominated Senegalese singer, with whom he spent several weeks developing the base of his score. Afterwards, Göransson travelled to South Africa and spent over a week at the International Library of African Music listening to thousands of recordings of music from different African tribes. Having spent over a month in Africa, Göransson returned to Los Angeles where he planned to combine the traditional African music with his usual orchestral and modern techniques to create the final score. Two years later, the score consisted of 28 brilliant pieces each narrating a distinct story of their own. In order to explain how the score is so effective and yet emotional at the same time, this review will look at two distinct pieces.

Wakanda by Ludwig Göransson ft. Baaba Maal

As the scene opens, the audience is greeted by vivid orange skies, contrasted by lush green mountains. In the background, we hear Baaba Maal's heart-moving outcall. The song that he is singing is about an elephant that had just died, the elephant here being symbolic of the recent King. Maal's rendition calls out for someone to take over the mantle, yet how this process must not be rushed. This song draws parallels to the recent events in the Marvel Cinematic Universe, where the protagonist's father, T'chaka, has recently passed away. The melody is able to very powerfully convey the depth of emotion being felt by the king's son, T'challa, who is not only still reeling from his loss but also about to inherit his father's throne. The use of giant Senegalese drums also adds to the overall grandeur of the scene.



However, as our characters leave the rural countryside and approach the main futuristic city of Wakanda, the music slightly shifts away from the traditional African instruments, and now adds a flourish of horns and trumpets. The employment of this instrument is significant as it seems to symbolize the arrival of the “new king”. We also see the same motif used throughout the film in scenes of T’challa’s arrival or importance. Göransson has underlined the entire piece with the voices of an operatic 40-piece choir. While some critics have objected to the usage of trumpets and choirs as they seem to split away from the traditional African instrument; I believe that this not only adds depth to the scenes but also represents the influence of the British, through the colonization of the African peninsula in the 19th century. Towards the very end of this magnificent piece, the audience is introduced to the Gangan’s, also known as the talking drums. By placing this instrument on one’s shoulders, one can squeeze it to produce different pitches and imitate speech. Thus, Göransson cleverly uses this instrument to repeat T’challa’s name in the background.

Killmonger by Ludwig Göransson

Göransson has repeatedly said that this piece was the hardest to produce due to the character’s complexity. However, after understanding the various layers of Erik’s character, Ludwig produced one of the most interesting soundtracks in the score. Just like the character, the song itself has several layers. In the movie, the audience is first introduced to Erik’s character with his back turned against them. Göransson uses a soft melodious piano base which represents the mystery surrounding this new character, however, the harp soon begins doubling the Piano which is symbolic of his ingenuity. Afterward, the strings come into play, producing a rather melancholic tune which could be the manifestation of all the suffering that he grew up alongside. The overall music, to me personally, is also connotative of his transformation from one of childish innocence to a hardened ruthless soldier.

In an interview with Song Exploder, Göransson also points out the influence of Bach, especially Matthew’s passion. Moving ahead in the track, we hear the iconic Fula flute whose tone goes from soft to a rather aggressive motif rapidly. The employment of this instrument is emblematic of Erik’s African descent while the rapidly changing tone illustrates the conflict within Erik’s character. The aggressive motif is suggestive of Erik’s cruelty, chaos produced by his character, and the thirst for his idea of “justice”. Personally, in certain parts of the song the flute also closely resembles the sound of a police siren. This could be drawing parallels to the massive incarceration during the ’80s as a result of the iconic “War on Drugs” by Nixon, which disproportionately affected people of color. The track gets progressively louder as if in tandem with Killmonger growing ever closer to his goal of attaining the throne. The music then suddenly cuts away and is replaced by the loud thumping of the low-bass Roland TR-808. This sudden cutting away from the track could be figurative of the change Killmonger brings to Wakanda. However, I personally feel that this motif is resonant of a heartbeat, which could allude to the lives that Erik took while fighting in his wars. I remember myself sitting in the theatre, on the edge of the seat, as the music pounded the halls, literally shaking the floor. Yet, soon this too is replaced by a trap-rap-beat. After working with artists such as Childish Gambino, Göransson has been able to successfully intertwine this genre of music with the existing tone. Having grown up in Oakland, USA, a center for the Black Panther Party political movement as well as hip-hop in the ’90s, this tone explains Erik’s childhood. We also hear the iconic 40-piece choir again here which provides an eerie undertone to several portions of the song. The difference in T’challa’s theme with predominantly traditional African

instruments, as compared to Killmonger's hip-hop-themed beat was not accidental, but instead intentional to differentiate between the two character's origins.

One downside that I felt was that the score often became overwhelming, for instance, the drums sometimes drowned out the audio of the other instruments and the scene itself. Nonetheless, Ludwig's score is able to effectively reflect the events of the movie. For instance, in the battle scene between T'challa and Killmonger, the instrumentation is literally moving with the flow of what's happening on the screen. The score is also able to add unsaid messages, for instance, in the post-credit scene, wherein T'challa opens up Wakanda to the world. Instead of hearing T'challa regular trumpets, we hear the same theme but played by Erik's Fula flute instead. This is indicative of the fact that Killmonger's true goal of aiding the oppressed with Wakanda's technology is actually achieved.

Symbolism is abundant in Göransson's score, another example of this is the iconic leitmotif of the Dora Milaje who are the King's guard. This group consists of the very best fighters in Wakanda who happen to be women, thus, Ludwig is able to weave an element of Feminism into the track by placing the voices of the Dora Que, a group of women in Senegal. Their vocal line reminded me of Hyena's which could allude to their ferociousness and also how they fight in tandem with one another like a pack. The strategic implementation of the Kora Instrument in scenes where the characters are remembering their past is also delightful. For a person who has not watched the movie, I would suggest that they listen to the soundtrack either way as it is a remarkable feat in itself.

Overall, the composer has done a fantastic job as the score for this film was very demanding in itself. For a relatively new artist, Ludwig has been very successful in incorporating the European elements on a primarily traditional African base. The score possesses a similar style to James Horner in Avatar, in combination with the African instrumentation used by Hans Zimmer in The Lion King. What truly makes this score stand out, however, is the ability of the track to tell a story by itself. To conclude, Göransson's incredible performance has resulted in a truly Oscar-worthy soundtrack that has made Ludwig the ultimate *Griot* himself.



**INDIA, NEW DELHI
2021**



TALES WITH TAPASS

**AN INTERVIEW WITH THE DRUMMER OF THE
CHENNAI-BASED ROCK BAND, SKRAT.**

By Tavishi Nidadhavalu

Skrat has been a part of the Indian music scene for over 15 years now. Known for their incredibly engaging live shows and versatile albums, Skrat has sold out multiple shows across India and continue to influence and contribute to the Indian music scene.

You've been playing with Skrat for 15 years now, and have worked on multiple other projects as well - what has your journey with music been like?

ANSWER: So, I started off learning the Indian classical instrument 'Madhalam' when I was three years old and worked with many tutors, starting with TV Gopalakrishnan and then later under Professor N. Govindarajan. Parallely, I was doing school at Chettinad Vidyashram, which is one of the top 10 day schools in Chennai. They were the kind of school that promoted cultural activities so we got to do a lot in school and began. I never learned the drums as that's where my interest in drumming such. I started with a drum pad and



due to my history with Carnatic music, this was easy for me to pick up. After school, I came back to Chennai to pursue engineering and it was then that T.T Sriram, the guitarist of Skrat and I decided that we have to form a band. We joined a band called Belladonna, and eventually, all members of the original Skrat got kicked out of that minivan and formed Skrat.

I've always had an interest in performing with the film side of things as well. I play with a lot of people who are in the so-called Bollywood music space, like Sid Shriram, Benny Dayal and more. Additionally, in the quest to find regional sound without many influences available, there's also a bunch of Tamil projects that I've started, one of them being Oorka, a Tamil rock band.

Growing up in a country like India, we're often discouraged to pursue professions like music because of the uncertainty and even if your family and peers are supportive, there's an ask to have a plan B. As an active member of the Indian music scene, what is your perspective on this?

ANSWER: I think it is important to have a fallback plan. Not only for the music industry, but any industry, but with the music industry, it's volatile. You have to think it through a little bit and be more confident in your craft. Honestly, what it finally comes down to, is how good you think you are. If you think you're really good and you think you can make it, no industry can stop you.

I think you just have to set out the time between music and your education and decide what your priorities are. I cracked all my exams by just getting by, but if you want to excel in both, you have put in the hardcore effort, which I know some people have, but I made the choice to prioritise music. My approach was to just get through college and not let go of any opportunities in the music side and thus, balance them the best I can. In fact, before my exams, I used to go and sit with my hostel boys and they would help me study so that I could clear my exam. Lucky for me, I had a decent enough memory and I think as a musician as well, your memory and your ability to understand things improve so that kind of helped me pull through. What it comes down to is what your priorities are and how you pick your battles.

I always had the view that to pursue music, I had to study music. What are your views on this?

ANSWER: I think there are two schools of thought here. Studying music is just is a fast track to your entire process. I feel like there's a curriculum and a methodology that scientists have figured out that works to teach students in a fast track way and they push you. If you're going to go down the self-taught route, however, your motivation comes fully from yourself and that is probably the hardest part. If you're motivated enough, then you don't need it. For example, .T Sriram, Skrat's guitarist went for just five months of classes and after that, he just practised and practised and practised. So it can work as a small boost in your learning process, but it's not necessary.



Across 2019-20, live music took a MASSIVE hit - first, due to the live music bans in entertainment hubs like Bangalore and Kolkata and second, due to COVID-19. I know that Skrat has played at THT and Bflat, which were two of my favourite venues before they shut down. How did this impact independent musicians and the industry?

ANSWER: It was pretty horrible. Every city had its share of venues shutting down. Bangalore, of course, is our second home so we've seen that city grow. There was this time where it became this crazy spot for live music but then, the next thing you know, live gigs stopped happening. They shut everything down because of various regulations and political agendas. That definitely set us back, but that is the state of India itself and unfortunately, we are in no position to make a change at that level. That's why I'd like to emphasise the regional music scene to build so that it helps independent Indian musicians. Only when the regional music kicks in, will the people of the city and the state, and everybody take in the Indian music scene.

We've spoken a lot about how volatile the music industry is so how do you deal with the setbacks and your approach to getting into something like that?

ANSWER: Understanding the business helps. There's one side of things where you're doing what you want, which you should continue doing but it's also important to understand what the business wants, which is a completely different set of things. If you'd like to get into music full-time, you need to cater to what the country needs. I'm not saying don't pursue your music, but to make money off of the music scene, you have to be ready to give up a part of your creativity.

I'm sure all musicians write their music. I would say that is a part of their passion experiment, which is great. Please keep doing that! But if you want to stay in the music industry, you need to understand the commercial angle of the business and try to put yourself there. You'll have to identify your strengths and play the industry accordingly. That's very important.

Is there any advice that you'd like to share with students wanting to pursue a career in music in India?

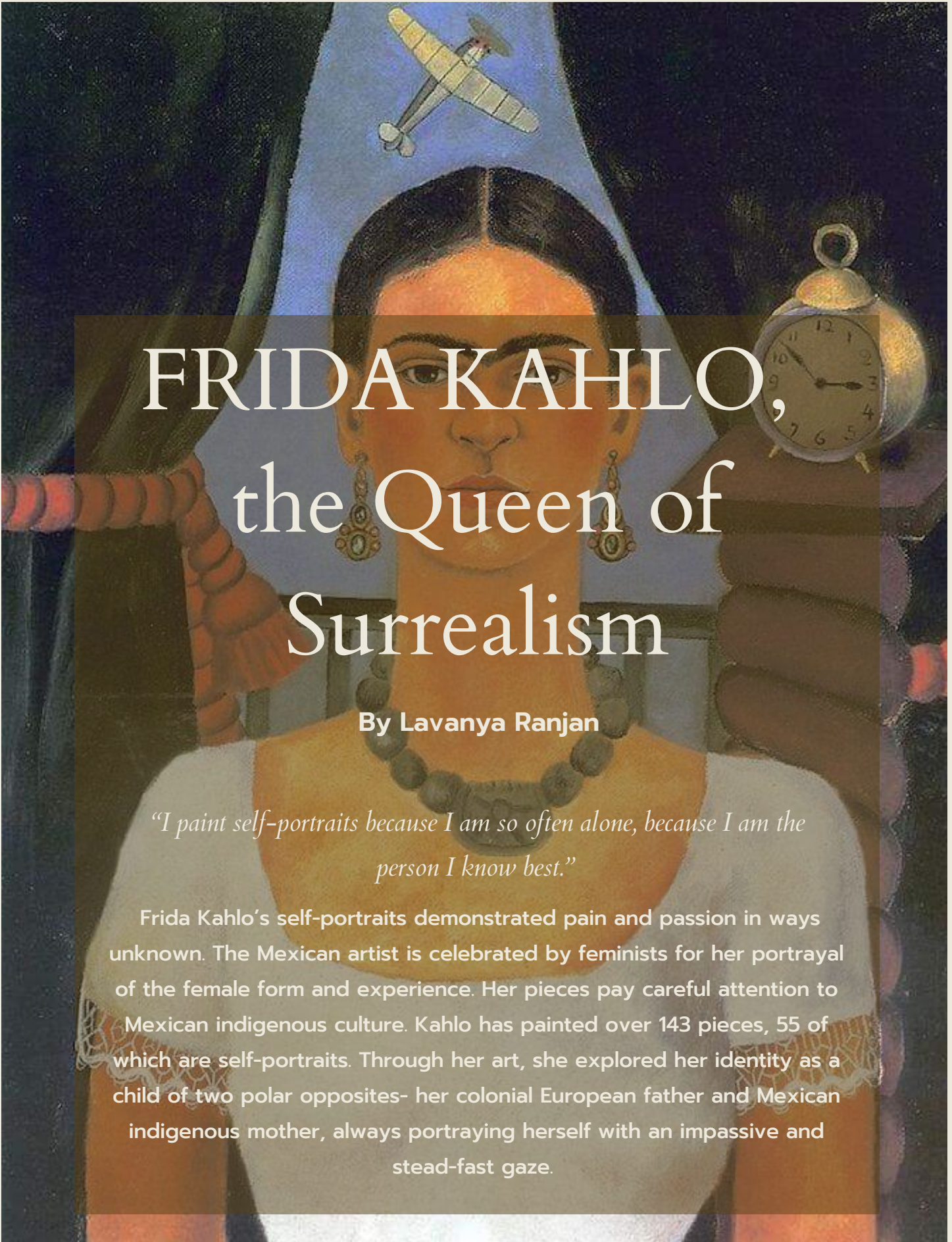
ANSWER: Everybody's journey in the music industry is very different. I know people who have hit success within a few days, but I know people who have not hit success in 20-30 years as well but it's the journey that matters. It's a lot of fun in terms of the kind of people you meet, the kind of places you get to play at, and the kind of music you feel. I'd say that it's definitely worth getting into, but just be wary of what it is and go into it with full guns blazing. I'm sure you'll come out successful.



1907-1954

MEXICO

Mexico City

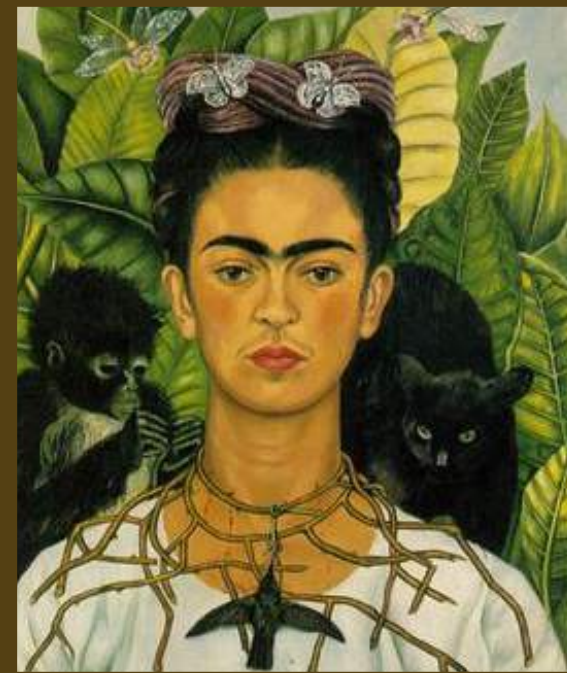


FRIDA KAHLO, the Queen of Surrealism

By Lavanya Ranjan

"I paint self-portraits because I am so often alone, because I am the person I know best."

Frida Kahlo's self-portraits demonstrated pain and passion in ways unknown. The Mexican artist is celebrated by feminists for her portrayal of the female form and experience. Her pieces pay careful attention to Mexican indigenous culture. Kahlo has painted over 143 pieces, 55 of which are self-portraits. Through her art, she explored her identity as a child of two polar opposites- her colonial European father and Mexican indigenous mother, always portraying herself with an impassive and steady gaze.



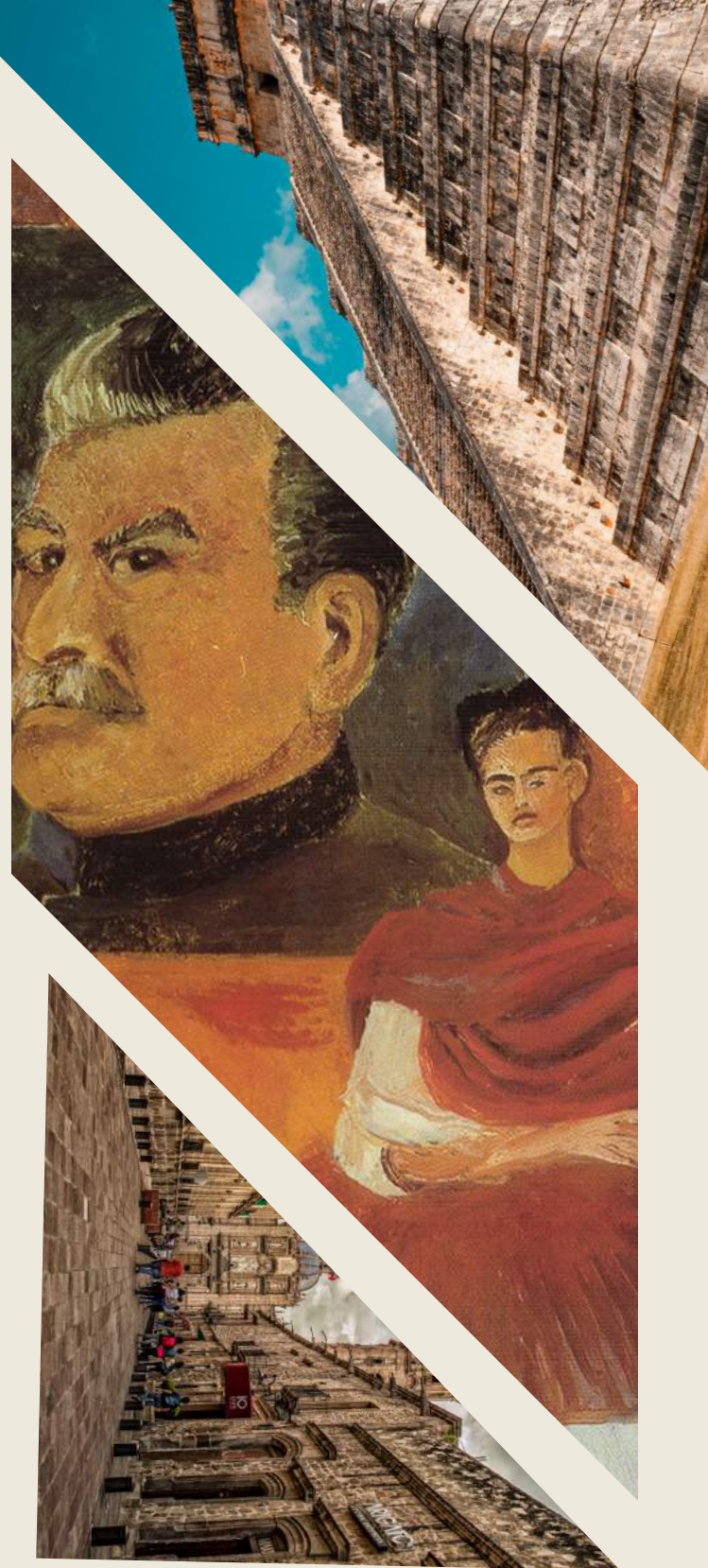
Frida Kahlo had a "brutal" attitude towards pain, fearless while expressing it as well as confronting it. Her paintings had a paradoxical but real quality - she portrayed herself with goddess-like strength and power but also in a vulnerable and human way. In doing so, she created one of the first works of art with a realistic female form. She had a brilliant amount of self-awareness and visual honesty.

Her life and art revolved around and was heavily influenced by her husband - famous mural artist, Diego Rivera. The two artists had a very passionate but unsteady relationship, with various instances of infidelity from both of them. Most of Diego's affairs did not bother Frida much, as she herself had several with men and women, but the one with her sister was the final nail in the coffin. After her divorce, she created some of her most bold paintings, questioning the notions of femininity. She represented a woman's strength and resilience, giving her art a very strong feminine viewpoint. With this perspective, it became difficult to understand how much of a role her gender played and if her art would be interpreted in the same way if it was created by a male.

Kahlo never considered herself a Surrealist, but Andre Breton called her a natural Surrealist. Her vivid use of symbolic elements proved Andre Breton right. Her paintings contained elaborate narratives that were described by a juxtaposition of beings and objects alike. She denied being a Surrealist artist because 'she drew what she saw', but this made her fit into the Surrealist movement all the more.

Kahlo's paintings have received great praise as well as harsh criticism. She translated her pain into paint, making it quite uncomfortable for some people but impressive nonetheless. It has been difficult for critics to lash out at her skill or composition. She used her subject and background in a cohesive manner and every aspect told a story - the aim of art. But that doesn't mean that her themes haven't been questioned. Her themes and ideas have often been called overdramatic and said to be sending mixed messages. These critics question whether Frida's pain was truly as severe as she made it out to be. It is often said that she dramatized her disabilities to capture her husband's attention while he was with someone else. A lot of these criticisms seem to be about her personality more than the artwork, but because both are so closely entwined, it is difficult to separate them.

The artist's tumultuous life became the inspiration for the 2002 film 'Frida', starring Salma Hayek. *Frida* was nominated for six Academy Awards and won Best Makeup and Original Score. Her pieces presented topics that were considered taboos during that time such as independence, miscarriage, gender roles, grief, internal struggle, depression, political and economic beliefs, disability, etc. Her paintings are considered some of the most progressive paintings and an inspiration to various social and art movements.



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United Kingdom, *London*
1980s

The Secret Behind the Glamorous Lives of British Pop Icons

*By Aryan Ramkumar
and Neha Srinivas*

Glamour. Fame. Fortune.

Three words that come to mind when you think of British bands deeply rooted in the extensive history of pop culture: from Queen to The Kinks, to the Beatles and countless others. From the naked eye, it may seem like the members of these bands had the most exhilarating lives but this was not always the case. A life constantly under the spotlight called for a multitude of ramifications and was painted with scandal.

Depression. Drugs. Addiction.

Freddie Mercury, the popular British musician was subjected to vile drug abuse and a heavy addiction to intoxicants in order to cope with the never-ending pressure of having to live up to everyone's expectations. At one point in the late 1970s, his drug purchases actually reached over 7,000 British pounds per week. In general, Mercury lived a flamboyant lifestyle oversaturated with jamborees - he would always say, "I've lived a full life and if I'm dead tomorrow, I don't give a damn" and would insist on partying like there was no tomorrow.



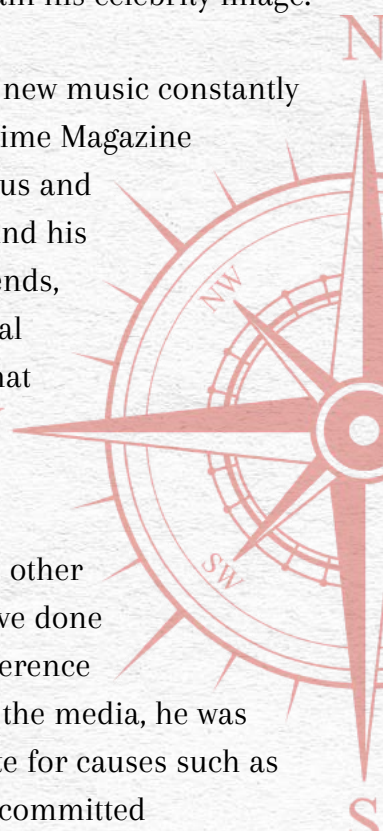


Although a star of galactic proportions, Freddie still tried his best to keep many of the details of these lavish parties and his intimate lifestyle and relationships hidden from the media, who were constantly on the lookout for drama and exposés. Furthermore, he was a victim of exploitation by his shrewd manager and boyfriend at the time, Paul Prenter, who was keen on portraying a very specific persona of Mercury to the media - at the expense of Mercury's own well-being. Through his compound wrongs and manipulations, he lured Mercury into a twilight world of drugs, parties, illegal, and immoral activities to maintain his celebrity image.

In addition to all of this, Freddie was also under the pressure of having to release new music constantly and would even face a lot of criticism over the peculiar style of his music. Once, Time Magazine even went so far as to opine that "Lyrically, Queen's songs manage to be pretentious and irrelevant." The stress and anxiety caused by these critics and various others around his music resulted in the singer isolating himself from the rest of his bandmates, friends, as well as ending his rumoured relationship with Prenter. And to top off his mental trauma, he was also suffering from HIV-AIDS - an incurable and deadly disease that was ranked one of the leading causes of death back then. All of these factors W culminated in his untimely and tragic death.

Another example of a British celebrity who struggled under the public eye is none other than David Bowie, the famous singer-songwriter of the rock band Tin Machine. "I've done just about everything that it's possible to do", a famous quote of his, is a direct reference to the drugs towards which he had a substantial appetite. On the outside, through the media, he was portrayed as a musical prodigy. A man with a pristine image as well as an advocate for causes such as women empowerment and AIDS research, he was perceived as a responsible and committed philanthropist.

Beneath the surface, however, Bowie was quickly roped into the "celebrity life" and was easily influenced by the people around him. After his peak stardom, his marriage began declining and he almost went into severe depression. Moreover, there was a long-running lawsuit to end his management contract with MainMan and slowly, he began despising the music industry. He began hating the constant presence of the media and the impediments behind the scenes. As a coping mechanism, he developed a chronic cocaine addiction - which nearly resulted in his death.

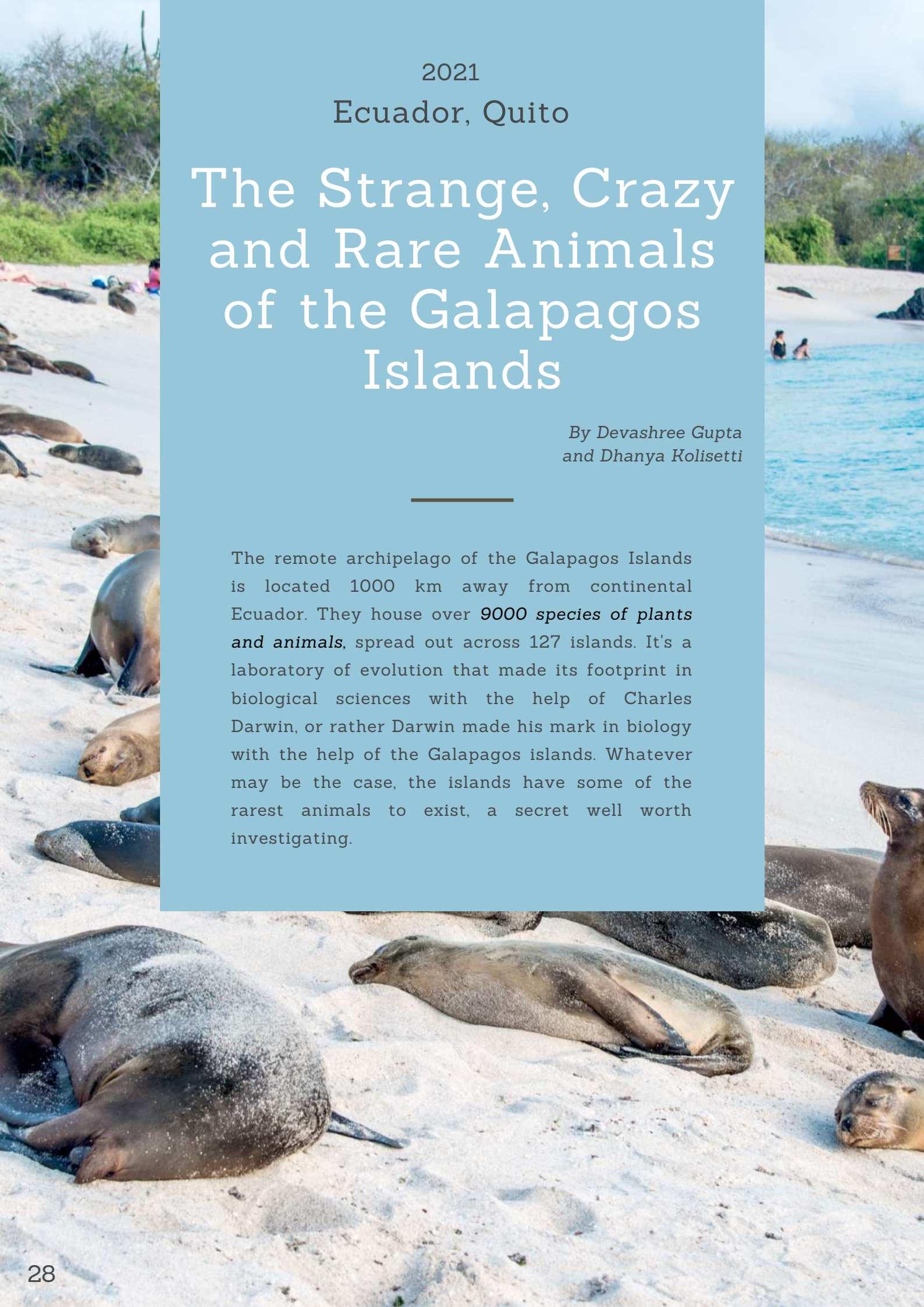




Freddie and Bowie were not the only ones sentenced to the difficulties of being under the spotlight though- accompanying them were the other “dazzling” personalities of that era like John Lennon, Jeremy Spencer, and Ray Davies - their lives were also tainted with affairs, lies, secrecy, and controversy. As much as the media at that time would like to portray their lives to be flawless, successful, and lavish, behind the scenes of it all, the narrative was vastly different.

Even now, in the 21st century, to be a celebrity - to be someone constantly looked upon by the public eye - is not an easy task. The mental stress that a public figure has to undergo is immensely high - they are constantly plagued with criticism, online trolls, and the public’s unrealistic expectations. The pressure to maintain their image on social media platforms every single day leads them to make questionable decisions and results in a lot of secrecy. From an outsider's point of view though, it’s almost impossible not to envy these celebrities, as their lives are portrayed to be blanketed with glamour- but the truth is that we cannot even begin to comprehend the entirety of their situations as we are often misdirected by the media. Misinformation and over exaggerations create false narratives. In reality, we don’t know anything about the ongoing events that take place behind the scenes and are almost always clueless about the mental state of these public icons. People should realise that these figures that they look upto are nowhere near perfect and it’s time we, and the media, started treating them as what they are - humans.





2021
Ecuador, Quito

The Strange, Crazy and Rare Animals of the Galapagos Islands

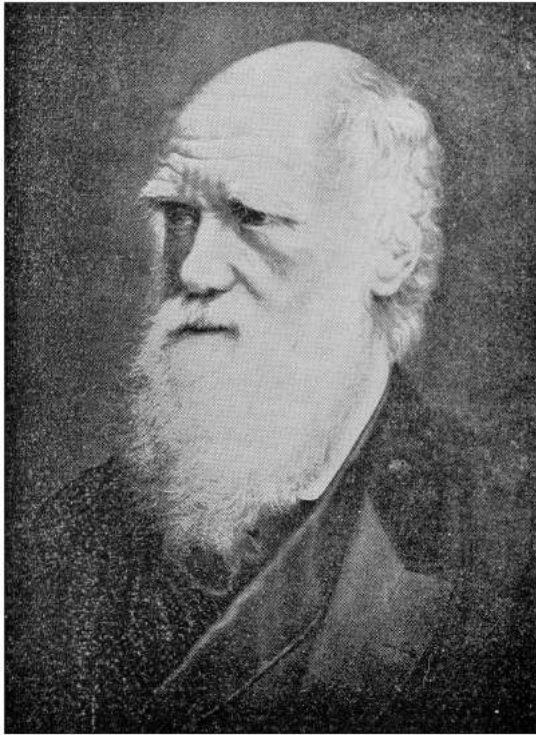
*By Devashree Gupta
and Dhanya Kolisetti*

The remote archipelago of the Galapagos Islands is located 1000 km away from continental Ecuador. They house over 9000 *species of plants and animals*, spread out across 127 islands. It's a laboratory of evolution that made its footprint in biological sciences with the help of Charles Darwin, or rather Darwin made his mark in biology with the help of the Galapagos islands. Whatever may be the case, the islands have some of the rarest animals to exist, a secret well worth investigating.

A catalyst of evolution, the Galapagos Islands have been a taxonomist's haven since the early 19th century. A profession, we would not have known if it weren't for Charles Darwin, the father of evolution. In 1835, Darwin first arrived on the Galapagos islands. The animals and plants he saw on these secluded islands were similar throughout the islands. However, they had distinct differences that made them perfectly suited to their habitat. As Darwin observed the diversity of these animals, hidden away from the rest of the world, he asked one central question that defined our concept of natural selection and evolution today: "How did life first come to these islands?" 24 research-filled years later, in 1859, Darwin finally published the 'Origin of Species by Means of Natural Selection'.

With over *55 species of native birds* inhabiting these islands, the Galapagos is swarmed with a majority of seabirds who occupy the entirety of the shoreline. Home to the three types of 'boobies', they are distinguished by their mesmerizing colors which merge into the serene fauna of the islands. The 'blue-footed boobies', as the name suggests, waddle with blue webbed feet which are an integral aspect of their mating ritual- the alternating showcase of their feet to attract females. The smallest member of the species is the red-footed boobies who possess an incredible sight and diving ability which allows them to drop 130ft underwater to capture their prey. Finally, the Nazca booby is the largest of the three, it is well known for its obligate siblicide, where one of the hatchlings simply kicks the other out of the nest to avoid competition and follows the principle of survival of the fittest. The boobies are often prey to the parasitic tendencies of 'finches'. In particular, the Vampire Finches, are a subspecies of the sharp-beaked ground finches that live on the Darwin and Wolf Islands. What's unique about these birds is their vampire tendencies, drinking blood from the boobies they simultaneously pick off parasites and insects allowing them to gain nutrition and enrichment. The Galapagos Islands are home to strange and unusual creatures who cumulatively make up this thriving ecosystem.



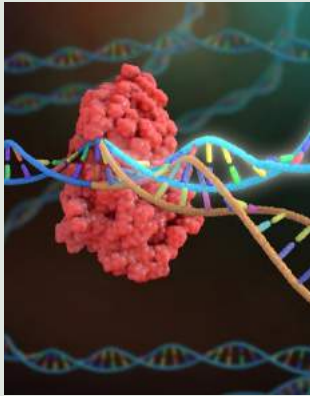


Charles Darwin



While mammals outnumber other vertebrates in most parts of the world, the Galapagos Islands are ruled by reptiles. There are 25 reptile species on these islands, out of which 19 are endemic. Possibly the most famous are the giant tortoises. These enormous animals do justice to their name, weighing nearly **550 pounds and living up to 150 years**, the tortoises have evolved so much on these islands that they have been classified into different species too. However, they are an endangered species, such as the fate of several animals on the Galapagos islands. The persevering list of endangered species includes the 'marine iguana'. These are the only type of lizards that find the ocean to be their most natural habitat. They can dive to a depth of 40 feet underwater and feed on algae as well as tiny crustaceans. Quoted as having a "singularly stupid appearance" by Charles Darwin himself, the land iguana is another endemic creature that resides in the Galapagos. They have a yellow-grey color due to a symbiotic relationship with a parasite that lives on their skin, which led Darwin to believe they are "ugly animals". Secure from the rest of the world, before the claws of climate change make their way, these reptiles live at peace on the Galapagos islands.

The Galapagos are well known for their diverse array of flora and fauna which blankets the islands. Many species are endemic making them special to these islands and hence leaving an unerasable signature on these lands. It is extremely important that society cherishes authenticity and protects and conserves this treasure of nature.



CRISPR? WHO THAT?

CRISPR expanded means 'clustered regularly interspaced short palindromic repeats.' It is a region of DNA where nucleotides repeat and spacers are present. Spacers are bits of DNA distributed in sequences. Nucleotides are the structural unit of nucleic acid, they are a compound that are linked to phosphate. The spacers are from previous viruses that serve as a 'memory bank', allowing the bacteria to fight off future virus attacks.

CRISPR is a tool that is used to precisely edit the gene; essentially removing any disease-causing gene. CRISPR acts as a defense system for the body, it cuts out the 'bad' DNA strand.

CRISPR is a prokaryotic defense system using

RNA molecules and Cas proteins to target and cut out the genetics causing the disease. Imagine the protein Cas9 to be scissors; it cuts strands of DNA. The strand cut out is then disintegrated. Thus allowing for genes to be edited.

GENE EDITING TOOL

The protein Cas9 binds two RNA molecules: crRNA and tracrRNA. These RNAs guide the protein to the region of DNA that needs to be removed. Cas9 cuts both strands of the DNA double helix, known as 'double-stranded break'. There is a built-in safety mechanism that ensures Cas9 doesn't attack CRISPR regions. Once the DNA is removed, the cell repairs the 'break-in DNA'.

This tool was created by Emmanuelle Charpentier (Germany), Jennifer Doudna (USA), Francisco Mojica (Spain), and Virginijus Šikšnys (Lithuania).

IMPROVEMENT OF CRISPR

The most important improvement to be done is to eliminate errors when the DNA is being cut. This could be done by researching different types of proteins that could substitute Cas9; no protein has been found that has the efficiency of Cas9.

USES

In 2013, CRISPR was first used to edit human cells in Harvard. The study conducted at Harvard shows that CRISPR can treat diseases such as cystic fibrosis, cataracts, and anemia.

CRISPR has also been used to engineer probiotics and vaccines for agriculture and food purposes. It also has applications in improving crop yield and the nutritional uptake of certain plants.

DRAWBACKS

Even though Cas9 has high efficiency in cutting the DNA, it still leaves room for error where it can cut into good DNA, thus leaving room for disabilities or it will leave a strand of the disease-causing gene, thus allowing for it to duplicate and grow back.

There is also the slight problem of 'off-target effects' where after cutting the DNA Cas9 may unintentionally cut the good DNA. Thus, leaving room for mutations.

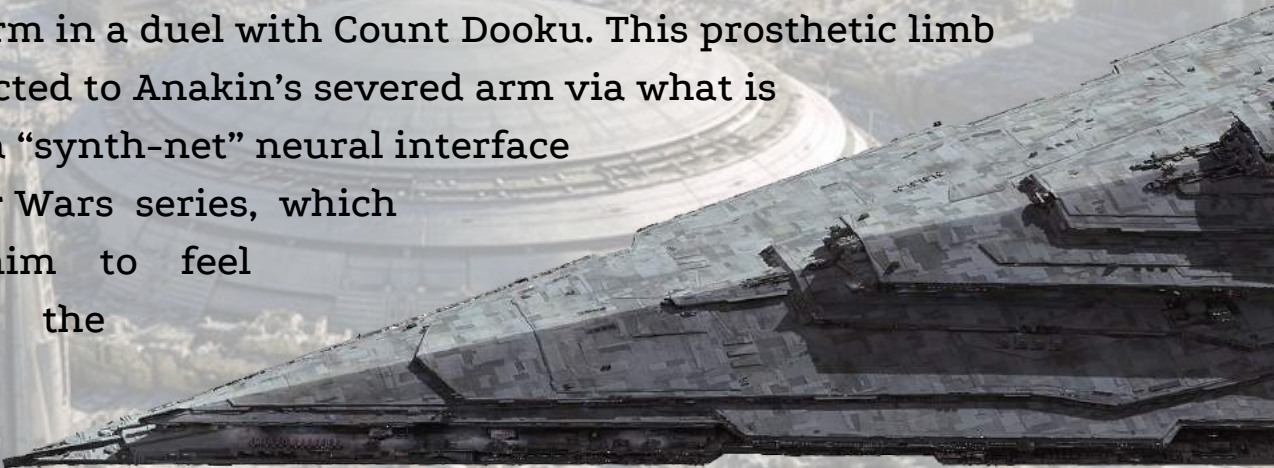
BY DIYA KAKKAR

CORUSCANT

THE CAPITAL OF THE GALAXY

by Mihir Saripalli

Coruscant. The capital of the Star Wars galaxy. Is it a city, a country, or a planet? The answer is probably all of the above. If you've ever watched Star Wars, you definitely remember the skyscrapers that touch the clouds and the never-ending air traffic. Being so technologically advanced, it's no surprise that a lot of the series' cyborgs are born here. In fact, it was on Coruscant that Anakin Skywalker had his infamous techno-arm custom created after he lost his right arm in a duel with Count Dooku. This prosthetic limb was connected to Anakin's severed arm via what is known as a "synth-net" neural interface in the Star Wars series, which allowed him to feel through the robotic arm.



Anakin would then go on to lose his other arm and both his legs (brutal, I know), and get them replaced with bionic devices when he becomes Darth Vader. Believe it or not, his new left arm was amputated and replaced about 4 times following. It is very common in this galaxy, far, far, away for limbs to be lost frequently, and it is equally customary for them to be replaced by advanced prostheses. Imagine if we could do the same- here, on Earth. Turns out, scientists and engineers worldwide have also been developing bionic limbs for years, and hope to eventually provide them to everyone with deficiencies.

Researchers at the Applied Physics Laboratory at Johns Hopkins University have developed an arm that actually re-enables patients to touch and feel. The Modular Prosthetic Limb (MPL) is an arm that enables a greater range of control and sensation than ever previously possible. This was possible all thanks to a surgical procedure called Targeted Reinnervation, involving two components - either efferent or afferent. The efferent component refers to nerves that carry electrical impulses towards muscles, while afferent nerves carry signals to the brain.

Targeted Muscle Reinnervation involves the denervation of a 'spare' target muscle, meaning that the efferent nerves that run to the muscle are deactivated. Taking their place are the residual nerves that used to run to the amputated limb. Therefore, the electrical signals emitted by the target muscle now control the motor functions of the missing limb, which is replaced by the MPL. This means that when a user thinks of



moving their finger, they can flex the target muscle and achieve a precise, controlled movement. Apart from the fingers, the wrist, arm, and even elbow can be controlled, which cannot be done using myoelectric prostheses.

Regaining sensation is made possible by Targeted Sensory Reinnervation, and involves the afferent nerves. This process is reminiscent of the "synth-net" neural interface in Star Wars movies.

A section of skin is denervated, and the afferent nerves that used to run from the amputated limb are allowed to reinnervate this area. This means that when the reinnervated skin is touched, the patient registers it as a sensation along their arm. By mapping what part of the skin produces what sensation, each finger. These sensors produce electrical signals when stimulated, and transmit these signals to the different areas of skin through electrodes. Now, if the bionic arm is touched on the index finger, the patient will not register it as a sensation on the chest- they will actually feel from their fingers, from



their lost limb. Right now, the MPL has around 200 sensors along its surface, and this number is going to increase in the future, bringing back a variety of senses.

The machinery that we have come up with is actually not very far from what Darth Vader has attached to his body, and this will only improve to provide more comfort, more control, and more sensation. Maybe one day we might be able to build up a bionic man, a General Grievous of our own when our cities look a bit more like Coruscant. For now, though, we can only dream.

THE FRENCH IN SCIENCE

By Sarah Pavthiwala

FRANCE, Paris

The French philosopher, Rene Descartes once said “cogito ergo sum”- I think therefore I am. The notion has a much larger essence than the mere necessity of thought. It could be looked at as the foundation for discoveries. Humans have the unique ability to think and thus create. This magnificent gift that is awarded to humans enables them to reach limits beyond their imagination. It gives logic a reason to exist, and it enables the explanation of logic through reasoning. This French philosopher was one amongst the many successful literates from France who changed the world for us. We now look and live in the world that their thought created. There is one such French scientist whose hunger for knowledge and capacity for thinking has had a lasting impact on our lives.



Marie Curie, a young girl born in Warsaw, Poland during its Russian era, is thought of as one of the greatest scientists. Her discovery, though limited to Physics, has impacted every other field of science. Marie Curie in her life faced huge obstacles. From being a girl, who was not allowed to gain a higher education to living in a time of such chaos. Added to this was the fact that modern-day science that we know today which is highly controlled by technology did not exist. Resources were highly limited. However, Curie was not shut down by this. She went on to pursue her theme. She started an underground organization where she taught the youth. After which, she moved to Paris where she acquired a Licenciateships in Physics and Mathematics at the University of Sorbonne. Curie met the love of her life and her forever lab partner, Pierre Curie. They very soon became one of the most powerful gifts in the field of science.

In 1896, Henri Becquerel discovered radiation that was produced by Uranium. This radiation interacted with photographic film. Marie Curie used this as the basis for her discoveries. She found that Thorium had produced very familiar radiation. As her research progressed, she discovered the quantity of the element determined the strength of the radiation. Curie related this to the idea that there must be some fundamental unit that dictates these radiations rather than the physical and chemical environment. She presumed that there must be something inside the element causing these radiations. With this, Curie was able to debunk the notion of atoms being the smallest, indivisible particles of an element. And so, the model of an atom was redefined.

Marie Curie along with her husband Pierre Curie used an ore called pitchblende which wasn't highly radioactive. Curie believed that all the radiation could not be produced by just one element, Uranium. Curie and her husband thus found two more radioactive elements. With this Polonium and Radium were found. In addition to this they also coined the term radioactivity. In 1903 she won the Nobel Prize in Physics along with Pierre Curie and Henri Becquerel.



She became the first ever female Laureate. This was not the end for Marie. She became a professor at Sorbonne. In 1911 she won a Nobel prize in Chemistry for her discoveries in Polonium and Radium along with detailed analysis of Radium and its compounds. With this she became the only Nobel prize winner in two different fields. Marie Curie had proved her scientific capabilities to the world but that didn't stop her from being an incredible human being. She used her radioactivity discoveries further by applying them in the medical field, using radiation to analyze tumors during the War. Curie's discovery of radioactivity is still used in modern science. It is used for Cancer treatment, used in Earth sciences and used in nuclear reactors. These are just some amongst the plethora of uses influenced by Marie's discovery. The passion she felt for the subject was expressed in her discoveries, some even say that radiation was probably the cause of her death. Curie gave her life to this field and we all have been impacted by her efforts.

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UNITED STATES, WASHINGTON DC, 2010

EXPLORATION OF CULTURAL DIFFERENCES

BY SIA THILAKAR

We've been studying *The Namesake* in Literature, and it's a great book! The story follows Gogol, who grows up in an Indian family in suburban America, and his search for identity. The book illustrates the identity crisis that a lot of second-generation migrants face. I wanted to better understand Gogol's perspective, and learn more about his struggles. So, I sat down with Aditya Narayan and Surya Sridharan of Grade 9 and talked to them about life in the US.

Aditya lived in **Portland**, Oregon for 8 years.

Surya lived in **Seattle**, Washington for 12 years.



What was your overall experience living in the US?

Surya: "When I was staying in Seattle, it was really nice. I didn't feel left out. Most Indians in the US feel left out, but I didn't feel that way."

Aditya: "I didn't feel left out either. In fact, in my third-grade class, there were more Indians than Americans and other nationalities. That made me feel a little more included. However, outside school, I remember that people would call me 'brown-skinned', not rudely, but they would notice that I was different from the common American there."

The food of a place is very important to its culture. Did you ever notice a difference between the food you ate in the US, and the food you ate in India?

Aditya: "There's a stark difference between the non-vegetarian and vegetarian diets in the US. It was primarily a non-veg community, the area that I stayed in. So, you had your steaks, you had your hamburgers."

Surya: "In India, there's more diversity in food."

What was the education, or the school environment like in the US? What were the kids like?

Aditya: "There were approximately 10 students in my class, which is really less compared to here in India. You tend to form a close bond with the people in your class, and with only 9 others, you end up learning all about them."

Surya: "The schools had more of a self-study model, where the students had to do most of the work. There were a lot of projects rather than just memorizing stuff."



When adjusting to a new environment, the people around you play an important role. What were the people like?

Surya: “I’d say the American lifestyle is similar to what we have here, because here we have communities, and these communities, these bubbles are similar to life in the US.”

Aditya: “To some extent, I socialized only with the circle of Asians in my class, because we were different from the average American, so we were able to bond over that. It was an extremely lovable environment, where the person next door is not only your neighbor, but also someone you care for.”



In The Namesake, Gogol’s family’s Indian lifestyle fuels his identity crisis in America. Did you ever feel “too Indian” or “too American” the way Gogol did?

Aditya: “So, that idea of having a community to fit in, is a crisis that a lot of second-generation migrants face. In the US, I was too Indian to be American. But in India, people would ask me “How’s life in America?”, and I wanted to fit in somewhere. But, my real sense of belonging was being with people who were in a similar situation, who had family in India, and they were migrants. I could understand what they were going through because I was going through the exact same thing. What happened to Gogol in the book, his identity crisis, his feeling of not belonging anywhere, that was something that I could really understand.”

Surya: “Whenever I came to India, I didn’t really have a full sense of belonging, and when I was in the US, there was a sense of belonging, but it wasn’t ‘I belong to this place. I will always stay in this place.’ I really bonded with Gogol once I read The Namesake.”

Finally, if anyone were to be shifting to or from the US, what advice would you give them?

Surya: “Don’t worry about the community too much, everything will get settled soon enough. This is the same thing I said to one of my friends who moved to San Diego.”

Aditya: “Just remain adaptable. Don’t be fixated on how your life was before, because there is a 100% chance, it will not be the same. You have to be open to change. That change, it may appear to be bad initially, but it will always be good for you.”



7 TAKEAWAYS FROM THE HAPPIEST
COUNTRY IN THE WORLD.

THE FINNISH GUIDE TO HAPPINESS

BY AKANKSHA VELATH

"The forest will answer you in the way you call to it" - Finnish Proverb

Finland, with its mesmerizing lakes, pristine forests, and diverse wildlife, is known to be one of the best places on the planet for its natural beauty. 75 percent of the country's land area consists of forests, which in fact is the highest proportion in the world. This makes the concept of "Forest Therapy" cost-free for Finnish people! "Everyman's right," a traditional legal Finnish concept, allows the general public to roam freely in natural areas like forests, lakes, and rivers—and without obtaining permission from landowners when said areas fall on private lands.

"You must listen to the spruce tree under which you dwell" - Finnish Proverb

The extensive greenery results in low pollution levels and clean air. However, citizens work towards maintaining this by adopting a sustainable lifestyle. A perfect example would be the robust secondhand scene in Finland, specifically the community-driven "Cleaning Day," where the country turns into one big outdoor flea market. Being the most literate country in the world, Finland has numerous public libraries, with 5.5 million people borrowing 68 million books a year. This is another great example of their

COUNTRY:
FINLAND
CAPITAL:
HELSINKI
YEAR:
2020-21



***"God did not create hurry"
- Finnish Proverb***

In a bustling world characterized by rush and competition, Finland is more laid-back and at peace with itself. Finnish culture, centered on the importance of community, emphasizes more on cooperation than competition. This is definitely a factor that leads to its extensive welfare benefits, low levels of corruption, well-functioning democracy, progressive taxation, wealth distribution, and a flourishing universal healthcare system. Although good policies add to overall public satisfaction, happiness comes from a deeper place of mutual trust and equality. The Finnish community strongly believes that one can only be free and independent if everyone has the equal opportunity to do so.

***"Be always a little afraid so that you never will be
much afraid" - Finnish Proverb***

An important measurement of happiness comes from a sense of safety and security. Due to Finland's low crime levels, passion for achieving equality, and high-quality education, society feels happy, safe, and secure. More than 80% of Finns trust their police force, which reflects the citizen's faith in the government.



***"Happiness is a place between too much
and too little" - Finnish Proverb***

Finland is a country where the disparity between the rich and the poor is barely visible. So much so that here, the rich are supposedly shy to show off their wealth! The wealthiest people in Finland may drive an old Volvo or at most a bit more expensive Mercedes. The country ensures that good quality education, healthcare, and shelter are provided even to the poorest citizens. The country is also passionate about closing the gender pay gap. A testament to Finland's progressiveness is the fact that it is the only country in the developed world in which fathers spend more time with school-aged children than mothers.

“Work Teaches the Worker”
- Finnish Proverb

Finland is known for its flat working model, which is a system where there are minimal levels of hierarchy between management and staff. This leads to lower supervision, more involvement in decision-making, open communication, and collaboration. Not only does this make an individual more content and in charge of their career, but it also leads to better workplace productivity, team cohesion, flexibility, and agility. Finnish people enjoy a great and healthy work-life balance.

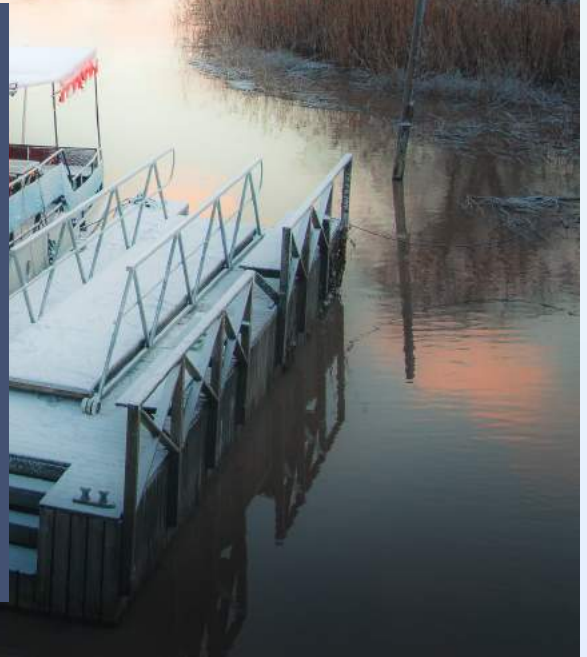
“Happiness does not come from happiness itself, but from the journey towards achieving it”
- Finnish Proverb

“Instead of waiting for a warm sunny day, many Finns practice daily *sisu* by heading out in any kind of weather for a brisk walk or cycle, or to spend time in nature.”

Finnish people believe in taking control of one's happiness and see the cause of happiness to be internal. “*Sisu*” is the national ideology of Finland. It includes accepting that dark days are part of daily life, quite literally, as Finland experiences long and cold winters. It promotes embracing and learning from negative emotions. Finnish people believe that we must rid ourselves of stereotypes of happiness.



Being the happiest country in the world does not mean that Finnish people are the most joyous people ever. They even go as far as describing themselves as a rather melancholic nation who likes to listen to ‘sad tangos’ or ‘angry heavy metal’ rather than happy songs.



Nepal, Kathmandu, 2021

Would I be able to climb Everest before graduating from school if I tried?

By Mrunmayi Kamerkar

Summitting Everest. Standing at the top of the world. Physically, symbolically, mentally, it's one of humankind's greatest individual achievements. And yet since the first successful climb on 29th May 1953, it's become a lot more attainable.

I graduate school in approximately 648 days, a little under two years. The journey to the top, beginning in Kathmandu takes about 60 days. Training, at least 6 months. But realistically, would I be able to reach the top of the world before I graduate from Inventure?

The best weather for reaching the top of Everest generally arrives in the second half of May, leaving me with only one opportunity to make the climb if I were to do it before my graduation. Preparations for the ascent begin months beforehand with teams assembling in Kathmandu towards the end of March to begin acclimatization. In April, climbers make multiple overnight round-trip climbs to successively higher camps up the mountain to acclimatize, while the first teams of Nepalese guides reach the summit. The final ascent to the summit normally takes place over an arduous four to five day round trip from basecamp. If all goes to plan, I'd have accomplished the feat and embarked on my way home by the beginning of June, just in time to begin my senior year of high school.

Climbing Everest, especially as an amateur, requires money. A lot of money. Covering the permit, sherpa guide, bottled oxygen, equipment, food, medical services, plane tickets, and expedition group expenses, the



cost can be anywhere from 30,000 – 12,000 USD. For a climber with my experience (close to none), I'd need a reliable expedition group to climb with, which would cost around 80,000 USD, approximately 60 lakhs INR. That would set me back one undergrad college education. But hopefully, climbing Everest would be a great application booster and get me a scholarship.

Logistics and funds aside, more than anything, Everest is a physical challenge. And I'd need to put in thousands of hours of training to have a chance of making it to the top. Building strength, stamina, and speed is one thing. But at 8,848 m above sea level, the air pressure is only one- third of what we're used to breathing, significantly reducing the ability to take in oxygen. With sub-zero temperatures and fierce winds, every movement becomes drastically more difficult. I'd need specific training for altitude, strength, endurance, and more. Technical training would be vital as well. Although Nepal does not currently require proof of climbing experience for those seeking climbing permits, experience from other climbs would be necessary to complete my preparation.

On average, there is one death for every ten successful ascents. On your way down you have a one in twenty chance of making it alive. The risk is undeniable, highlighted by the corpses dotting the route. With exposure to elements, avalanches, falls, running out of oxygen, hypothermia, frostbite, there is no shortage of ways to fall victim to the harsh nature of Everest. The crossing before the summit is called the Death Zone. Here oxygen is so limited that the body's cells start to die. Your judgment can become impaired, and you can experience heart attacks, strokes, or severe altitude sickness.

Due to COVID-19, the 2020 climbing season was cancelled. But 2021, saw Everest reopened from the Nepalese side. With COVID making breathing difficult, causing fatigue, the concerns of an outbreak were high. Despite precautions like masking, sanitizing and isolating, COVID cases began to spread. Pilots in PPE evacuated dozens of suspected COVID-19 patients from the area and a few companies cancelled expeditions, but climbing carried on. Optimistically, the situation should be better by the time the 2022 spring season comes around, but the pandemic could still play a major role in whether making the ascent is safe.





JAPAN, TOKYO

INDIA, NEW DELHI

Rewind

BY SAKSHI SINGHAL

Rebuilding after Hiroshima and
Nagasaki showed us resilience is thy
second name,

Showcasing Anime, Ikebana, Sakura
and Haiku which made you rise to
glory and fame.

Nothing deters your sense of
respect, discipline or pride,
That's Japan for you, who history
takes in its stride

Different states, religions, and
languages yet united we stand,
Each playing our part making a
symphony, like members of a band.
Sculptures, scriptures, cultures and
cuisines woven together hand-in
hand,

Defining proudly every inch and
spec of India – our beloved
motherland

Come rain, shine, earthquake or
famine

Japan yields to none in spirit,
making their way in a neat line,
every day every minute.

The Turks, Brits, Mughals and
Mongols

India too encountered conquest and
invasion,
emerging stronger, but with a little
push and motivation.



Both boast of the proud monarchy that once
aggressively ruled,
Passive traces of which are seen to date
need to be ridiculed!

Upliftment of women since the Geisha times –
Japan trying to make a mark
India worshipping them as goddesses but
confining them to kitchens,
Prohibiting from life's journey, "woman? you
cannot embark!"

The second world war was strenuous on cultural
and political ties,
However, Indo-Japan brotherhood continues to
build up as time flies.
Buddhism binds both apart from most of the
atlas,
Prevalent in both countries, but still a global
practice.

Konichiwa and Arigatogozaimashitaz or
Namaste and Dhanyawad,
Greeting and thanking with utmost respect.
Sentiments that are close to heart,
Encompassing values that the countries stand
by in every aspect.



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