



For more information, please visit rj.com, RJ mobile app, RJ sales offices or your preferred travel agent, call +45 5 373 2333 or email cphgdrj@rj.com.

*Fares start at advertised prices and are subject to availability.





IN THIS ISSUE

6	Alexander Lukasnenko Dictator With a difference	p. 6
	Justice delayed The downing of flight MH17 on trial	p. 16
	■ Kennedy assassination Bullets preserved in digital form	p. 22
	Digitalisation of aircraft cabins	
	Enabling innovations for tomorrow's passengers	p. 24
	■ Ecall: 2 years of saving lives	p. 26
X 1 24	Friends, enemies and loopholes - Part 2	
	Military proliferation through the back door	p. 27
	■ Gilead Manufacturing a cure to help address covid-19	p. 34
	Shaming Caesar The corona virus changes the world	p. 36
36	More dangerous than enemies	
	Ukraine Security Service officer charged with spying	p. 42
	■ The Geopolitics of the Corona	
	The most international crisis of history	p. 46
46	■ Playing out of tune Europe's discordant reaction to a pandemic	cp. 48



"EUROPE DIPLOMATIC MAGAZINE" is characterized by a very open editorial line that allows it to capture all the themes that affect directly or indirectly the European political, economic, social and security issues. Whether piracy in the Gulf of Aden and its threats to the global economy, articles about political leaders, geostrategic situations or technological developments affecting our civilization, Europe Diplomatic Magazine strives to work in comparing opinions and providing an objective analysis based on extensive research. For a wide audience composed of both members of the diplomatic corps, lobbyists,

international officials or academics, the magazine gives everyone the necessary and useful information about all topics that make up our daily lives. Covering sensitive issues such as nuclear, the rise of Islamism and energy dependence, the magazine opens its pages to recognized specialists who would like to express first order and exclusive information. But Europe Diplomatic Magazine is not only a source of information on recent topics. It is also addressing older facts with deep thought fur further analysis. Whether it's news, security, diplomacy, technology, energy, terrorism, European affairs, no subject is treated superficially. Europe Diplomatic Magazine is an independent media, conveying balanced ideas of openness and analysis based on almost 30 years of experience in the journalistic world.

■ **Briefs** News around Europe...

Books Our selection.....

Visit our site and please give us your comments:

https://europe-diplomatic.eu/

europediplomaticmagazine@gmail.com

.....p.**54**

.....p.**58**



EDITORIAL

SEVEN TESTS THE PANDEMIC POSES FOR THE EUROPEAN UNION

The coronavirus pandemic has devastated Europe, particularly Italy and Spain.

However, it has also tested and continues to challenge all the other member states' political, economic and medical resources and responses to this sudden health emergency.

The first test was in the humanitarian area. As Italy was devastated by the coronavirus, it reached out to other member states to ask for emergency humanitarian assistance. This concerned protective masks and other medical equipment. However, there was no tangible response to the Italian request.

This situation encouraged other countries such as Russia and China to step in and provide the humanitarian assistance Italy had requested.

Thankfully, European Union member states did understand the gravity of the situation rapidly and the fact that they had not given the proper response to Italy's request.

They then provided protective masks and other aid that helped ease the strain on Italian hospitals and the highly overstretched medical infrastructure in that country.

The second test was on coordination on border closures and confinement procedures.

Here again, the European Union failed to act in a concerted manner; individual countries made their own national decisions regarding cross-border activities as well as measures to keep their populations in safe confinement.

The third test - one that has been the most visible – was in the financial area.

The European Central Bank provided economic and financial support to pandemic-stricken countries, particularly to Italy and Spain.

Here, an enormous amount of fire power has been brought to bear but if additional measures are required, the EU will be forced to revisit a question that has proved very divisive: the creation of Eurobonds or 'Coronabonds'.

This is a mechanism designed for debt mutualisation. In a nutshell, this amounts to the debt of one Eurozone member becoming the debt of all other members.

Through 'Coronabond', a member state can ask for a loan to finance its response actions in the fields of health care, hospitals, military and police expenses as well as extraordinary ones such as emergency measures regarding the coronavirus pandemic.

This debt would then be shared among all member states.

This is something that the northern European countries, Germany, The Netherlands, Austria and Finland in particular do not agree to. That will indeed be a very big test for Europe.

The fourth test: democracy.

Here, very specifically in the case of Hungary and its government, democracy seems to be failing.

The government has issued an emergency decree to be enforced during the pandemic but which has no end date, no judicial supervision and no effective decision and oversight by the parliament.

Thus far, the European Union's response has been very muted.

The fifth test: leadership.

Here, individual EU leaders such as German Chancellor Angela Merkel, French President Emmanuel Macron and Italian Prime Minister Giuseppe Conte have taken big steps forward. Others have struggled, especially British Prime Minister Boris Johnson who was himself infected with the virus and had to be hospitalized.

This has also impacted the Spanish government, a very new and very fragile minority government.

We are starting to see the strains of politics in the initial response to the pandemic.

The sixth test has been in the area of geopolitics.

Here again, we have seen China and Russia trying to use their 'soft power' in the form of humanitarian aid but also Russia resort to disinformation.

So, we are realising that the great struggle for power doesn't end with the pandemic; we are seeing it being used as a unique tool.

The seventh and final test is really about the future.

Can the EU decide on a new, ambitious agenda? Will all those funds be used simply for recovery from the pandemic? Or will they be used for funding Europe's ambitions, such as the new Green New Deal and the digital economy?

And again, getting back to those Eurobonds and Coronabonds, if additional support is needed by various member states, will they agree to debt mutualisation or will this issue strain the European Union to a breaking point?

The impact of this pandemic is not on just our daily lives and our health but primarily on our economy, on our politics, on our morality, on the way we deal with asymmetric and symmetric threats.

This pandemic, like all pandemics has these two separate but of course related aspects:

One is the impact on our health and the way it changes our lives with confinement, with the cessation of normal activities and the fear of illness.

But at the same time, this pandemic has spread throughout the global political economy and has begun a process that could, if left unchecked, lead to economic chaos and its subsequent fallout on society as a whole.

The time has come for the European Union to show that it can and will indeed act as a UNION.

Trajan Dereville



ALEXANDER LUKASHENKO

Dictator with a difference

As countries around the world effectively shut down to tackle the spread of the coronavirus, the authoritarian president of Belarus was urging citizens to drink vodka - when not at work - and visit the sauna at least twice a week to stay healthy.

A global health crisis has prompted governments worldwide to impose draconian measures on the daily lives of hundreds of millions of people. The restrictions range from confinement and school closures to strict regulations on social distancing and public gatherings.

Yet in the Eastern European country of Belarus, borders remained open, and President Alexander Lukashenko remained unmoved by the coronavirus pandemic.

He has refused to implement confinement or other restrictions in the country of about 9.5 million people, reportedly suggesting that others have done so in an act of "frenzy and psychosis".

Sports leagues in the country have carried on as normal, with the 66-year-old Lukashenko himself taking part in ice hockey matches alongside star players, in an attempt to show the public that they are "all in this together". He has pointed out that Russian President Vladimir Putin - his friend and closest foreign ally - has also previously taken part in ice hockey exhibition matches.

International experts have stressed that Lukashenko was taking a big risk by refusing to accept the new reality of the coronavirus pandemic, warning that the economic impact of the health crisis could be catastrophic for this relatively poor country.

s Covid-19 cases rose in Belarus, President Lukashenko was still in denial.

On 28 March, he participated in an ice hockey match. During an interview with Belarus television channel ONT, he said: "There are no viruses here...did you see any of them flying around"? I didn't see them either"!

In Belarus, only hospital patients with serious symptoms were tested for Covid-19, and doctors have revealed to foreign journalists that not even all such patients were tested. On 3 April, the President said: "Three hundred and five cases in the whole country; it's minuscule"!

And then on 7 April, during a cabinet meeting he declared: "Today, we have 794 people in hospital, 31 on ventilators. It's absolutely no catastrophe. An increase has been observed here, but thank God, it is not an avalanche".

However, even official figures showed cases doubling every three days.



The first victim of the virus in Belarus 75-year-old actor of the Yakub Kolas Theater, Viktor Dashkevich

Lukashenko has also shown insensitivity to the victims. Viktor Dashkevich, a 75-year-old actor died on 30 March after testing positive for the virus.

During a television broadcast, the President said: "We suspect this actor who died, also had pneumonia and other things, as well as this virus. He was nearly 80 years old. Why was he still walking around, and even working"?

Another 70-year-old fatality was also shown little sympathy. This is Lukashenko's reaction: "How can you live when you weigh 135 kilograms? Your heart is close to failing. It hurts... it hurts! The whole body is sick, and the virus attacks the weak, people who have no immune system".

On 6 April, there were rehearsals for Victory Day celebrations. The annual military parade in May that celebrates the end of World War II, and draws huge crowds.

And as health authorities warned that cases will peak in early May, Lukashenko has declared that confinement measures and restrictions would hurt the economy. "People are ranting about quarantines, curfews and so on. Listen, it's easy to do, we can do it overnight, but what are we going to eat"?



Belarus factory manufacturing masks



President Lukashenko with Vladimir Putin in 2002

TIME-WARPED BELARUS

Belarus lies between Poland and Russia, with the Ukraine to the south and the Baltic States to the north.

Alexander Lukashenko has ruled this former Soviet republic with an iron fist for the past 26 years. His authoritarian style has earned him the nickname of 'Europe's last dictator'.

For many he is a figure of ridicule, but his grip on power is real and at times, terrifying.

The headquarters of the State Security Service – still called the KGB – dominate the Minsk skyline. Just as its officers rule Belarusian society, there is no meaningful free speech, the media is almost entirely state-run or heavily state-controlled and internet usage is restricted and monitored. The Lukashenko regime controls almost every aspect of life here; any opposition is firmly dealt with.

Some in Belarus call him 'Daddy', the benevolent family patriarch who preserved a proud nation from the same downward slide as neighbours Russia. Others see the former collective farm manager as a ruthless

dictator, a man whose 1950s-style Soviet-era rule is echoed by, among other and more sinister things, his Stalinist moustache.

On Lukashenko's official website, the president is often portrayed as a jovial man of the people. One minute, he is the nation's favourite ice hockey champion; the next, he is the energetic patriarch of a land of plenty, as happy to extol the virtues of Lenin and the collectivised economy as he is to show off Belarusian agricultural prowess to sympathetic celebrities like French actor Gerard Depardieu or American actor Steven Seagal.

Alexander Grigoryevich Lukashenko was born on August 30, 1954, in the village of Kopys in eastern Belarus, which, at the time, was of course part of the Soviet Union. His parents never married, and so his father was rarely around as he grew up. This affected him adversely with his peers in school who taunted him continually for having no father. His mother, who only died recently, in 2015, worked as a milkmaid to earn enough to make ends meet.

From a very early age, the young Lukashenko began reading the works of Lenin and dedicated himself to an in-depth study of his political thought; he aspired to become a teacher of politics later in life.

Following his secondary education at the local Alexandria school, he enrolled at the Pedagogical Institute in the city of Mogilev and graduated in 1975, after finishing a four year course.

He wasted no time in marrying his high school sweetheart, Galina Zhelnerovich before the birth of his



Vitebsk Regional Clinical Diagnostic Center, Belarus



Alexander Lukashenko in Moscow in 1994 three years after having taken up the presidency

son Viktor later that year. But for reasons that have never been divulged, he and his wife separated since he became president of Belarus in 1994 and the couple have never appeared in public. Other than her wedding ceremony, there are no other known photographs of Galina Zhelnerovich, who remains married to the president but who lives separately in her home village near Shlov, in the Mogilev Region.

Aged 21, Lukashenko now had to begin his mandatory, two year national service..He was posted to a military unit of the Border Guard, where he became an instructor in its political department. Here, he had attained a position that allowed him to dispense his political knowledge and enthusiasm to his peers.

After leading the local chapter of an All-Union Young Communist League in Mogilev until 1978, Lukashenko

Alexander Lukashenko as a Soviet officer

joined the ranks of the Communist Party of the Soviet Union. He also served in the Soviet army where he was named Deputy Political Officer in the Guards Motor Rifle Division which was based in Minsk.

Another happy family event marked the year 1980: the birth of his second son, Dmitry.

For the next eight years, from 1982 through 1990, he held a number of managerial posts at collective and state farms and at a construction materials and equipment plant.

In 1990, he was elected to the parliament of the Republic of Belarus.

CATAPULTED TO THE TOP

As a deputy, Lukashenko formed a faction which he named 'Communists for Democracy'. He was the only deputy to vote against the December 1991 agreement that led to the dissolution of the Soviet Union and the creation of the Commonwealth of Independent States (CIS).

He maintained close ties with conservative communist factions in

the newly-independent Belarus as well as groups with a similar ideology in Russia.

Over the years, Lukashenko earned a reputation as a fierce opponent of corruption which led in 1993, to his being elected chairman of the anticorruption committee in parliament.

He lost no time in proving his reputation was well-founded: that same year, he accused not only the Supreme Soviet chairman but also some 70 senior parliamentarians, as well as the then Prime Minister, Vyacheslav Kebich of corruption and embezzlement of public funds.

The year 1994 proved a watershed moment in the modern history of Belarus. A new constitution was enacted that paved the way for the very first democratic presidential election in that country in June of that year.

Lukashenko who ran as an independent on a populist platform, and five other candidates stood in the first round. There were no outright winners and the voting went to a second round in July. This time, Lukashenko received 80.1% of the votes and thus became the first president of independent Belarus.

Following his election, Lukashenko addressed the State Duma in Moscow and made a passionate plea for the creation of a new union of Slavic States.

Fortunately, the Belarusian idealist's words fell on deaf ears on that occasion. The Russian political elite was far too intelligent to allow itself to indulge in such ill-founded ideas.

This union has at its core the idea of Pan-Slavism and ultimately, the creation of a greater, single nationstate

The name Slavic Union is quite explicit in itself. In its abbreviated



Solemn signing ceremony of the Treaty on the Formation of the Union of Russia (Yeltsin) and Belarus (Lukashenko)



Military Parade in Minsk, 9 May 2017

form in Russian, it sounds as 'CC' in Cyrillic or 'SS' in the Latin alphabet, which of course, is a direct reference to the *Schutzstaffel*, the military and paramilitary elites of Nazi Germany.

The ideology of the Slavic Union can be summarized as neo-Nazism, antisemitism, nativism, anti-immigration and homophobia among others.

And a number of these traits have come to characterise Alexander Lukashenko throughout his very long tenure of office.

In May 1995, Lukashenko announced a referendum about changing the national symbols, the use of the Russian language, closer ties to Russia and other social issues. Despite strong opposition from his political rivals and even an impeachment attempt by them, the referendum was finally held in November 1996.

Following the result, an amended constitution was put to the vote and according to officials, 70,5% voted in favour.

The EU and the US however did not accept the legitimacy of the referendum.

Be that as it may, the favourable outcome of the vote dramatically increased Lukashenko's political and economic power.

This was in fact, the true beginning of his long dictatorial rule.

ABSOLUTE POWER

The 1996 referendum had also extended the presidential term of office for an additional two years. Therefore, Lukashenko prepared for the campaign in September 2001, in which he promised enhanced farming

and social benefits for all Belarusians. This time there was no need for a second round; Lukashenko obtained 75.65% of the votes in the first round.

International observers, including the Organization for Security and Co-operation in Europe (OSCE) announced that the election had clearly failed to meet international standards.

As expected, this was the least of the President's worries as he engaged into secret arms deals with Iraq and Iran following the 2003 invasion of Iraq by the US-led military coalition. There were even reports that political figures in Saddam Hussein's inner circle had managed to obtain Belarusian passports while in Syria, and rumors were rife that Belarus would grant political asylum to Saddam and his sons.

It was at this point that American and other western leaders began referring to Belarus as 'Europe's last dictatorship'.

Quite unfazed by all this, Lukashenko went on national television and addressed the nation in September 2004, to propose an end to the two-year presidential term limit through a referendum.

Champion of the people, the President obtained 79.4% of the vote. Again as expected, domestic opposition groups, as well as the OSCE, the EU, and the US State Department complained that the vote had fallen well short of accepted international standards and that large scale pre-marking of ballots had taken place.

Belarus had been doing quite well under Lukashenko; it had seen spectacular economic growth, although a large part of that was in fact, due to Russian crude oil which was imported at cut-prices, refined, and then re-exported to European countries at a substantial profit.

But of course, the population need not know all this...

The transitional 2006 presidential elections were particularly controversial in Belarus' history. Opposition parties all rallied behind one candidate: Alexander Milinkevich. Large scale street protests were being planned.

Meanwhile, polls showed Lukashenko as a favourite of about 84% of voters.

"Anyone joining an opposition protest is a terrorist and we will wring their necks like a duck"! (Lukashenko, March 2006)



Alexander Milinkevich

Notwithstanding, opposition voters took to the streets and protested against Lukashenko's undemocratic leadership. Despite these protests, the elections went ahead and Lukashenko gained another landslide victory.

Unsurprisingly, many international organisations again deemed the elections as fundamentally flawed and pointed out glaring irregularities.

In fact, Lukashenko this time surprisingly admitted these allegations, but stated that the elections were actually rigged against him!

After his victory, he declared: "The elections have been rigged! 93.5% have voted for me…but they say that this is not a European outcome. So we have changed that figure to 86%"!

FEELING UNDER THREAT

Though the next presidential elections were scheduled for 2011, an earlier date was decided upon in order to ensure maximum participation at a time considered more convenient for voters. And so, the campaign geared up for elections set on 19 December, 2010



A Belarus opposition protest in Minsk

But Belarus is democratic only in name. Lukashenko was standing for a fourth term in office and his grip on power was as tight as ever, manipulating parliament and brainwashing his people with propaganda.

This time, he was declared the winner with 79.6% of the votes even before the polls had closed. This of course came as no surprise; vote rigging has become almost common practice for Lukashenko.

It can often appear that time has stood still in Minsk. The grand boulevards which are often empty, the intimidating and oppressive architecture which dwarfs the people that live here...it's all still reminiscent of the Soviet era and people are somewhat uncomfortable when you mention politics.

Few people dare talk out of line; 80% are employed by the state and even in the small private sector, the state has the biggest influence. So, going against the regime means losing your job, losing your livelihood and putting your whole family at risk.

Yet on the night of the presidential election, it looked like people had finally had enough. Tens of thousands came out onto the streets to protest against the vote rigging. This was the largest demonstration Belarus had ever seen.



Andrei Sannikov

Opposition parties joined forces and gathered outside parliament. Spurred on by the large crowd, they called for talks with the government and demanded a second round of the election.

But Lukashenko ordered the KGB and riot police onto the streets in uncompromising response. Two prominent opposition figures, Andrei Sannikov and Vladimir Neklyaev paid a heavy price for their actions.

They were targeted by security forces and brutally beaten up as they made their way to join the protesters.

Thousands were arrested that night in Minsk and many more were detained in the days that followed. Some were tortured. The KGB used telephone records to trace each and every person that had used their mobile during the protest. People were locked up, issued fines and placed on a black list.

In April 2011, a bomb ripped through a Minsk metro station, just metres from Lukashenko's office. The explosion killed 15 people. He was quick to call it terrorism, and even pinned blame on the opposition.

But what's even stranger is that he took his youngest son, Kolya to witness the carnage. He may have wanted to show him what an enemy of the state can do to disrupt normal life.

Even more sinister are the accusations that Lukashenko might have been behind this explosion himself; a way of persuading his people they are under threat, and he is the only man who can save them.

"The opposition uses social networks to call for action...

I will look, watch...and then I will strike hard"!

(Lukashenko, June 2011)

There has been speculation about the President's mental health for some time. Before the presidential election, a prominent human rights lawyer asked the central election committee and supreme court to look into whether Lukashenko was still fit to be commander-in-chief. But he was ignored.

Diplomatic cables released by Wikileaks show the Americans have also had their concerns, referring to him as 'bizarre' and 'disturbed'.

If Minsk feels like a step back in time, the Belarusian countryside resembles another era entirely.

On the approach to Lukashenko's home village of Alexandria, the landscape changes dramatically. Dilapidated old shacks give way to modern and bright houses, all apparently with central heating and



Belarus President Alexander Lukashenko during a military parade in Minsk on the occasion of Belarus' Independence Day celebrations

hot water, which is unusual in this part of the country, despite the harsh winters.

And in the centre of the village, where only 600 people live, an elegant hotel; though it is not clear who comes to visit. This really is the middle of nowhere. Perhaps Lukashenko's ego led him to believe his home village would become a tourist hot spot. But no sign of that today.

Even the 3 million dollar bridge crossing only ten metres of river is hardly used. There has clearly been high levels of investment in the area; investment that is not matched in the rest of the country. The house in which Lukashenko lived with his mother has been completely rebuilt; he clearly looks after his own.

"Our people made their choice...they demonstrated who is the master of the house...This is a bright and undisputed victory". (Lukashenko, March 2006)

THE REIGN CONTINUES

Five years had passed. Alexander Lukashenko had to prepare himself once again for the upcoming elections in October 2015, and his fifth term as president. As widely expected, he faced unrest again.

Although he commanded the loyalty of many Belarusians, this time around, he was up against an opponent who could call upon widespread public support: Mikola Statkevich, one of Lukashenko's most bitter political opponents.

Following the police crackdown during the 2010 elections, Statkevich was arrested and later put on trial. He spent nearly five years in prison and was barred from standing for president.



Mikola Statkevich



A military parade on the occasion of Belarus' Independence Day celebrations

He called a rally on the day before the 2015 voting and addressed thousands of his supporters.

"Thank you for finding the courage in this scared country to show your will and exercise your right to assemble in the centre of Minsk and talk about what is important to us. The nation lives for as long as there is someone fighting for it. As long as you live, Belarus lives"!

Elsewhere in the capital, Lukashenko's small team of paid supporters made quite a contrast to the thousands who had turned out for Statkevich.

But the president does have the backing of the KGB, the militia and the army!

Sunday, 15 October 2015...election day. At polling stations throughout the country, local administrations organised musical entertainment, food stalls, cheap vodka and discount fruit and vegetables, which became the main reasons voters turned up.

Tatsiana Karatkevich, one of only three sanctioned candidates was chosen by the opposition to stand against Lukashenko.

But it was all rather academic as the final result was, as usual, a foregone conclusion. However, Karatkevich thought that the actual support from the people would matter more than the inevitably forged official results. After casting her vote, she declared:

"Before this day, there was this quote that said: It doesn't matter how people vote, it matters how people count. But today, I think it acquires a different meaning".

Indeed. Although there were hundreds of election observers scattered throughout the country, they were not allowed to observe the all-important counting process.

By evening, the mood was sombre. Many feared that large-scale protests might arouse the unwanted attention of Vladimir Putin.

After all, it was less than one year earlier that Russian troops and paramilitary units had taken over the parliament of Crimea and captured strategic sites across the region, before installing a pro-Russian government. If necessary, the Kremlin is quite capable of staging some kind of coup or simply deciding to annex part or even the whole of the territory of Belarus.

Ironically, this is also a very important argument put forward by the regime's propaganda. It says look at Ukraine. Democracy means war...democracy means losing territory...it means political chaos!

The choice is simple, says Lukashenko. Dictatorship or a bloody war like the one in neighbouring Ukraine.

Nonetheless, a small protest began outside the headquarters of the electoral commission.

Not far away, a giant TV screen showed Lukashenko casting his vote, accompanied by his then 11-year-old son Kolya, who many in the West believe is being groomed to take over the presidency one day.



Tatsiana Karatkevich

Kolya, whose official name is Nikolai is in fact an illegitimate son of President Lukashenko. Although it remains unconfirmed, it is widely believed that his mother is Irina Abelskaya, a physician who had an alleged affair with Lukashenko when she was his personal doctor.

Next to appear on the screen was the head of Belarus's Central Election Commission since 1996, Lidia Yermoshina. She announced:

"With reference to the army going to the polling stations in their barracks, 100% of them have voted...and first place in the election is taken by Lukashenko with 98% of the vote"!

No surprises there!

Crowds had also gathered in front of parliament in anticipation of the results. Before long and as expected, the militia appeared out of the shadows and began dispersing the crowds.

Against this background of political oppression, it might seem odd that there is a human rights NGO in Belarus. It's called Viasna, meaning 'spring'.

Viasna may have had its offices confiscated and even outlawed, but somehow its small team continues to agitate for change. And they certainly have their work cut out...even demonstrating is an offense.

But there are far worse things than a beating by the KGB, following a street protest. Belarus, the only European country with a death penalty executes prisoners with a gunshot to the back of the head. Forced confessions and kangaroo courts are the order of the day.



Chairperson of the Central Election Commission Lidia Yermoshina, and Belarus President Alexander



Relatives of arrested opposition members waiting for information in front of a prison in Minsk

According to Viasna and other international human rights groups, since Lukashenko seized power, over 300 individuals have been executed and a many others have disappeared without a trace.

The director of Viasna, Ales Bialiatski, says:

"Lukashenko is the person who ultimately can grant a pardon or refuse to do so. In accordance with Belarusian law, the president is always the one who decides the fate of a person, even if that person does not apply for pardon. And for him, knowing that he is the master of a person's life is the most important evidence of his unlimited power".

In 2016, amid the inflationary spiral and tumbling salaries, the economy was pushed into deep crisis. Lukashenko's solution: a tax on the unemployed, whom he called 'parasites'!

The 'parasite tax' amounted to 200 euros or 18 months unemployment benefit. Almost 500.000 people were liable for this tax and many just couldn't pay it.

The penalty was two weeks in prison.

However, Lukashenko had an idea. In order to reinforce his personal image of Minsk as a communist paradise, he decided to also make it the cleanest capital in the world. Armies of unemployed, regardless of age and health were forced to clean the streets to avoid paying the 'parasite tax'. Introduced at the beginning of 2016 by Lukashenko, it was meant to punish the unemployed.

This is of course was all part of a collective whitewashing.

But then something remarkable happened: people began to protest. Thousands came out onto the streets, and not just in Minsk, but across the country.

Demands for the abolition of the tax soon morphed into demands for democracy and as the protests escalated in March 2017, there was even talk of a 'Belarusian Spring'.

Lukashenko was out of the country and with no one in command, the demonstrations went unchecked.

But on his return, the arrests began on a large scale and the authorities responded aggressively, especially in view of preempting a big demonstration planned towards the end of March.

A cabinet meeting was televised live during which, Lukashenko issued an ominous warning:

"We are not afraid of anyone. Any minor deviation from the law will be brutally suppressed"!

Lukashenko's opponents say his disregard for human life is also epitomised by his denial of the threat still posed by the Chernobyl nuclear disaster.

In fact, one of Lukashenko's first acts as president was to close down the ministry set up to help victims of Chernobyl.

The Chernobyl Zone is a large area that spills over the border from Ukraine into Belarus and which took 70% of the fallout. The zone will remain badly contaminated for hundreds of years. Thousands fled, leaving behind their houses and agricultural lands in the Kalinkavichy region of southern Belarus.



A Belarus opposition protest rally in 2019

But for over a decade, Lukashenko's policy had been to repopulate the zone. Under the president's orders, previously abandoned fields in contaminated areas were being cultivated for purely economic reasons, part of a drive to make the zone profitable in a country already in desperate financial straits.

But of course, it's the land that poses the biggest threat as radioactive elements find their way, via the food chain into the human body, giving those who have returned a dangerous dose of radiation. However, the government insisted that all was safe and denied that the very high rates of various forms of cancer in the region were in any way linked to Chernobyl.



Vladimir Putin and Alexander Lukashenko attending the inauguration of a new building of the National Museum of the Great Patriotic War in 2014

GAZING INTO THE FUTURE

It is perhaps unsurprising that Belarus has one of the highest suicide rates in Europe, along with the high levels of alcoholism. But take a look at Lukashenko's official website and it would seem that things could get any better

It shows the president smiling paternally below the national flag. There are endless, feel-good photos of the 66-year-old, keep-fit fanatic as well as videos showing him meeting other autocrats and bathing in the reflected glory of WWII veterans. His cult of personality is reminiscent

Lukashenko nurtures the idea that Belarus is a Soviet utopia. Nowhere is this more evident than the National Museum of the Great Patriotic War, opened in 2014 in Minsk.

of many others before him.

But Hitler isn't the only mustachioed dictator on display...

Even here, it's hard to avoid Lukashenko and his heir apparent son and schoolchildren are strongly urged to visit and be fed a diet of propaganda about WWII and the triumph of Communism.

It's all part of the propaganda machine; any report which deviates from the official line is pounced on. Journalists are routinely charged or imprisoned, yet somehow, they continue to work.

Belsat TV for example, operates out of a flat somewhere in Minsk. It was launched as far back as 2007, when demand from democratic communities in Belarus for reliable and independent news increased considerably.

Here, journalists compile reports which are sent covertly to Warsaw and then beamed back by satellite.

The broadcasts are carried by the Astra 4A Satellite and are also available on cable networks. However, not surprisingly, due to an 'unofficial' ban by Belarusian authorities, accessing cable or digital networks can be complicated.

SEEKING SUPPORT AS ISOLATION BITES

Although Lukashenko has long been accused of suppressing human rights at home, Belarus's icy relations with the West began to thaw in 2009 when he met Pope Benedict XVI at the Vatican on his first visit to Western Europe, after more than ten years of diplomatic isolation from the West.

After having issued a travel ban on him for ten years, the EU later adopted a policy of 'change through engagement' and it has supported economic and some political reforms in view of integrating Belarus.

Ever since the crisis in Ukraine, Lukashenko who has always been one of President Putin's closest allies has become wary of Russia's moves. This, together with the fall in global oil prices and other economic downturns have pushed Belarus into recession and have prompted Lukashenko to reach out to other nations.

He may have little room for manoeuvre in his relations with the West, but he has managed to forge ahead in a number of areas.



President Lukashenko with Indian Prime Minister Narendra Modi

In 2017, Lukashenko was invited to India at a time when the two countries were celebrating 25 years of diplomatic relations. The Indian Prime Minister,



Chinese President Xi Jinping with President Alexander Lukashenko of Belarus

Narendra Modi and the President held talks in many areas including trade, investment and defence.

At the Belt and Road Forum for International Cooperation (BRF) held in Beijing in May 2017, Chinese President Xi Jinping welcomed Lukashenko after China and Belarus established a strategic partnership for trade and investment in various areas in 2016. The two heads of state witnessed the signature of the cooperation documents.



President Lukashenko with Secretary of State Mike Pompeo

Ever since 2015, Lukashenko worked towards improving trade relations between his country and Latin America.

In October 2017, he invited Nicolas Maduro, the Venezuelan President to Minsk, and they discussed the development of cooperation in the fields of energy, agriculture as well as military ties.

And in February 2020, US Secretary of State Mike Pompeo who was on a tour Bashar al-Assad and Alexander Lukashenko

of ex-Soviet countries, met President Lukashenko in Minsk and called for real progress in their bilateral relations. about Lukashenko joked authoritarian rule as the two shook hands, saying:

"What makes our dictatorship different is that at the weekend everyone rests but the president works"!

Meanwhile, back at the Presidential Palace in Minsk, Alexander Lukashenko, Belarus's first and only president has said sarcastically that he is ready to give up power:

"This is not my first term as president. I am fed up with the presidency"!.

But he has also denied he is preparing his son 'Kolya' to succeed him.

"I promise you firmly that I will not die in the president's chair...Secondly, I promise that I will not hold on to power for the sake of my children and hand it down to them by inheritance".

And yet, ever since Lukashenko's visit to the Vatican in 2009, when he took with him his then five year-old son to meet Pope Benedict XVI, Kolya has appeared regularly in public. He sits



Alexander Lukashenko and Nicolas Maduro

in on many state occasions, including major military events, sometimes holding a pistol, and accompanies his father on his foreign trips.

In 2012, Lukashenko and his son were welcomed in Caracas by the then Venezuelan President Hugo Chavez. It was here that the Belarusian president, perhaps inadvertently revealed his true intentions:

"You are correct in pointing out that my kid is here alongside us. This shows that we have seriously and lastingly established the foundation for our cooperation, and that in 20 to 25 years there will be someone to take over the reins of this cooperation."

In 2015, political observers were surprised when Lukashenko took his son to the UN General Assembly in New York.

At a reception for the summit, Kolya and his father posed for a photograph with Barack and Michelle Obama.

Kolya later also accompanied his father on official trips to Syria, China, India and Pakistan among other countries.





Alexander Lukashenko, his son Nikolai and Pope Benedict XVI in 2009



President Alexander Lukashenko took his son, Kolya, to meet the US President and his wife in 2015



Alexander Lukashenko and son 'Kolya' during the Independance Day parade in 2008



Vladimir Putin, Alexander Lukashenko and his son at a hockey match



Vladimir Putin and Alexander Lukashenko with son Nikolai at the military exercises "West 2013". Grodno. Gozhsky training ground



Alexander Lukashenko' s son 'Kolya'



Alexander Lukashenko, his son Nikolai and Pope Francis

Be that as it may, the Central Election Commission has already announced that the presidential election of 2020 must take place before the last day specified by the electoral law.

There will, as usual, be opposition candidates who will attempt to take on the incumbent, including old adversaries, such as Mikola Statkevich and Tatsiana Karatkevich.

They know the ropes well by now.. So, the game is on!

But would it come as a surprise to anyone to learn that the day specified by the electoral commission is Sunday, 30 August, 2020?

This happens to be President Alexander Lukashenko's birthday!

Hossein Sadre



A convoy of funeral hearses carrying the remains of the victims of the MH17 plane crash is driven from the airbase in Eindhoven to Hilversum, the Netherlands

JUSTICE DELAYED

The downing of flight MH17 on trial

There is an old legal saying, "Justice delayed is justice denied", which is variously attributed to the 19th century British Liberal Prime Minister William Gladstone and to William Penn, founder of the American state of Pennsylvania, although neither is on record as having said it. Penn would have had an intimate knowledge of justice, as practised in 17th century England, having been expelled from Christ Church college, Oxford, and arrested several times, just for being a Quaker. The idea of justice not being delayed first enters history as part of the Magna Carta, the legal agreement forced upon a very unwilling King John by his barons in 1215, in which it is written that "To no man will we sell, or deny, or delay, right or justice." The King promptly repudiated the agreement and won the support of the Pope for doing so. Justice was not something to be given to just anyone. Even so, there is a copy of the Magna Carta on display inside the European Court of Human Rights in Strasbourg and in the crypt of the US Capitol in Washington, among many other places, while of the surviving original four (admittedly all with very slightly different wording), two are on display at the British Museum, while the others can be seen at Lincoln Castle and Salisbury Cathedral. The Magna Carta was used in framing constitutions for the new states of America and is often referred to in US Supreme Court judgements. In fact, the Court's monumental doors show a depiction – cast in bronze – of King John sealing Magna Carta at Runnymede.

And yet, for the relatives of those killed in the downing of Malaysian Airlines flight MH17, justice looks like being delayed for a long time yet, perhaps indefinitely, but at least a trial finally began at the Schiphol Judicial Complex, Amsterdam, the nearest court to the point of departure, on 9 March, 2020. Began, but by no means ended. The flight took off from Schiphol Airport in Amsterdam on the 17 July, 2014, carrying 283 passengers and 15 crew, bound for Kuala Lumpur.



Boeing-777-200 (B777-2H6ER, side number 9M-MRD) of Malaysia Airlines, which was operating the MH17 flight from Amsterdam to Kuala Lumpur on 17 July 2014



The site of the MH17 flight crash

Whilst flying over Eastern Ukraine, where pro-Russian separatists were fighting Ukrainian government forces, a Russian missile destroyed it in midair, killing everyone on board. Contact with the aircraft, a Boeing 777-200ER, was lost some 50 kilometres from the Ukraine-Russia border and its wreckage showered down over the contested Donetsk region. It broke up into six parts, the remains of which landed across six separate sites. The Dutch Safety Board and a Dutch-led Joint Investigation Team (JIT) investigated the tangled parts scattered over the ground and concluded that it had been brought down by a Russian Soviet-era Buk surface-to-air missile, launched from rebel-controlled territory. Other members of the JIT are Australia, Belgium, Malaysia and Ukraine. The JIT's researchers suggested that the missile, belonging to the 53rd Anti-Aircraft Missile Brigade of the Russian Federation, had only arrived from Russia on the day it was fired.

A transporter was allegedly seen by a journalist just 16 kilometres from the crash site later the same day. Other international journalists reported seeing the Buk and that it was operated by a man with a Russian accent wearing an unknown uniform. The JIT announced that Russia was primarily responsible for the attack on MH17 and for the loss of the 298 people on board at the time. The crew had all been Malaysian but just over two-thirds of the passengers had been Dutch, the rest being Malaysian, Belgian and Australian. Even on the eve of the trial opening, a spokesperson for the Russian Foreign Ministry, Maria Zakharova, dismissed the suggestion of Russian involvement as "propaganda".

It's arguable that the aircraft should not have chosen that route. Eastern Ukraine was a war zone where military aircraft were deployed and where some



Vladimir Putin awarding Maria Zakharova, Director of the Information and Press Department of the Ministry of Foreign Affairs of the Russian Federation, with the Order of Friendship.

had been shot down in the preceding weeks. The International Civil Aviation Organisation had issued a warning to airlines that there was a degree of risk for commercial flights. Three days before MH17 was brought down, a Ukrainian Air Force Ilyushin Il-76 military aircraft, carrying nine crew and forty soldiers had been shot out of the sky as it approached Luhansk Airport. On that same day, a Ukrainian Air Force An-26 transport flying at 6,500 m (21,300 ft) was also shot down. American experts gave the opinion that it, too, had been brought down by a Buk, and that it had been fired from Russian territory. Russia denied it, but the day before the Malaysia Airlines tragedy, a Ukrainian Sukhoi Su-25 close air support aircraft was shot down, too, also supposedly from Russian-controlled territory.

WHO HAS THE MISSILE?

Later that same month, Russian news agencies reported that a Buk had been seized by rebels from a Ukraine military facility they had overrun. On that same day, rebels of the Donetsk People's Republic claimed in a Tweet that they had obtained a Buk missile system; they

deleted the Tweet just hours later, once it was clear that a civilian passenger jet had been downed. Indeed, just after the missile struck, the separatists boasted that they had brought down a Ukrainian military aircraft, but that claim was also promptly withdrawn when the truth emerged. Some 37 international airlines were still flying over the area when MH17 went down, despite a warning from the Ukrainian government, issued just three days before the attack, to all European countries.



Cockpit Voice Recorder

The warning was reported in the Dutch newspaper, De Telegraaf. On the day of the attack, however, it was reported that a Ukrainian Antonov An-26 had been due to carry paratroopers along more or less the same route, if at a lower altitude, on their way to the battlefield. It seems possible that the rebels' radar mistook the Boeing for the anticipated military flight. The mists of battle, though, have been deliberately fogged by those not wanting the truth to be exposed. And an attack on civilians, even in a state-to-state war is illegal. An attack by rebel groups is murder.

Which brings us to the trial, which began only on 9 March. You may not have heard much about it; news in every medium at the moment seems to have been completely taken over by the corona virus. Covid-19 is all anyone wants to talk about. On trial, but not actually present in the Dutch courtroom, are Vsevolodovich Girkin, Sergey Nikolayevich Dubinskiy, Oleg Yuldashevich Pulatov (all Russians) and Leonid Volodymyrovych Kharchenko, a Ukrainian.

They stand accused of having obtained and subsequently deployed the Buk TELAR (transport erector launcher and radar) system with the intention of shooting down an aircraft. Their guilt or otherwise is what the court has to decide. They are not accused of having deliberately targeted a passenger jet, but for rebel forces to deliberately bring



This blue VW minivan is the same one that was photographed and filmed escorting Buk 332 throughout the day of the MH17 downing. Additionally, this blue VW minivan served as an escort to a different convoy of Russian-separatist military equipment two days before the downing



Vsevolodovich Girkin, Sergey Nikolayevich Dubinskiy, Oleg Yuldashevich Pulatov and Leonid Volodymyrovych Kharchenko

down any aircraft is an offence under international law. Girkin is the former 'defence minister' of the self-declared 'People's Republic of Donetsk'. The war was not official, between two sovereign nations, and 'combatant immunity' cannot apply to acts of wilful murder. The Netherlands Chief Prosecutor, Fred Westerbeke, says he will summon all four to face two specific charges. Firstly they're accused of "causing the crash of flight MH17, resulting in the death of all persons on board, punishable pursuant to Article 168 of the Dutch Criminal Code". Secondly, the charge lists "the murder of 298 persons on board MH17, punishable pursuant to Article 289 of the Dutch Criminal Code". So, the four are accused of deliberately bringing down the aircraft and of the culpable homicide of all those on board. None of the accused is expected to attend the court, although Pulatov is represented by his lawyer, and it's unlikely that the court's eventual judgement will lead to punishment for anyone found guilty.

Westerbeke warned the court in his opening statement that this is likely to be a long trial, possibly lasting five or six years, and it opened more than five years after the aircraft was shot down, so 'justice delayed' is inevitable, and 'justice denied' is highly probable; investigations into the tragedy are continuing and all four of the accused may be cleared. He also spoke of "the Russian Federation's active efforts to obstruct the investigation" and the risks of retaliation faced by local witnesses. The JIT looked at other possible causes of the crash, such as that MH17 crashed because of an unexplained onboard explosion, that it was shot down by fighter aircraft and even that it was shot down by Ukrainian armed forces. The evidence to be presented at the trial includes documents provided by the Russian Federation. But the JIT investigators reached certain firm conclusions, according to Westerbeke "that flight MH17 was not shot down during a military exercise or by armed forces who believed that they were defending their country from a perceived attack," he told the court in his opening statement, "The Buk-TELAR that downed flight MH17 should never have been in Ukraine, and no-one should have fired a missile there, whether aimed at a civilian or military aircraft. This makes the assessment of this case fundamentally different from cases where errors of judgment during a legitimate military operation result in the loss of civilian life. Second, the parties responsible for downing flight MH17 have taken no responsibility whatsoever for their actions."



Assistant Commissioner Peter Crozier representing Australia at the June 19, 2019 Press conference of the JIT

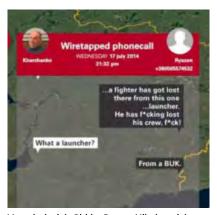
And, to be honest, nor are they likely to, although, as Westerbeke said, an effective investigation, openness about the findings and, where possible, the punishment of those responsible, are not merely a moral obligation. "They are also a legal obligation under international human rights conventions." But that is not all; the Public Prosecution Service admits that many people have questioned the point of holding a trial at which the accused are unlikely to appear and when it's questionable that the defendants, if found guilty, would face punishment. "The possibility that the defendants in this case may not face punishment, even if convicted," the Prosecutor told the court, "is not, in our view, a reason to forego a trial."

SNAPSHOT OF A DISASTER

In the end, it all comes back to what actually happened on that fateful day. The flight plan showed that MH17 was due to fly over Ukraine at 33,000 feet (10,060 metres), then change course and altitude to fly over the city of Dnipropetrovsk on a flight path called Airway Lima 980, flying over the city itself at 15:53 local time. Dnipropetrovsk Air Traffic Control asked MH17 to climb to a higher flightpath to avoid possible conflict with a Singapore Airlines flight, but the crew declined and the Singapore Airlines flight changed altitude instead. At 16:00 local time, the crew asked to deviate 20 nautical miles (37 kilometres) to the north because of thunder storms in the area, which was approved. At 16:19, Dnipropetrovsk ATC noticed the flight was 6.7 kilometres north of the approved flight path and instructed the crew to correct this before asking the Russian ATC at Rostov-on-Don to take over responsibility. The Russians agreed but when Dnipropetrovsk ATC tried to notify MH17 there was no response. The flight had simply vanished from the radar.

There have been many claims of intercepted calls between various suspects that suggest complicity, but the JIT fears some have been tampered with or else took place too close to the event to have any significance. As the Prosecutor said, the case must be completely watertight, without any room for question or doubt.

Meanwhile, the JIT investigation continues and is still investigating other individuals who may have played a part. Some have blamed the authorities for not doing enough, but as the Prosecutor said, "the question of whether public authorities could have done more to



Vsevolodovich Girkin, Sergey Nikolayevich Dubinskiy, Oleg Yuldashevich Pulatov and Leonid Volodymyrovych Kharchenko

prevent a murder can never absolve the murderer". It was only following an extensive investigation over an extended time period that the JIT was able to conclude that "flight MH17 was shot down by a Buk-missile launched from a farm field near the town of Pervomaiskyi, to the south of the town of Snizhne; that a Buk-TELAR of the 53rd Anti-Aircraft Missile Brigade of the Russian army had been used for this purpose; and that this Buk-TELAR system was transported from the Russian Federation on the night of 16-17 July 2014 and the remaining three missiles on the launcher were transported back to the Russian Federation shortly after the downing of flight MH17."

Russia has not been at all helpful to the investigation; there have even been allegations that Russia manipulated images to obscure the truth. In July 2015, Malaysia proposed that the United Nations Security Council set up an international tribunal to prosecute those found responsible for shooting down the aircraft. The Malaysian resolution gained a majority on the Security Council, but it was vetoed by Russia, which then proposed its own rival draft resolution, pushing for a greater U.N. role in an investigation into what caused the crash and demanded justice, but the proposal stopped short of setting up a tribunal: no trial, no verdict, no punishment. Russia's lack of cooperation prompted Tony Abbott, the Prime Minister of Australia at the time of the incident, to say that "With MH17, Russia has demonstrated that there's a touch of evil at the heart of their government."

INEXPLICABLE EVENTS

Since then, the Dutch Public Prosecutor's office have sought the extradition of a Ukrainian, Volosdymyr Tsemakh from the Russian Federation, although it has not been decided if he will face prosecution. The evidence against him is not so strong as the evidence against the four accused. Even so, many feel it was odd that Ukraine, willingly or unwillingly, surrendered Tsemakh to Russia in a prisoner exchange in September last year at Russia's insistence, especially as he was a key witness in the investigation and part of the legal proceedings. Australia expressed its deep concern about the prisoner exchange.



Left: Volosdymyr Tsemakh at Savur-Mohyla, south of Snizhne, dated 27 May 2018. Right: One of the post-arrest photos of Tsemakh in 2019 that has appeared online.

The Australian government wanted Tsemakh to be questioned by the JIT and for Australian federal police to be involved, while recognising the pressure Kyiv was in from Moscow to do the deal. Australia's Foreign Minister, Marise Payne said "Australia is disappointed, however, that Mr. Vladimir Tsemakh, a person of interest in connection with the downing of MH17, was included in the exchange." Payne believes that it will be harder to bring justice to Tsemakh if he lives in Russia.

Another colleague of the accused has also been mentioned, Igor Bezler, who, in an intercepted telephone conversation on the afternoon of 17 July, 2014, told the person to whom he was talking (not identified) that a 'bird' was coming his way.

This was just before MH17 was brought down, but investigators were unable to establish a definite connection. Two other suspects are only known by their codenames, 'Orion' and 'Delfin', both thought to be high-ranking Russian officers who were involved in the conflict in Eastern Ukraine. In an intercepted telephone conversation on 14 July, 2014, Orion was heard to say that 'they' now have a Buk and are going to shoot down aircraft. Investigations

have shown, though, that in the days prior to 17 July, various people and groups were trying to obtain a Buk and Orion's conversation may have referred to a Buk-TELAR brought across the border from Russian but which then caught fire accidentally before it could be used.

As to the actual impact, the Dutch Safety Board has made very clear the sequence of events as they believe it to have taken place. Forensic research has shown that a 9M38-series Buk missile was fired, carrying a 9n314M warhead, which was surrounded by 800 iron fragments, intended to spread very rapidly, even lethally, on detonation. The missile had a proximity fuse, designed to detonate when the distance to the target is less than a pre-set amount. It detonated just above and to the left of the cockpit, the fragments tearing through the cockpit and business class sections of the aircraft. Some of the fragments mainly small metal cubes or what were described as 'bow tie shaped' pieces of metal - were found in the bodies of the cockpit crew. I have seen similarlyshaped fragments - shrapnel - that had been part of Russian anti-personnel mines dropped in Afghanistan during Russia's war with the Mujahideen.



Buk missile system is a family of self-propelled, mediumrange surface-to-air missile systems developed by the Soviet Union and its successor state, the Russian Federation. Source: Dutch Safety Board

They are designed to do the maximum possible damage to human tissue. Coupled with the explosion, this shower of fragments sucked air out of the body of the plane, causing it to break up into six sections which all came down to earth separately. The JIT's description of what happened is based on the accounts of eyewitnesses who claim to have seen the missile being fired, on remnants of the aircraft and of the Buk missile found at the crash sites, on satellite images and data from radar and even on photos and videos of the missile being transported to Donbas, which is held by pro-Russian separatists and from where it was fired.

The trial in Amsterdam is not the only legal case to be brought. Groups of relatives of the victims have brought two cases to the European Court of Human Rights. One of them, prepared by American lawyer Jerry Skinner, demands compensation of €6.4-million from Russia for each of the victims.

Advocate Skinner made a name for himself in the trial held in May 2000 over the downing of Pan Am flight 103 over the Scottish town of Lockerbie in December 1988. Skinner is acting on behalf of forty families of victims and he told the court: "Such a weapon as the Buk missile system, from which MH17 flight was downed, could not leave the territory of Russia without the permission of officials. Probably, we will hear the names of the advisors close to Putin who maintained close links with actors in the east of Ukraine. I believe we will hear about Putin." I'm sure we will, but the denials will continue: Russia's new Tsar sees his own position as bomb-proof. It's only his political rivals that have much to fear. The European Court called upon Russia to respond to the charges put but has not published what the Russians said. Additionally, four relatives have filed a separate suit at the ECHR, this time against Ukraine for not closing off the airspace over the conflict zone. They had closed it below 8,000 metres only. Strangely, Russia imposed its own ban up to an altitude of 16 kilometres shortly before MH17 was brought down, 16 km being the maximum altitude for a Buk missile.

WHO'S WHO

The problem with cover-ups is that they have to be cohesive, consistent and persuasive, and the JIT do not believe this to have been the case with the MH17 disaster. They have published material that was recorded with the



Official portrait of Sergueï Choïgou in 2014



Video reconstruction of the moment of the missile explosion.

participation of militants and a senior Russian official, made in July 2014. The official in question allegedly stated that "men are coming from Shoygu (Russian Defence Minister Sergey Shoygu) and that they "will kick the local warlords out of the units".

The same official is claimed to have said to the person being quoted, "you will report to our Minister of Defence. Our Minister of Defence is Strelkov (the codename of Vsevolodovich Girkin), and our Commander-in-Chief, like any other President or Prime Minister, is Borodai," (Aleksandr Borodai, a Russian) According to the investigators, a few former militants told them that the Russian Security Service (FSB) and the Military Intelligence Service (GRU) were deeply involved in running the socalled Donetsk People's Republic (DPR), one of them reporting that the leaders of the DPR regularly travelled to Moscow to consult both the FSB and GRU.

JIT investigators remain convinced that at least some of the leaders of the DPR had been sent there by Moscow. Some witnesses had said that they came from inside the Russian Federation. Just after MH17 was brought down, Girkin announced to Borodai that he was leaving to "return to HQ". In August that year, both Girkin and Borodai travelled to Moscow. In an interview in 2017, it's claimed Girkin said "I was ordered to pass the command to Zakharchenko". Germany has repeated a call for Russia to start getting involved in the investigation. "Those responsible for this crime, the destruction of MH17 flight aircraft," said German Foreign Office spokesperson Maria Adebar, "must be identified and brought to justice, and, of course, Russia should co-operate constructively in the investigation of this crime." That might seem like wishful thinking, with Russia appearing not to take the whole thing seriously, variously accusing Ukrainian ground troops, a Ukrainian fighter jet and even, on one bizarre occasion, suggesting that what had been brought down was an aeroplane full of dead bodies supplied by the United States and put aboard an otherwise empty flight just to blacken Russia's name. Few outside Russia believe that, especially the relatives of the murdered passengers and crew.

So who allegedly is to blame? Prosecutor Westerbeke made that clear in his opening statement where he believes all the evidence points. "Among the DPR fighters," he told the court, "we view Girkin, Dubinskiy, Pulatov and Kharchenko as leading players in the downing of flight MH17. Girkin and Dubinskiy were top military leaders of the DPR. Pilatov and Kharchenko were Dubinskiy's direct subordinates. Together, these four men took delivery of the Buk-TELAR from the Russian Federation and deployed it as part of their own military operation, with the aim of shooting down an aircraft." Others, Westerbeke said, may have played lesser rôles, instrumental in shooting down the aircraft, but the responsibility rests with the four accused. "The crew of the TELAR pressed the button," said the Prosecutor, "but according to the indictment it was Girkin, Dubinskiy, Pulatov and Kharchenko who directed the employment of this weapon in order to serve their own interests. They were in command of others; they directed the Buk TELAR to the launch location; they talked during intercepted communications about the need for a Buk to serve their cause and whether 'their' Buk had done its job; they noted with delight that an aircraft had been shot down; they directed others in the delivery of the system to the launch site and they organise the removal of the Buk-TELAR to the Russian Federation. When it comes to evidence and responsibility, as of now no other suspects in the investigation are in the same position as Girkin, Dubinskiy, Pulatov and Kharchenko." It is the wish of the JIT that the minor players who



Justice Complex Schiphol

have been named - the alleged buttonpressers, the guards who watched over the TELAR and others - should face justice in Ukraine itself.

Later in the speech, Westerbeke concedes that the murders of innocent foreign civilians may not have been the aim, although it was the effect. "It is perfectly conceivable that the true intention of these defendants was to shoot down an aircraft of the Ukrainian armed forces." Bear in mind, they may be cleared of all charges, of course. In fact, he went on to say that some of the evidence uncovered by the JIT points towards what he called "this error scenario". But that makes no difference under Dutch law. To clarify, he told the court that there is a guiding principle: "wars are fought between combatants, and that civilians are not involved in any way. When despite this principle civilians in Ukraine use violence against Dutch, Malaysian, Australian and Belgian citizens, this violence falls under the scope of the ordinary criminal laws of these countries." He said it didn't make any difference if the perpetrators used a rifle or an advanced rocket system and also regardless of whether the intended victims were civilians or combatants. "Our preliminary conclusion," he said, "is therefore that the suspects were not entitled to claim combatant immunity in July 2014, and that they had no right or excuse to use violence in Eastern-

Ukraine,"

THE STRONG LANCE OF JUSTICE

Judge Yolande Waynobel, responsible for liaising with the media in this case, spoke of the vast volume of evidence amassed by the JIT. "The prosecutor's office has handed over a lot of materials to us," she said, "Now the matter is much larger than it was in November. The question is whether these materials are complete. On Monday, the judge will answer this question. If he considers that the file is finished, he can decide to look into the case. But this does not

mean that new materials cannot be added to the file." It will be difficult to add much more material; many dozens of witnesses have spoken about what they claim they saw, what they think they knew and what they may or may not have heard, but in the Russiancontrolled DPR and in the Russian Federation itself, they run a serious risk if their statements are seen as 'traitorous'. For that reason, the identities of many of those witnesses are to remain secret. Moscow's record for dealing with people who don't toe the official line is not a happy one. Their defence against officialdom is not strong. "Place sin with gold," says King Lear in the eponymous play by William Shakespeare, "and the strong lance of justice hurtless breaks. Arm it in rags, a pygmy's straw does pierce it."





Boudewijn van Eijck and Sabine ten Doesschate Dutch lawyers assisting one of the four men who are being prosecuted for the MH17 plane crash

The opening session of the court was held behind closed doors because of the corona virus scare, although that's not the reason for the hearing to have been suspended. It's the sheer volume of the evidence: 36,000 pages of files and other material; Pulatov's lawyer, the only defence figure taking part in the proceedings, told the court he needs time to study everything. The judge agreed. "The court suspends the examination of the Pulatov case until June 8th, 10am," said Presiding Judge Hendrik Steenhuis, "and the defence will be able to speak at that time." Supporters of the victims' families placed 298 empty chairs outside the Russian embassy in the Hague as a reminder of those who died, many bearing white roses and photographs of the dead. Embassy officials declined to comment but Putin, while saying he would await the outcome before giving his opinion, cast doubt on the likely objectivity of the trial, saying the evidence gathered is 'biased and politically motivated. Although none of the accused is expected to appear -Russia never extradites its citizens and even though Kharchenko is a Ukrainian citizen, it's thought likely he now holds a Russian passport - relatives of the victims believe the trial could bring some comfort to them. Justice in this case is not only delayed but looks likely to be denied altogether. Those who lost loved ones, though, still see it as more than just symbolic. Meanwhile, Girkin and Kharchenko have been placed under a visa ban and had their assets frozen by the European Union, which has also imposed asset freezes on several Ukrainians who held positions under the pre-2014 regime and who stand accused of 'looting the country'. Ukrainian investigators are still assembling cases against them. And of course, being accused and standing trial, even if in absentia, as in this case, is no proof of guilt.

So now the case is there but not there, like the missing dead who might have filled those chairs in The Hague. It will continue, but it may take years, and those who caused the disaster will doubtless walk free, untouched and untouchable. Westerbeke, in his opening speech, quoted the Russian writer Aleksandr Solzhenitsyn, who once said "Violence has no way to conceal itself except by lies, and lies have no way to maintain themselves except through violence." The war in the Donbass region goes on, despite a ceasefire and a ban on certain types of weapon. On one day, 8 April, the ceasefire was reportedly violated eight times and Ukrainian forces near the town of Maryikna and villages such as Pavlopil, Hnutove, and Novo-Oleksandrivka, came under attack from troops firing 120mm and 82mm mortars - both supposedly outlawed - as well as from heavy machine guns and small arms. So the conflict is not over, despite a peace conference in Paris last December, mediated by France and Germany, and despite new Ukrainian president Volodymyr Zelensky agreeing to a 2016 formula that gives special status to the Donbas region.

Some 13,000 people have died in the conflict, not counting the passengers of Malaysian Airlines flight MH17. The Dutch court is determined to ensure that their deaths will count, or at least come under detailed scrutiny, however obliquely. It will focus attention, whether or not the accused are found guilty, but in view of the current media obsession with the corona virus, justice looks like being delayed, denied and, unfortunately, largely ignored.

T. Kingsley Brooks

KENNEDY ASSASSINATION BULLETS PRESERVED IN DIGITAL FORM

NIST scientists used advanced imaging techniques to create digital replicas of these important historical artifacts.

In the palm of his hand, Thomas Brian Renegar held two small metal objects that had changed the course of history. Twisted pieces of copper and lead, they were fragments of the bullet that ended the life of President John F. Kennedy on Nov. 22, 1963.

A physical scientist at the National Institute of Standards and Technology (NIST), Renegar was not yet born when the nation was robbed of the young, charismatic leader who fought for civil rights and set America on a course for the Moon. But he felt the weight of history. He picked up one of the fragments using rubber-tipped forceps and, with the care of a jeweler setting a stone, placed it into a housing beneath the lens of a 3D surface scanning microscope.

These artifacts are usually held at the National Archives. They were transported to NIST so that Renegar and the rest of the NIST ballistics team could scan them and produce digital replicas that are true down to the microscopic details.

Viewing the digital replicas on his computer screen, Renegar said, "It's like they're right there in front of you." The National Archives plans to make the data available in its online catalog in early 2020.

Why do this, so many years after President Kennedy's tragic death? The mission of the National Archives is to provide the public with access to artifacts such as these, and it receives many requests for access to them. This project will allow the Archives to release the 3D replicas to the

Thomas Brian Renegar examines the positioning of the bullet before the scanning run begins. Twenty-two such scanning runs were needed to fully capture all the surface details of the stretcher bullet from every angle, resulting in 1,699 individual measurements of the bullet's

public while the originals remain safely preserved in their temperature and humidity-controlled vault.

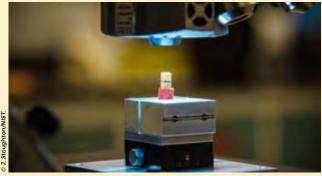
"The virtual artifacts are as close as possible to the real things," said Martha Murphy, deputy director of government information services at the National Archives. "In some respects, they are better than the originals in that you can zoom in to see microscopic details," she said.



NIST physical scientist Mike Stocker places the bullet, wrapped in a silicone sleeve, on the microscope for a new run

In addition to the two fragments from the bullet that fatally wounded the president, the digital collection includes another bullet that struck both the president and Texas Gov. John Connally. That one is known as the "stretcher bullet" because it was found lying near Connally at the hospital. The collection also includes two bullets produced by test firing the assassin's rifle, and a bullet that was recovered following an earlier, failed assassination attempt on Army Maj. Gen. Edwin Walker that was thought to involve the same firearm.

In the lab, the NIST ballistics team used a technique called focus variation microscopy to image the artifacts. At each location along the object's surface, the microscope created a series of images at different focal distances. By analyzing which parts of those images were in focus, the microscope measured the distance to the object's surface features. As the lens moved across the object, it built a 3D surface map of the microscopic landscape beneath it, like a satellite mapping a mountain range.



During the scanning process, a bright light evenly illuminates the bullet while the microscope captures a series of images. In the end, the individual images were stitched together to create a seamless 3D model.

Renegar and NIST physical scientist Mike Stocker spent countless hours rotating the metal fragments beneath the lens of the microscope to image every facet, then stitching the image segments together where they overlapped. "It was like solving a supercomplicated 3D puzzle," Renegar said. "I've stared at them so much I can draw them from memory."

If you held one of the original fragments in the palm of your hand, you would see that the metal is warped and twisted into a complex shape. But magnified on the computer screen, it is a world unto itself: a highly complex and undulating terrain that bends, dips and doubles back. Zoom in, and you can see rifling grooves left by the barrel of the gun. Zoom in closer, and you can see the microtopography — ridges and scratches that would be far too fine to feel with your fingertip.

The focus variation scans had a horizontal resolution of 4 micrometers, about one-tenth the width of a human hair, and a vertical resolution of 0.5 micrometers, or eight times better. This allowed the scans to record the depth of minute scratches in the metallic surface of the artifacts. Other members of the team, including mechanical engineers Xiaoyu Alan Zheng and Johannes Soons, used a technique called confocal microscopy to image selected regions of the artifacts at higher resolution.

Although this was an unusual project for the NIST ballistics team, its members do spend a lot of time imaging bullet surfaces. Their regular work has them researching advanced forensic techniques for identifying firearms used in crimes.

For more than a century, forensic examiners have matched pairs of bullets by viewing them under a split-screen comparison microscope. If the striations on a pair of bullets — or on microscopic photographs of those bullets — line up, examiners might consider them a match.

The NIST ballistics team is developing methods for comparing bullets using 3D surface maps, which can provide greater detail and accuracy than comparing two-dimensional images. It's also developing methods so that, instead of just saying whether or not two bullets appear to match, forensic examiners will be able to statistically quantify their degree of similarity. This research is part of a larger effort by NIST to strengthen forensic science so that judges, juries and investigators have reliable, science-based information when deciding guilt or innocence.

Robert Thompson, the NIST forensic firearms expert who oversaw the project, said that the bullet fragments from the Kennedy assassination were bent and distorted in ways

that made them difficult to image. "The techniques we developed to image those artifacts will be useful in criminal cases that involve similarly challenging evidence."

The team did not conduct any forensic analysis of the bullets from the Kennedy assassination. This project was strictly a matter of historic preservation. However, once the National Archives makes the data available to the public, anyone who is interested in analyzing those bullets will be able to do so without risking damage to the originals.

Though Renegar is too young to remember the event that indelibly marked the memories of an earlier generation, he feels deeply connected to that day in history. Speaking for the entire team, he said, "It was an honor to put our expertise toward such an important project."

https://www.nist.gov/news-events/news/2019/12/kennedy-assassination-bullets-preserved-digital-form

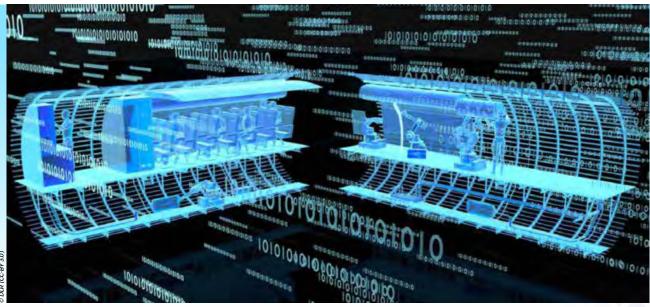
The strectcher bullet (CE 399 FBI C1); a fragment of the bullet that fatally wounded the president (CE 567 FBI C2); a second fragment of that bullet (CE 569 FBI C3); and a different perspective of that same fragment. The exhibit numbers were assigned by the Warren Commission (beginning with "CE") and the Federal Bureau of Investigation.











A virtual aircraft cabin

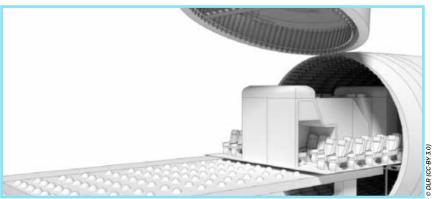
HOW THE DIGITALISATION OF AIRCRAFT CABINS ENABLES INNOVATIONS FOR TOMORROW'S PASSENGERS

- The German Aerospace Center (DLR) is launching a project for the digital linking of design and layout for cabin concepts.
- Radically new research approaches are putting cabin designs at the centre of aircraft development.
- Researchers are developing revolutionary design solutions for the efficient use of the entire fuselage space of an aircraft.
- Focus: Aeronautics, digitalisation

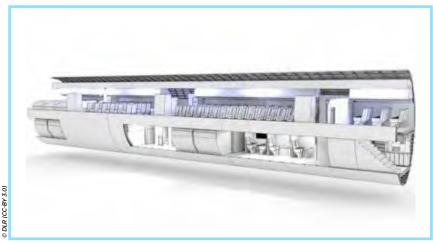
demands hanging among future passengers and developing trends in the global aviation market are resulting in the need for new, agile cabin designs and fuselage concepts. As such, aeronautics research is placing a stronger emphasis on the digitalisation of the aircraft cabin. The recently launched InDiCaD (Innovative Digital Cabin Design) project is establishing the technical foundation for creating digital links between the design and layout of cabin and fuselage concepts. At the same time, a large number of technological innovations and reconfigurable modules are being integrated into cabin concepts, with a view to enabling the agile and efficient use of the entire aircraft fuselage. These include options for using the underfloor area that was previously reserved for cargo. Ultimately, the aim is to promote reduce environmental impact and increase individual comfort. Previous DLR work on aircraft cabins, such as in the field of safety requirements, are being incorporated into the InDiCaD project.

DEVELOPINGA DIGITAL CHAIN

"InDiCaD's research approach is different to the way things are usually done in aeronautics research," says Christian Hesse of the DLR Institute of System Architectures in Aeronautics, based in Hamburg. "Until now, the entire aircraft served as the basis for the cabin design, but now we are looking at things from a different perspective. When thinking about the design, we are taking the cabin as our starting point." Concepts



Flexibility with reconfigurable cabin modules



Fuselage designs for the future

and designs for the passenger area of an aircraft are intended to emerge from the project and then be adapted – either entirely or in a modular fashion – to new aircraft. In the future, entire aircraft may be adapted to new cabin designs. This will be possible thanks to complete digital continuity between design and layout, whereby new designs can be flexibly adapted to future requirements using computers.

A DATABASE FOR CABIN DESIGNS

InDiCaD will create the technological prerequisites for incorporating requirements into the cabin design concepts at an early stage in the development phase. "To this end, we are developing digital methods for fully visualising the cabin as a virtual project and assessing its potential," explains Frank Meller, Head of the Cabins and Payload Systems Department at the DLR Institute of System Architectures in Aeronautics. "One of the primary goals of the InDiCaD project is to achieve a digital information chain that runs from design to production, and all the way through to their demonstration and implementation in operation." The institutes of Aerospace Medicine, Air Transport and Airport Research, Flight Systems, Composite Structures and Adaptive Systems, Structures and Design, Materials Research and Software Methods for Product Virtualisation are combining their expertise in fields such as new materials and cabin and fuselage technology for this project. A database of various cabin designs will be available by the end of the project in 2022.

SLEEPING BELOW DECK

Completely new uses may be conceivable as part of the further development of fuselage concepts. In future, airlines want to use the underfloor areas within the fuselage for cargo and the flexible transport of additional passengers. "To this end, we will be developing new design solutions over the coming years," says Hesse. "These kinds of unconventional approaches are only possible through the type of digital linking of design and layout offered by InDiCaD." The researchers involved in the project are also addressing the more advantageous distribution of passengers across two levels in the upper section of the aircraft fuselage.

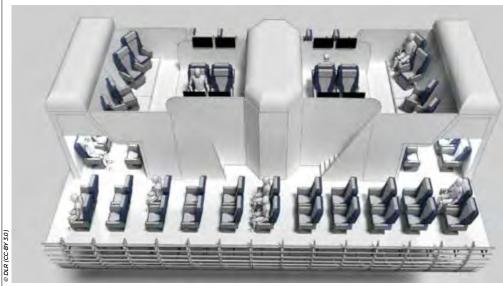
Many key aspects, such as boarding, are specifically included as part of the overall design, including the turnaround time of an aircraft on the ground, which has a major

bearing on its economic efficiency. For example, researchers may look at how turnaround times and passenger changes can be represented in the cabin concepts, and which options for design adaptations are associated with this. This will also take account of the passengers, for whom the boarding and disembarking times at the airport are a key factor in the way in which they assess airlines, together with cabin comfort.

RESEARCHING MODIFIED CABIN ACOUSTICS FOR LOW-EMISSION PROPULSION SYSTEMS

InDiCaD is also concerned with new approaches for reducing cabin noise, as new engines that reduce fuel consumption and exhaust emissions may require new technological solutions for the fuselage and cabin design. The cabin acoustics of engines with extremely high bypass ratio engines or counter-rotating, open propellers, for example, have been the subject of very little research. Active and passive noise reduction methods are to be investigated as part of the project, with the aim of resolving the expected acoustic issues. These include the active control and suppression of vibration levels in the cabin structure, along with the use of innovative aerogel materials.

The German Aerospace Center (DLR) is the national aeronautics and space research centre of the Federal Republic of Germany.



Design freedom thanks to modular cabin concepts

ECALL: 2 YEARS OF SAVING LIVES

In the two years since the launch of the EU's eCall emergency response system, which automatically calls emergency services in the event of a road accident, manufacturers have been quick to implement the life-saving technology, with around 3 million eCall-enabled vehicles already sold in Europe.



he EU launched its eCall emergency response system with the publication, on 31 March 2018, of the European eCall regulation, requiring all new car and light van types sold in the EU to be fitted with the system. Manufacturers were quick to respond, with Volvo Cars being the first to certify the system for use in its vehicles and the first to launch an eCall-equipped model to the market – presenting the V60 at the ITS World Congress 2018 in Copenhagen in September 2018.

GSA HELPS PAVE THE WAY

European Commission services – specifically the Joint Research Centre – and the GSA helped pave the way for a quick and smooth uptake by the automobile industry, publishing a set of guidelines to help the eCall industry value chain to pre-test the accuracy of their new devices and understand how to reap the benefits of Galileo.

Other manufacturers were quick to follow Volvo's lead and currently there are 27 car brands offering over 65 models that are equipped with the system, with around 3 million vehicles sold on the EU market to date. To see which car models are currently available, check the UseGalileo site.

WATCH THIS: ECALL - EMERGENCY POSITIONING

"eCall is a true success story for Europe," said GSA Head of Market Development Fiammetta Diani. "The system leverages EU technology – specifically Galileo precise positioning – to save our citizens lives." she said.

According to European Commission figures, 25,300 people were killed and 135,000 people were seriously injured in road accidents in the EU in 2017. While new automotive technologies have resulted in a sharp drop in the number of fatalities – which have fallen by 57.5% since 2001, the numbers are still high. By speeding up emergency response times by 40% in urban areas and 50% in the countryside, it is estimated that eCall could help prevent 2,500 road deaths and save EUR 26 billion every year.



HOW DOES IT WORK?

eCall is activated automatically as soon as in-vehicle sensors detect a serious crash. Once activated, the system dials the European emergency number 112 and establishes a telephone link to the appropriate emergency call centre. Leveraging EGNSS (Galileo and *EGNOS*), the system sends the accurate position of the crashed vehicle and the direction of travel to the emergency services, enabling the emergency responders to get to the accident site faster. An eCall can also be triggered manually by pushing a button in the car, for example by a witness to a serious accident.

Source GNSS Agency



Members of a joint U.S. and Australian navy boarding team conduct a security sweep during a boarding exercise in the South China Sea as part of a Proliferation Security Initiative (PSI)

FRIENDS, ENEMIES AND LOOPHOLES

Part 2

'n a relatively unsafe world, the last thing we all need is for some unstable country or group to get hold of weapons of mass destruction (WMD) and, worse still, threaten another country or group of people with them. Or, in the worst case, use them. Responsible governments (and, in all honesty, some may be less responsible than others) have long made an effort to prevent WMD falling into the wrong hands. What does that mean? The Financial Action Task Force (FATF), set up as a G7 initiative in 1989, specifically to prevent such things, defines proliferation of weapons of mass destruction (WMD) as "the transfer and export of nuclear, chemical or biological weapons, their means of delivery and related materials." Sounds pretty clearcut, but we have to bear in mind that it's not only the weapons themselves that are covered but also every tiny part that could conceivably go towards their construction. Stopping the transfer of such small and ambiguous bits and pieces is far harder. When I say 'ambiguous' it is because many of them may have some other, quite legitimate, even peaceful use in mobile phone technology, the broadcast industry or your children's latest high-tech toy.

Of late, we've been seeing a massive global rearmament programme that should really please nobody except the shareholders of the military-industrial companies, against whom former President Dwight D. Eisenhower warned. "This world in arms is not spending money alone," he said in Washington in 1953, "It is spending the sweat of its labourers, the genius of its scientists, the hopes of its children." This may well be true, but those same shareholders are rubbing their hands in gleeful anticipation, all the same. Meanwhile, regimes around the world

are looking for ways to strengthen their arsenals against perceived foes. Some of them, if successful, are so unstable that they are likely to use them, whether or not they're provoked. They tend to see every country and group that does not support their world view as a foe anyway. We already have Russia boasting of its hypersonic weapons, such as the Avangard missile, capable of flying at twenty-seven times the speed of sound and described by a Canadian expert as "unstoppable", at least for now. Not surprisingly, this makes other countries uneasy and encourages them to develop



Artist's rendering of hypersonic weapons



their own super-weapons. The US has already tested an unarmed prototype of a hypersonic missile, although reaching only Mach-5, it's not as fast as Russia's Avangard. It's still pretty speedy, though. In its fiscal 2021 budget, the US Defence Department requested US\$3.2-billion (€2.97-billion) for hypersonic programmes, up from US\$2.6 billion (€2.4-billion) in the current year. "Delivering hypersonic weapons is one of the department's highest technical research and engineering priorities," the Pentagon said.

Where weapons of mass destruction concerned, rumours conjecture don't help, although they are inevitable, especially in the wilder areas of sensationalist media and public imagination. On-line social media sites in India are already claiming that the corona virus was developed in Chinese military laboratories as a biological weapon, and I have heard the same rumour being spread and talked about in the United Kingdom. Indian internet sites are full of anti-foreigner propaganda, however, especially since Narendra Modi's Hindu Nationalist party's most recent election victory, some attracting literally millions of hits. Modi's supporters rioted during a visit by President Donald Trump, attacking Muslims because of centuries old religious hatreds, the kind that led to India being divided when the country gained its overdue independence. But while some people with extreme and - let's be honest - racist views spread malicious and fairly obviously nonsensical scare stories, they stoke up public demand for weapons to match those supposedly available to a potential enemy.

BLOCKING THE FLOW

The trick now must be, it seems, to prevent weapons of mass destruction from falling into the hands of rogue states, unstable leaders and terrorist groups. It's not easy, but it's a battle being fought in many western nations, not least the United States, whose Department of Treasury leads the fight. EU member states are playing catch-up, quite successfully, on the whole. France has designated (in other words applied sanctions to) twenty-five companies and



Narendra Modi, Prime Minister of India

individuals allegedly linked to Syria's chemical weapons programme. They are suspected of being part of two 'supply networks' for the Syrian Scientific Studies and Research Centre (SSRC), which has itself been sanctioned repeatedly over the country's chemical programme.

Many of the firms based in Syria, Lebanon, China and France are linked to the Katranji family. One of those named, Amir Katranji said his blacklisted company has no connection with chemical equipment and supplies. He was named by France, along with his brothers, Houssam and Maher, as well as their company, Electronics

Katranji Trading (EKT) and its associate firms, NKTronics and Smart Pegasus, publicly advertised as an import-export company based in Paris. Also listed was EKT Smart Technology, based in China, and Mireille Chahine, originally from Lebanon, who claims to have worked in EKT's accounts department. A Chinese national, Zhou Yishan, a director of EKT Smart Technology, has also been named, as has Polo Trading, because it was set up by Amir Katranji. EKT Katranji is, however, very much still in the electronics (and other) business and has an address in Beirut, Lebanon. This is the claim on its website: "EKT is a leading retailer and wholesaler of specialist and everyday electronics. Our online shop and showrooms in different countries bring together all the things. Innovative products to make your life easier, technical know-how and first rate customer service." The very many products on offer include toothbrush sterilizers, computer monitors, laptops, electric drills, hand sanitizer gel and, oddly, Lego. After being blacklisted by France, Katranji told Agence France Presse (AFP) in Beirut "We aren't doing anything wrong; we reject this announcement," and he warned that he was appointing a lawyer.

Other entities targeted for sanctions by France include ABC Shipping, also based in Beirut, whose owner, Sami Ballout, strongly denies involvement in helping to develop chemical weapons.

Companies based in Damascus were also named, including Golden Star, the MKH Import-Export firm and the metal trading company MHD Nazir Houranieh and Sons, along with five members of the Houranieh family, who OFAC says have "attempted to provide financial, material, technological, or other support for, or goods or services in support of, EKT." It also conducts business under the name Smart Logistics Offshore and is accused of having helped to facilitate EKT's operations to the benefit of SSRC. Polo Trading is being designated for being owned or controlled by Amir Katranji, who founded the company in 2013. Also designated were Antoine Ajaka and Anni Beurklian, formerly of Waltham, Massachusetts,



Satellite Photos Show Syrian Chemical Weapons Sites Destroyed After U.S.-Led Strikes before and after.



Ekt Katrangi Facebook promo page

"for providing, or attempting to provide, financial, material, technological, or other support for, or goods or services in support of Amir Katranji, including the procurement of U.S.-origin electronic components, which were ultimately destined for Lebanon and Syria." Both Ajaka and Beurklian fled the United States in 2018.

Furthermore, "Lebanon-based Top Technologies SARL is being designated for being owned or controlled by Ajaka. Top Technologies SARL specializes in the import, export, and sale of network and electronic components."

France, however, remains pragmatic and willing to upset the administration of President Donald Trump when it suits French interests, especially where the security of its citizens is concerned. For instance, it has controversially agreed a prisoner-swap with Iran, releasing a man French courts had previously agreed to extradite to the United States, where he is wanted for allegedly violating US sanctions. The State Department was furious: "The United States deeply regrets France's unilateral decision to release Iranian national Jalal Rohollahnejad from its custody. Rohollahnejad was the subject of a U.S. extradition request.

There are multiple outstanding U.S. charges against him related to the illegal export of equipment with military applications in violation of U.S. sanctions. The United States and France have a shared interest in bringing those accused of serious crimes to justice, particularly in cases with national security implications.

Jalal Rohollahnejad

It is regrettable in this instance that France failed to uphold its treaty obligations and prevented justice from being pursued." The man whose liberty France secured in exchange for Rohollahnejad is Roland Marchal, a researcher accused of breaching Iran's security laws. One has to hope it was a worthwhile deal, because Rohollahnejad has links not only with the Iranian military but also, allegedly, with Iran's Aerospace Industries Organisation (AIO) and Iran's Ministry of Defence and Armed Forces Logistics (MODAFL), - involved with ballistic missile development - and also with China. It's where he lived for ten years, gaining a PhD in optical engineering in 2017 from the Huazhong University of Science and Technology in Wuhan. According to Iran Watch, between April 2016 and June 2018, Rohollahnejad allegedly "sought industrial microwave and anti-drone systems from several U.S. firms for Rayan Roshd Afszar, an entity connected to the Islamic

These are clearly the sorts of claims that would make Washington's desire to extradite him very understandable. The prisoner exchange sees the release of Marchal, an expert on sub-Saharan conflicts, who had been accused of spreading anti-regime "propaganda against the political system of the Islamic Republic", while visiting research colleague Fariba Adelkhah, whose dual French-Iranian nationality is not recognised by Tehran, meaning she is (as Marchal was) in an Iranian prison. Both were researchers at the Centre for International Research (CERI) at Sciences Po Paris. The charges against Ms. Adelkhah have been downgraded from espionage but still involve security issues. She remains accused of antiregime propaganda and "collusion to endanger national security".

The deal between Paris and Tehran notwithstanding, the US Treasury Department has worked in conjunction with French enforcement agencies to counter attempts at side-stepping antiproliferation measures, according to Sigal Mandelker, the Treasury's Under Secretary for Terrorism and Financial Intelligence. "We remain firm in our resolve to counter Syria's horrific use of chemical weapons, and will continue to take aggressive action against those who supply the SSRC and enhance Syria's capacity to produce and use chemical weapons." But Syria, of course, has allies in both Russia and Iran and it was a



Iranian firm Rayan Roshd Afzar

Revolutionary Guard Corps (IRGC)". Rayan Roshd produces components for the IRGC's drone program, according to the U.S. Department of the Treasury. Rohollahnejad allegedly aimed to disguise the Iranian end-user and destination for these items by using a Chinese pseudonym and declaring the United Arab Emirates (UAE) as the ultimate destination. Payments related to the scheme allegedly totalled about \$1 million and involved transfers through several shell companies."

Russian-made nerve agent, Novichok, that was used in Salisbury, in the United Kingdom, against former spy Sergei Skripal and his daughter Yulia, an action carried out by officers of Russia's FSB (Russia still denies it) which also killed one UK citizen and seriously harmed another. So blocking access from the West may have little effect: if Syria can't make the stuff itself it can always get some from Russia, one would imagine. As the saying goes, however, every little helps.

ATOMIC DREAMS

According to the Center for Strategic and International Studies (CSIS), a US-based think tank, "Today, there is a growing recognition that the risks of nuclear weapons just might outweigh their benefits, even for nuclear weapon holders." It then goes on to explain that: "Three kinds of efforts are required to reduce nuclear risks: Deterring and preventing states and non-state actors acquiring nuclear weapons; Engaging in nuclear arms control to reduce the threat that nuclear weapons and nuclear material pose worldwide; and building a peaceful nuclear energy fuel cycle that lowers the risk of misuse of nuclear capabilities." The CSIS has a research programme whose purpose, it says, is clear: "The research of the program is focused on: (1) Developing new tools for slowing proliferation; (2) Identifying next steps in arms control; and (3) Helping illuminate the path toward a sustainable and safe nuclear future."



US Service members participate in an emergency response exercise in Starke, Fla to ensure they are operationally capable and prepared to conduct chemical, biological, radiological and nuclear response operations.

nuclear weapons, devastating, are not the only weapons of mass destruction (WMD) upon which various countries are trying to get their hands. UN Security Council resolution "identified the proliferation of nuclear, chemical, and biological weapons, their related material, as well as their means of delivery, as a threat to international security," according to the Stimson Center in Washington, which goes on to explain that the resolution "requires that all States must have and enforce laws and regulations to help prohibit the spread of weapons of mass destruction within or across their borders, complementing and supporting implementation of other non-proliferation treaties, conventions and other resolutions. However, many States struggle to implement these obligations effectively - they lack the capacity or expertise to control the many different materials and technologies that constitute a proliferation risk."

Those seeking to by-pass the legal controls on proliferation are, of course, well aware of the measures put in place by the US Treasury Department and are looking to find financial support elsewhere. The European Union, a wealthy trading bloc, might be an obvious choice. It, too, has laws to prevent proliferation. The Official Journal of the EU produces annual reports on its progress in "the implementation of the European Union Strategy against the proliferation of weapons of mass destruction (WMD) adopted by the European Council in December 2003".

Its main body working in this field is the European External Action Service (EEAS), with its office facing along the rue de la Loi, across the Rondpoint Schuman towards the Brussels headquarters of the European Commission on one side of the road and the European Council on the other. It is committed, it says, to "the effective and complementary use of all available instruments and financial resources - the Common Foreign and Security Policy budget, the Instrument contributing to Stability and Peace (IcSP), other instruments — in order to maximise the impact of the EU's activities in pursuit of its foreign policy objectives." The problem is that the number of countries trying to acquire WMD increases, along with the agents prepared to find ways around regulations on their behalf, so keeping up with it all takes effort, especially from a multicountry body whose decision-making is inclined to be sclerotic. "In 2008, the EU adopted new lines for action on WMD proliferation," says the Official Journal. "These were designed to make the 2003 strategy more effective by, for instance, raising awareness in scientific, academic and financial institutions and developing measures to prevent the transfer of knowledge about WMDs to the wrong parties. They reiterate the importance of the 2003 strategy and the principles that determine EU action (effective multilateralism, prevention and international cooperation) and their role in helping implement the United Nations Security Council Resolution 1540."

Acting through G7, the EU is active in other ways to minimise the risk from WMD. "It is represented in the G7 forum for WMD control - the Non-Proliferation Directors Group - by its Special Envoy for Non-Proliferation and Disarmament," says the EEAS, "and through the G7, the EU is also part of the Global Partnership against the Spread of Nuclear Weapons and Materials of Mass Destruction, which also includes 17 other donors." Under the Partnership, the EU has committed almost €1bn, mainly in Russia and Ukraine, to help with dismantling decommissioned nuclear submarines, redirecting former weapons scientists, improving the safety of nuclear installations and decontaminating and converting former chemical weapons production facilities.

The European Council, made up of the appropriate ministers from the EU member states, is ultimately responsible for updating and applying the rules. In October, 2019, they "extended restrictive measures by the EU addressing the use and proliferation of chemical weapons until 16 October 2020." This was part of ongoing measures originally passed back in 2004, when the problem first became apparent. "These sanctions, which consist of a travel ban to the EU and an asset freeze for persons, as well as an asset freeze for entities, currently apply to nine persons - five linked to the Syrian regime and four involved in the Salisbury attack and one organisation, the Scientific Studies and Research Centre (SSRC), the Syrian regime's principal entity for the development of chemical weapons."



Wide view of the Security Council meeting on Non-proliferation of Weapons of Mass Destruction, with a focus on confidencebuilding measures

In order to prevent the by-passing of EU laws on financing the acquisition and transportation of sanctioned technology, Italy has made major changes to its laws, as reported by the global law firm DLA Piper: "Among the most important news, it is certainly worth mentioning that the list of addressees of the anti-money laundering obligations set forth by the Decree now includes EU banking and financial intermediaries operating in Italy on a cross-border basis under the freedom to provide services, as well as financial advisers and financial advisor companies referred to, respectively, in Articles 18-bis and 18-ter of the Consolidated Law on Finance." The new laws are likely to impact unfavourably on gaming and gambling sites, but since gaming service providers are suspected of helping, however unintentionally, to launder dirty money involved in illicit arms transactions anyway, honest providers - in fact, all providers - are being urged to observe their obligations to carry out 'due diligence'. The new rules

are designed to include virtual currencies - it's not just the legal tender issued by national treasuries or the European Central Bank but also virtual currencies such as Bitcoin, Etherium and Monero (there are a lot of them, with wildly differing values) "meaning any 'digital representation of value, not issued by a central bank or by a public authority, not necessarily linked to a currency with legal tender, used as a means of exchange for the purchase of goods and services and transferred, stored and negotiated electronically." According to DLA Piper, "the Decree 231 now qualifies as 'other non-financial operators' the virtual currency service providers, defined as 'natural or legal persons providing to third parties, on a professional basis, services functional to use, exchange, store virtual currencies as well as to convert them in or from currencies with legal tender'. Such providers are required to fulfil specific anti-money laundering obligations with regard to virtual currency conversion activities." The decree, issued in 2018, tries to ensure that it is all-encompassing and that nobody with dishonest intent can slip through the net. DLA Piper again: "Among the most significant innovations, it should be highlighted the creation of a single register of the ultimate beneficial owners of enterprises and trusts. In particular, a special section of the Register of Enterprises will be the tool for collecting and storing information on the beneficial owners of legal persons as well as private legal persons other than companies. The directors of all legal persons are required to provide the register with the relevant information and data. In the event of an inactivity or unjustified refusal by the shareholder to provide the necessary information, the voting rights related to the stakes owned by the beneficial owner will be frozen." EU countries are determined not to be outfoxed by criminal gangs working for terrorist groups or rogue states, and the European External Action Service wants to be at the forefront of that fight.

CATCHING THE SMUGGLERS

The EEAS continues in its efforts to thwart moves to smuggle illicit materials to supposedly dangerous countries, under the Treaty of the Functioning of the European Union (TFEU).

According to a report by the EU Anti-Proliferation Consortium, "all regulations of the sanctions regime, including those against the financing of terrorism (the so-called anti-terrorism and Al-Qaeda regulations) and against WMD proliferation financing (currently, the so-called Iran and North Korea regulations) are binding in their entirety and directly applicable in all EU member states, thus taking precedence over



The European Union External Action Service (EEAS) in Brussels, Belgium

national laws." The targeted measures are aimed not only at freezing assets allegedly involved in banned transactions, but "more importantly, to prevent them from having direct access to their funds and other economic resources in the EU. The nearly 30 regulations of the regime contain, in their respective annexes, comprehensive lists of natural and legal persons as well as other entities subject to the restrictive measures. Currently a total of approximately 5,000 persons or entities are listed on the website of the EU's European External Action Service (EEAS)."

Returning to the Financial Action Task Force (FATF), it is also helping to unite a variety of nations in trying to stop the spread of WMD. As it says on its website, "To achieve global implementation of the FATF Recommendations, the FATF relies on a strong global network of FATF-Style Regional Bodies (FSRBs), in addition to its own 39 members. The nine FSRBs have an essential role in promoting the effective implementation of the FATF Recommendations by their membership and in providing expertise and input in FATF policy-

making. Over 200 jurisdictions around the world have committed to the FATF Recommendations through the global network of FSRBs and FATF memberships." FATF has the full support of the Council of Europe, too, that association of forty-seven member states that predates the European Union and which tries to ensure compliance with its many conventions through its Committee of Ministers, its Parliamentary Assembly (PACE) and, of course, the European Court of Human Rights. It supports the work of FATF through the Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism.

There are other ways of trying to prevent proliferation. Take the Los Alamos National Laboratory in the United States, which strives to implement the goals of the US Department of Energy Initiatives for Proliferation Prevention. Its methods are very different from those of the US Treasury: "The mission of the U.S. Department of Energy Initiatives for Proliferation Prevention (IPP) Program is to identify and create commercial opportunities for former weapons scientists currently or formerly involved with weapons of mass destruction in the Former Soviet Union (FSU)," says its website. "IPP currently sponsors 164 projects in Russian at 64 institutes; 16 projects in the Ukraine at 14 institutes; 14 projects in Kazakhstan at 10 institutes; and one project in Belarus. To date, the IPP program has engaged over 10,000 experts in the areas of nuclear, chemical, and biological weapons and missile development at more than 170 institutes in Russia, Kazakhstan, Ukraine, and Belarus." Eight of the many projects the LANL manages, linking the institutes in those four countries with US partner firms, have been successfully commercialised, generating \$17-million (€15.72-million) in annual sales.



The FATF is located at the Organisation for Economic Co-operation and Development (OECD) headquarters in Paris

START TALKING

President Donald Trump has said he's keen to open negotiations with the leaders of the other members of the UN Security Council and that talks could begin in September. It's important for the US, he says, because, over the next ten years,"China seeks to at least double the size of its nuclear stockpile while Russia is developing expensive and destabilizing new types of delivery systems." He wants a follow-up to the Strategic Arms Reduction Treaty (START). However, China has never been keen on the idea of trilateral talks with the US and Russia. State Department officials recognise this obstacle but remain hopeful. They told the Arms Control Association: "we're optimistic that it will be possible to engage both with Russia and with China, and to bring those bilateral engagements forward into a trilateral engagement that will ultimately result in the kind of agreement that President Trump has tasked us with trying to come to." China seems unlikely to play ball, as a Foreign Ministry spokesman reminded journalists in March this year: "China has repeatedly reiterated that it has no intention of participating in the so-called trilateral arms control negotiations with the U.S. and Russia." Russia has already said it will make no attempts to persuade China. Foreign Minister Sergey Lavrov said "If the Americans are quite sure that it makes no sense to take any further steps on the New START...without China, let them get down to business on this all on their own."

France's President Emmanuel Macron believes a new START treaty is essential and that it must extend beyond 2021. He told a conference in February that uncertainty about its future makes likely a round of "unhindered" military and nuclear competition: an arms race, in other words. His views were echoed by other US allies, including Germany and the United Kingdom. In February, Admiral Charles Richard, commander of U.S. Strategic Command (STRATCOM), told the Senate Armed Services Committee that the "New START treaty has been valuable to this nation and to my command." He is concerned, however, that the treaty fails to cover every type of nuclear weapon in Russia's arsenal and that China is not included. "Ultimately a decision to extend the treaty is a political decision," he said. "I do provide best military advice down the lines of what I just offered to my department to contribute to that." Admiral Richard told the House Armed Services Committee that he "would love to convince China of the benefits of arms control in general, forget the numbers...I would like to encourage China to understand the benefit of arms control, mutual confidence-building measures, transparency, avoiding miscalculation.



The Dongfeng-17 is a Chinese solid-fuelled road-mobile medium-range ballistic missile that mounts the DF-ZF Hypersonic Glide Vehicle

That's what I would like to see added to the table." No-one is holding his or her breath for such a development, however.

All of this may become merely academic, of course, as the corona virus continues to wreak havoc with international relations, international trade and travel in general. The United Nations Conference on Trade and Development (UNCTAD) is concerned at the paralysis which has gripped the world. "Besides its worrying effects on human life, the novel strain of coronavirus (COVID-19) has the potential to significantly slow down not only the Chinese economy but also the global economy. China has become the central manufacturing hub of many global business operations. Any disruption of China's output is expected to have repercussions elsewhere through regional and global value chains." That almost certainly means a disruption in the financing, acquisition and transportation of the parts needed to manufacture WMD. The pandemic, especially as it has affected China, has certainly impacted on less contentious manufacturing procedures, according to UNCTAD: "For example, some European auto manufacturers may face the shortage of critical components for their operations, companies in Japan may find [it] difficult to obtain parts necessary for the assembly of digital cameras, and so on. For many companies, the limited use of inventories brought by a lean and just-in-time manufacturing process would result in shortages that will impact their production capabilities and overall exports." Bear in mind that this analysis was made before COVID-19 had spread widely outside of China. The situation is now much, much worse. But before anyone comes out with the line that 'every cloud has a silver lining' (albeit an extremely tarnished one) do bear in mind this report from Arms Control Today: "The Trump administration is requesting \$44.5 billion (€41-billion) in fiscal year 2021 for the Defense and Energy departments to sustain and modernize U.S. nuclear delivery systems and warheads and their supporting infrastructure, an increase of about \$7.3 billion (€6.74-billion), or 19 percent, from the fiscal year 2020 level....This includes \$28.9 billion (€26.7-billion) for the Pentagon and \$15.6 billion (€14.4-billion) for the Energy Department." The race for ever-bigger, ever-more-deadly weapons continues.

The way things are going, of course, while we may all escape the deadly effects of WMD in the hands of dangerous idiots, many of us may not escape the corona virus. It has yet to be tamed and it seems to be avoiding many of the hastily-erected barriers to its progress in its triumphant march around the globe. Daryl J. Kimball of the Arms Control Association points out in the April edition of Arms Control Today that governments have been warned for decades of the risk from global threats like pandemics but instead they spent their money on WMD and the means to deliver them. "The US government," he writes, "spends tens of billions of taxpayer dollars to maintain a massive nuclear arsenal capable of destroying the planet many times over. Meanwhile, it does not have a stockpile of masks large enough to protect frontline health care workers who are battling COVID-19."

In most places, "social distancing" is recommended, in the hope that a 2-metre gap between people will slow it down, although the SARS-COV-2 virus has so far traversed tens of thousands of kilometres to infect and kill thousands of people in almost 200 countries. What those rogue states and terrorist groups would do to acquire a weapon that could achieve so much global death and destruction we can only speculate.

Tobias Bowman-Grant



EFFICIENT PERSONAL SUPPORT IN BUSY TIMES

- Personal assistance
- Private concierge
- Property management







Employees in Gilead's manufacturing site in La Verne, California

RAMPING UP MANUFACTURING TO HELP ADDRESS COVID-19

As the number of confirmed COVID-19 cases increased in Asia and began to spread to other regions around the world, a team of employees at Gilead's manufacturing site in La Verne, California met in the early morning of Monday, Feb. 3. The topic of the meeting: How quickly could the site begin to formulate, fill, package and ship Gilead's investigational COVID-19 treatment, Remdesivir?



Gilead headquarters Foster City, California USA

From that moment on, it was all hands on deck," says Charlie Langdon, Senior Director of Manufacturing in La Verne. "It wasn't just one department – this was literally our entire site coming together and strategizing about what needed to be done to make this happen as quickly as possible."

Just eight days later on Tuesday, Feb. 11, the La Verne site was filling its first vials of remdesivir to support clinical studies and emergency use protocols for patients in critical condition with few options. The team began a six-week campaign to fill up to 25,000 vials of the investigational COVID-19 treatment



Rubber stoppers are placed on newly filled vials of Cilead's investigational COVID-19 treatment, Remdesivir

every other day, while at the same time packaging and shipping vials of the drug received from external manufacturing partners.

Remdesivir is an investigational drug that has not been approved by any regulatory authority, and the safety and efficacy of remdesivir for the treatment of COVID-19 are not yet known. However, the drug supply is urgently needed to support multiple ongoing clinical trials, as well as expanded access programs created in consultation with regulatory authorities worldwide.

Gilead opened the La Verne site in 2017 with state-of-the-art equipment and automation – which along with the team's experience building out and running the facility was helpful in preparing the site to quickly pivot to remdesivir manufacturing, says Richard Aman, Senior Director of the Project Management Office in La Verne.

"The biggest thing was that we didn't try to divide and conquer – instead we had every department involved in making the decisions," says Richard. "Every single person at our site is playing a critical role in this effort."

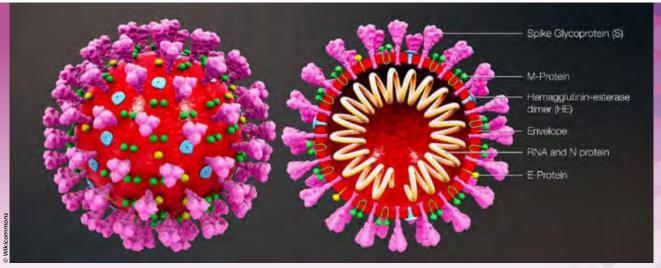
Still, there were challenges to overcome – new batch sizes of the drug product, new documentation requirements for the highly regulated process and a new manual inspection process that involves carefully inspecting each vial one-by-one.

"The most challenging part was getting started, but ever since we got up and running and did the first batch, we haven't stopped," says Huy Pham, Associate Director of Technical Services in La Verne. To keep employees safe, the leadership team at La Verne has implemented physical distancing practices and worked to ensure that only people who need to be present to directly support manufacturing are on site.

Team members say they are inspired by the opportunity to play a role in potentially addressing this significant public health crisis.

"We all feel privileged and proud to be part of manufacturing this treatment that we hope can make a difference in the fight against COVID-19," says Danielle Torres, Associate Director of Quality Assurance in La Verne. "With that also comes a great sense of responsibility, here in La Verne and at all levels of the organization. We can feel the potential magnitude of what we're working on."





3D medical animation still shot showing 2019 novel Coronavirus Structure

SHAMING CAESAR

The corona virus changes the world

Julius Caesar simply couldn't understand fear, according to William Shakespeare.

"Of all the wonders that I yet have heard," he says in the eponymous play (Act 2, Scene 2), "It seems to me most strange that men should fear for death, a necessary end, Will come when it will come." What on earth would he have made of the sometimes-panicky response to the corona virus?

Tot that I'm suggesting we should simply ignore it; it's a deadly disease, it is killing thousands and everyone has to do their bit to keep it under control. That should not include panicking, though, however much the more alarmist media reports stoke the fear. I'm not sure, for instance, where the hoarding of toilet paper fits into things. It's not as if diarrhoea is even one of the symptoms of Covid-19. Equally strange is the sort of knee-jerk reaction which, in the UK, led to the eviction of a health worker from rented accommodation 'in case they bring the virus home with them'. Caesar had no time for rank cowardice, either: "Cowards die many times before their deaths," he says, "The valiant never taste of death but once." However, once is quite enough for anyone.

Covid-19 is a nasty, sometimes fatal disease, however, and according to research so far, it's thought that everyone who contracts it is likely to infect two or three other people. Exactly how deadly it is, though, is hard to establish, as many people who catch it only experience mild influenza-like symptoms and quickly recover, so the cases are not recorded at all. According to the WHO, some 15% of infections will be severe, requiring oxygen, and 5% will be critical, requiring

ventilation. However, around 80% of those who contract Covid-19 will only get a mild dose. They're the lucky ones. Of those that get it seriously, the death rate seems to be around 3%-4%. No-one is really sure, however. In Britain, for instance, anyone exhibiting the symptoms - a dry cough, high temperature and shortness of breath - is advised to stay at home in self-imposed isolation and not to contact the health services, nor anyone else. With no record being kept, it's hard to work out accurate infection rates. It's safe to say, though, that whatever figures any government gives out (and presumably believes) are likely to be an underestimate.

Of course, every year brings seasonal influenza. Please remember, real influenza is NOT the same as the common cold, as anyone who has suffered it can testify, even if rather too many people with heavy colds call them 'flu. Both are caused by varieties of the corona virus. The viruses are members of the same family as the one causing Covid-19, which number more than forty types. They infect animals, both mammals and birds, and they're famous among veterinarians for causing diseases in pigs, cattle and chickens. Don't worry, though: they're not the same viruses, just close relatives. You're not going to catch Covid-19 from your cat or your budgerigar, even if the veterinary advice is not to cuddle them at present.



Transmission of coronavirus shown using a 3D medical animation



Wuhan

As for the virus now spreading global fear and closing down the world economy, it's a virion: a virus particle that needs 27 proteins to function but arrives at the human cell wall with only four of them, plus a strand of RNA (ribonucleic acid, mainly used to convey data from normal DNA about synthesising essential proteins), which hijacks the cell's own machinery into making the remaining 23 proteins it needs (and you certainly don't). It then causes it to manufacture many more of the virus particles (technically a SARS-CoV-2 virus, in this case) to go and infect other cells. SARS stands for severe acute respiratory syndrome. The cell in which the new virion is created provides it with a covering membrane, made of lipids, which break up in contact with soap and water, which is why hand washing is better than using sanitizing gel. The spike protein protruding from the virus (the thing that makes it look like a miniature sea mine) pokes through the membrane and can latch onto a protein called ACE2, especially common in the respiratory tract, hence the breathing problems it causes. The actual virus is about 90 nanometres (billionths of a metre) across and is roughly a millionth of the size of the cells it infects. Anyone walking around with a scarf around their mouths and nose is wasting their time and fooling themselves into a false sense of security: it would be like trying to use a trawler net to stop a gnat.

HOW DEADLY IS 'DEADLY'?

The corona virus seems to have the potential to kill more people than a seasonal bout of influenza, although the death rate is hard to judge However, the World Health Organisation (WHO) estimates that ordinary seasonal 'flu causes between 290,000 and 650,000 deaths annually around the world, with an average of 389,000. A study last year estimated that 99,000 to 200,000 deaths from lower respiratory tract infections were caused by influenza: not by Covid-19 but by the ordinary influenza that spreads throughout the world every year,

especially in winter. At the time of writing, the European Centre for Disease Control and Prevention reports 2,281,714 cases of the Covid-19 infection worldwide and 159,511deaths. Those numbers will go on rising for now.



A coronavirus funeral in Italy.

But it's nowhere near the death rate for seasonal 'flu cases each year. The infection and death rate from 'flu varies massively from year to year. According to the Centers for Disease Control and Prevention (CDC) in the United States, the number of 'flu cases in the US fluctuates between 9-million and 45-million a year, with the number of deaths varying from 12,000 to 61,000. Over the past decade, says the CDC, the number of 'flu cases that resulted in hospitalisation has consistently been between 1% and 2%, with a fatality rate of between 0.1% and 0.2%.

Although no-one knows for sure how many people have been infected with Covid-19 because it does not always present as a major illness, of those that are serious enough to be recorded, the death rate is around 3% to 4%, although if you include everyone who'd been infected the real rate is likely to be much lower. One of the more worrying differences between seasonal'flu and the corona virus, however, is that 'flu has been around for years, even if its viruses do mutate year by year, and many of us have gradually developed a kind of immunity, whereas SARS-CoV-2 is new. The WHO believes that seasonal influenza spreads faster than Covid-19 but that the corona virus has the potential to infect more people. The most at-risk groups are different, too. With Covid-19, it's the elderly and those with underlying illnesses that are considered most at risk, while seasonal influenza is most likely to affect young people, especially children, and pregnant women.



California, 1918. The 1918 Spanish flu killed up to 50 million people around the world

The world's worst-ever outbreak of seasonal 'flu came in the aftermath of World War 1. Between January 1918 and December 1920, the so-called Spanish 'flu infected some 500-million people -25% of the world population at the time - and killed between 17-million and 50-million (some estimates put the figure as high as 100-million). As with Covid-19, it infected a number of people who none-the-less survived, including Walt Disney, Mahatma Gandhi, Greta Garbo and Germany's Kaiser Wilhelm II. It was almost certainly the deadliest pandemic ever to strike the world, at least in terms of the number of infections, although in this case China seems to have suffered least. The cause in this case was the H1N1 virus. a virus that had infected mammals before. but with a hemagglutinin (HA) surface protein, possibly acquired from an avian version. It's this protein that seems to have made the disease spread so quickly and with such deadly effect.



Chinese leader Xi Jinping visiting Wuhan

Even so, it doesn't quite compare with the Black Death of the 14th century, which killed between 30% and 60% of the population of Europe. It took more than two centuries for population numbers to get back to normal and the disease occasionally returned until early last century. It probably put an end to feudalism in parts of Europe, because it caused a shortage of labour, and that meant landowners had to pay people to work in their fields. Unlike the Spanish flu and Covid-19, the Black Death was caused by a bacterium, Yersinia pestis, not by a virus and it lasted for much longer: 1346 to 1353. It also caused painful lymph node swellings, known as bubos, to form on its victims, especially around the armpits, thighs, neck and groin. It was a seriously nasty disease, which took three to five days to incubate before the victim fell ill and then a further three to five days before, in 80% of cases, they died.

BEING CAREFUL OR BEING SENSIBLE?

Caution, then, in the face of a pandemic is a sensible approach. In this most recent pandemic, not all countries took the same actions at the same times, however, leading to an uneven way of dealing with the crisis. It has also led to some very contradictory journalism as the media scuttled to catch up. The way in which it is reported may be as important as the quarantine measures adopted. Certainly, there have been plenty of outright lies. The European Commission has assembled some of the more outrageous ones, such as the totally untrue claim that Huawei had stopped sending face masks to Spain because of an article written by Josep Borrell, the EU's High Representative for Foreign Affairs and Security Policy. The claim was made on a Spanish news website but quickly disproved by the on-line news site, Politico. "Huawei has donated a million masks to the Spanish authorities for use in the fight against the expansion of Covid-19, including 150,000 units of the FFP2 type of maximum protection," it explained. "For his part, the head of Communication and Public Affairs in Europe at Huawei, Abraham Liu, published this Saturday an article in the newspaper 'Politico' in which he assures that his company has 'no hidden agenda' and that 'they want nothing in return." In the text, Liu assures readers that the sending of masks is a solidarity that is not part of 'any geopolitical strategy, as some have suggested.'

You may not be surprised that Donald Trump has been tweeting, perhaps not always wisely. "Nobody knew how contagious this was," he said in one. "I don't think any doctor new (sic) it at



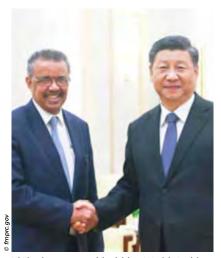
Abraham Liu

the time. People have not seen anything like this," he wrote in another. Trump has informed Canada's Prime Minister, Justin Trudeau, that he won't allow the export of N95 protective masks there. "We need the masks," said Trump, "We don't want any other people getting it." This is despite the fact that parts of the masks are manufactured in Canada and that the Canadians had shipped medical gloves and testing kits to the US. Meanwhile, Mexico has received 50-million Covid-19 testing kits from China. In England, on the day when the government announced plans for a lockdown, the Daily Telegraph boldly claimed that all over-70s would be prohibited from leaving their homes and that patrolling police could fine them £1,000 (€1,137) on the spot if they did. According to a very good source at the Home Office, this idea was not even discussed at the very many emergency meetings. In fact, certain people with underlying health problems have been told not to go out but there was never a risk of such massive fines. Around Europe, though, some have defied the ban. The decision to allow people to walk their pets led to a fine in Spain for a man who took his chicken for a walk. A claim that the WHO had decreed the "suspension of any and all medical activities" was also a lie,



designed to cause fear. What other gems of malicious nonsense has the Commission unearthed? The story that helicopters were spraying disinfectants to eradicate corona virus is untrue. Recommendations on social media for self-treatment have also had their followers, but, as the Commission points out, you cannot cure Covid-19 by 'inhaling hot water', blasting your nose and mouth with hot air from a hair dryer or drinking tea, however much some malicious sprite urges it.

There is no supposed cure so stupid that some mischievous person hasn't posted it on-line; as European Commission President Ursula von der Leyen pointed out, drinking bleach (as one site proposed) is NOT a cure for Covid-19, although if you took the advice it would certainly end it. And end you, too, of course. You'd be dead, eventually, after a great deal of agonising pain. One of the other sillier sites claimed there is a scientific link between the corona virus outbreak and the implementation of 5G technology. This comes from the same Luddite stable as the claims that turning on the Large Hadron Collider would create an Earthconsuming black hole. Considering that the collider was later put out of action temporarily by a passing pigeon, this seems a bit off the wall. Amazingly, a number of people who ought to know better - American actor Woody Harrelson is one - have been helping to spread the 5G story, an especially silly one, proving, if nothing else, a woeful ignorance of basic science. In the UK, mobile phone masts have been burned down and engineers attacked when they turned up to repair them. With everyone in lockdown and having to work from home, losing Internet connections could prove disastrous. It makes you wonder if the rumour was started by an enemy power, just to disable the economy. It also suggests more attention should be paid to teaching basic physics in our schools.



Xi Jinping meets with visiting World Health Organization (WHO) Director-General Tedros Adhanom Ghebreyesus

The European External Action Service (EEAS) has come up with a long list of fake news sites, many originating in Russia. Of those trending most widely are claims that the corona virus is a biological weapon deployed by China, the UK or the United States. Another suggests it's been caused by the arrival of migrants (which always plays well with populists and the far right). There's a claim that the EU is unwilling to help its own member states or neighbours - absolutely untrue as the European Commission's daily updates make clear, despite a slow and weak response when Italy first asked for help - and that the Schengen area no longer exists because Europeans are in quarantine, but migrants can move freely (they can't). Those are just a few; they get sillier. Some suggest "natural remedies" should be used and vaccines avoided. There isn't a vaccine, of course, but the scare-mongering antivaccination (anti-vax) lobby of conspiracy theorists continues to mislead. The EEAS lists 110 corona-related misinformation cases since 22 January that show signs of originating in Russia. In times of fear, people are more inclined to lend credence to the bizarre, the scary and the frankly scientifically impossible. Russia Today (RT) is especially liable, suggesting, for instance, that environmentalists are enjoying the outbreak because they see it as "an opportunity". One posting on the last day of March said it was "too early to tell" if any more people would die of Covid-19. They have. Russia also wrote that climate campaigner Greta Thunberg claimed to have contracted the virus as a publicity stunt and that 380 Belgians caught it through an act of group sex, albeit an impressive one. Belgium must have changed since I lived there. You would imagine, reading some of the claims, that no-one sensible would believe them. Sadly, it seems, a lot of people are not sensible.

DON'T LET TRUTH SPOIL A GOOD STORY

Headline writers, though, like to make an impact and exaggeration is a not uncommonly used tool to achieve that. But the current emergency must not be used for political advantage. "It's of utmost importance," said von der Leyen, "that emergency measures are not at the expense of our fundamental principles and values. Democracy cannot work without free and independent media. Respect of freedom of expression and legal certainty are essential in these uncertain times." Try telling that to Viktor Orbán, Hungary's leader. He has seized the power to rule by decree indefinitely because of the virus, whilst also toying with a plan put forward by his deputy to remove power from city mayors, many of whom support opposition parties, and to classify for a decade any important information about a Chinese-funded railway. He also removed all bureaucratic obstacles to a contentious construction project the opposition is against. He announced plans to scrap the state recognition of gender transition, too, to the fury of many campaigners. The European People's Party (EPP) group in the European Parliament have refrained from comment but Orbán's move has been widely condemned across the political spectrum, from European Greens to Republicans in the United States.

In Brazil, President Jair Bolsonaro initially played down the disease as 'a hoax' and castigated local mayors who urged self-isolation in overcrowded cities like Rio de Janeiro. More recently he has organised a day of fasting and prayer. But there again, America's President Donald Trump originally suggested the disease was a hoax by the Democrats, and he was backed up by some of the more right-

wing TV stations. He later referred to it as "the Chinese virus". In fact, no virus has a nationality, of course, being "nonliving, metabolically inert, but biological in nature", according to my dictionary of science. They cannot reproduce without invading a living cell and hijacking its metabolic processes in order to synthesize more virus particles. I wish Bolsonaro luck with his prayers; masks, testing equipment, ventilators and self-isolation might serve his country better. Now Brazil is in deeper hot water after Brazilian education minister Abraham Weintraub tweeted that the Covid-19 epidemic was started deliberately by China as part of its "plan for world domination", even making a mocking reference to a Chinese accent in the tweet. Beijing is demanding an explanation and an apology.

However, political silliness abounds in the blame game when the stakes are power and potency. Senate Majority Leader Mitch McConnell, a Republican, blamed the Democrats' urge to impeach President Trump in January for 'distracting' the administration from the threat posed by the coronavirus. Trump's opponents claim the distraction came from a fully-briefed president who simply didn't believe the evidence, said Democrat Senator Chris Murphy. Trump dismissed Murphy's criticisms as a "hoax" (a popular word, that) and said that "within a couple days," the number of coronavirus cases "is going to be down to close to zero." It's not, of course, and Trump has ruled out reopening the enrolment site (which closed several months ago) for Obama Care, to help Americans who lack health insurance, with officials saying they're "exploring other options". Meanwhile, the White House is now predicting up to 240,000 deaths from the disease in the US, despite mitigation measures.



Brazilian President Jair Bolsonaro



Some MEPs participated remotely in the special plenary debate on EU response to COVID-19 in the Brussels chamber.

RUMOUR AS A WEAPON, OR FISTS

Russia has denied spreading false rumours on the Internet, despite some prime-time television news reports suggesting that the virus may have been created in a laboratory in Georgia, USA. The news reader said there was no truth in the allegations but that 'nothing can be ruled out. Russia seems to like waging war by innuendo and spreading fake news by alerting people to the story through denial. Spreading rumours by denying them is an old trick; so is capitalising on the fear. Just before the lockdown I was in Paris where I bought a copy of the French satirical journal, Le Canard enchainé, which mentioned accusingly - an advertisement, offering a hundred anti-dust and anti-pollen masks for €90.99, or forty dust masks for €159.99, even though they would not work against the corona virus. They'd be good against a pollen allergy, though, or if you live somewhere dusty.

One American outlet, the New Yorkbased "Epoch Times" has produced an hour long documentary in which it claimed that the virus was created by a virologist at the Wuhan Institute of Virology. The programme points the finger at Dr. Xi Zhengli, without ever quite explaining why she should do such a thing. Some of what the programme says could be true: the accidental release of a mutated virus containing genes from two SARS-like bat viruses, CoVZC45 and CoVZXC21, collected in Zhoushan, and the inevitable elaborate cover-up, the suppression of information and some inexcusable censorship to conceal what was really happening.



Picture taken from inside Wuhan's secretive Institute of Virology show a broken seal on the door of one of the refrigerators used to hold 1.500 different strains of virus

Oh, and the appointment of a politician's son to run the facility. I can go along with the idea of carelessness, secretiveness and nepotism, all of which have been common practice in China for years. But I lost faith in the story when there came a mention that the new SARS-CoV-2 virus contains elements from the HIV virus, because although the viral enzymes in both perform similar tasks, they are not related at all. As Britain's Economist magazine memorably put it, "HIV and SARS-CoV-2 have about as much in common as a human and a satsuma". Don't forget, The Epoch Times is pro-Trump, backed by China's muchpersecuted Falun Gong movement, and it would like to bring down the Chinese Communist Party, which is no doubt why it described SARS-CoV-2 virus in its publicity blurb as "the CCP virus". Even so, a further increase in deaths in Wuhan has drawn criticism from around the world, including from French President Emmanuel Macron, for China's attempt to cover up the disease, thus allowing it to spread more widely. Few are taking seriously the idea that China engineered the virus as a weapon, despite what Trump has said. There has been a price to pay, though: China has had its worst economic performance in decades. Its latest GDP figures for the first quarter of 2020 show its economy has shrunk by 6.8%

One saddening and awful outcome of the pandemic has been the massive upsurge in gender violence during the lockdown. An enormous increase of between 25% and 36% has been reported as people find themselves locked in with an abusive partner from whom there is no escape. Spain and France have schemes whereby an abused woman can use a code to alert a pharmacist to their abuse and he or she can then alert police, who arrest the perpetrator, while Italy has an app so that women don't have to go out, nor make a telephone call with their abuser listening in. Even so, the known cases could be just the tip of the iceberg. Tempers can fray quickly between people forced to live in close proximity in an enclosed space where it's hard to escape one another.



UN Secretary General Antonio Guterres

UN Secretary General Antonio Guterres has expressed his outrage and concern at what has been happening and he has urged governments to include the protection of women in their responses to the corona virus pandemic. However, it's likely that many more women will suffer humiliation and physical violence in what ought to be the 'safety of their own homes' for as long as the lockdown lasts. Meanwhile, there is a serious risk of violence against children, too, and the fear that some of them may face sexual abuse. Without teachers who are trained to spot violence and abuse against children, or even the attention of nosy neighbours, more will undoubtedly suffer.



Swedish Prime Minister Stefan Löfven

Across most of Europe, lockdowns continue, with France warning it could go on for a long time. European Commission chief von der Leyen even told Germany's Bild newspaper that the elderly may have to remain in lockdown until the end of this year. Many elderly people may prefer the risk of death to months of loneliness. After all, a number of politicians are hardly spring chickens; look at Britain's House of Lords. Sweden, however, has gone against the trend. Prime minister Stefan Löfven has told the media that he trusts his fellow-Swedes to "behave like adults" and follow the guidelines on social distancing while the state's epidemiologist, Anders Tegnell, has said he doesn't trust lockdowns. The satirical British magazine Private Eye has listed some good things (not many) to emerge from the crisis. Fewer people are now turning up at Accident and Emergency departments with tiny cuts, scrapes and bruises they could have patched up at home. Britain is seeing less of the anti-immigrant rhetoric, too. "The chorus of 'coming over here and taking our jobs' has been silenced," the magazine points out, "as people realise that one in eight NHS (National Health Service) staff are from overseas and one in four aren't completely white, even behind the mask. The anti-vaxxers have shut up and, like everyone else, are praying for a vaccine." Sadly, that last sentence may turn out to be wishful thinking; as noted earlier, the

anti-vaxxers are still there, even if fewer in number for the moment. As usual, whenever people are expected to behave in a particular way, there are those who flout the rules and those who see it as their duty to report their neighbours to the authorities for any breaches.

MYTHS AND PORTENTS

In reality, much of the supposed "spirit of the blitz" being artificially conjured up in Britain was created by the highlycensored wartime media who failed to mention the looting, thuggery and even rape that went on among the bomb blasts and ruins. Foreign-owned shops and restaurants were attacked and firebombed by self-identified "patriots". Children evacuated to safety in the countryside often faced drudgery, hard work, a lack of welcome, shortages of food and even sexual abuse. One mother and daughter I interviewed once, evacuated from London to the supposedly "friendly north" (and I am a northerner myself) were refused service at food shops, despite possessing ration cards. They were made to wait until all the locals had done their shopping and there was hardly anything left. In the end, they returned to London: better to face bombs among your friends than hunger and starvation among the indifferent and the openly hostile. Myths are always popular but not often true.





Moderna, Inc., a clinical stage biotechnology company, develops therapeutics and vaccines based on messenger RNA for the treatment of infectious diseases

Where to next? In all probability, most people will survive this frightening time and the economy will recover, too, given time, although the Economist Intelligence Unit is predicting that the world economy will shrink by 2.5% in 2020. Many of the measures being put in place by politicians playing catch-up and pretending they were being decisive all along will prove counter-productive. If people treated as adults and given sensible advice, they will mainly follow ite; if they're told to behave in a way that is uncomfortable and difficult, inadequately explained or makes no logical or scientific sense, they're likely to rebel against it. Many people will undergo hospitalisation, a great many will die, and hopefully the corona virus pandemic will come to an end, probably just in time for the next bout of seasonal 'flu, which may well kill just as many or more, but probably without the media hype. The year 2020 will be remembered mainly for this pandemic: for the courage of health professionals and volunteers who helped them, for the largely empty gestures of their supporters (especially in the presence of television cameras), for the uncoordinated response of many of our political leaders and the opportunistic power-grabs and electioneering of a few, for the jingoistic lies on social media and the nonsensical propaganda of some abusers of power. In fact, the human race has proved itself especially human: brave, cowardly, hypocritical, stupid, sly and gullible. And if you happen to believe in portents (I don't) then we have had the wonderful ATLAS comet, tracing its way across the sky and just about visible for a time through binoculars. It was getting brighter, too. One night a few weeks ago, I saw it apparently (but not really, of course) very near to an especially brilliant Venus. Comets used to be seen as harbingers of disasters and it first appeared on 28 December. No doubt some idiot will say it has caused the Covid-19 outbreak, although it's no more credible than the nonsensical claim about 5G masts. Don't believe everything you hear, or see. But do have a look at the comet, even though it now seems to have broken up and to be fading; it's still more interesting than the newscasts at present and may help you forget the corona virus and the fact that you're not allowed out.

Anthony James



Major General Valery Shaitanov is walked out in handcuffs by Security Service officers. Shaitanov

MORE DANGEROUS THAN ENEMIES

Ukraine Security Service officer charged with spying

There are, I was once told, two types of traitor. There is the idealist, keen to achieve his (or her) political aims at huge personal risk, seeking success as the only reward. And there is the one who does it for money or some other personal advantage. Both are dangerous but one is more despised than the other. "Traitors are more dangerous than enemies," said the late Velupillai Prabhakaran, a Tamil separatist and founder of the so-called Tamil Tigers in Sri Lanka. But they're only dangerous if they're not caught. Now a senior officer in Ukraine's Security Service, the SBU, has been taken into custody, accused of working for Russian intelligence, and so far, his motivation has not been made clear.

The man arrested is Major-General Valerii Shaitanov. Apart from passing on military intelligence to his Russian handler, it's claimed that he was planning to assassinate the British-educated Chechen fighter Adam Osmayev, who led the Dudayev Battalion, a pro-Ukraine group fighting against the separatists in Donbass. The detention of Shaitanov shook Ukraine and looks likely to lead to further arrests.

The Chair of the SBU, Ivan Bakanov, describes it as the most significant step since the previous, pro-Russian regime of Viktor Yanukovych was



Ivan Bakanov, Head of the Security Service of Ukraine since 29 August 2019. He is also a member of the National Security and Defense Council of Ukraine. His predecessor Vasyl Hrytsak was fired from the office by Ukrainian President Zelinski. In December 2017, Bakanov chaired the Servant of the People party. He also led the electoral staff of Volodymyr Zelensky during the presidential campaign

overthrown in 2014 in the so-called Orange Revolution. "Unfortunately, an individual that was promoted to general after the Revolution of Dignity and was supposed to protect Ukraine," said Bakanov, "in reality was working against its interests. We have conducted a long-term, complex, and multi-layered operation. This is the most important exposure conducted by the SBU since the independence."

It's worth remembering what happened in that revolution, whose repercussions rumble on even today. Step into Kyiv's imposing Maidan Square, where much of the action took place, and you are very likely to be approached by people who claim they're collecting for "our boys" in Eastern Ukraine. It reminded me of certain bars in Northern Ireland back in the days of the Troubles. But while in Belfast or Derry it was always obvious, just whose boys do the Maidan







Egorov held meetings with Shaitanov and recruited assets N in Europe

Square cash collectors have in mind? Are they supporters of the Ukrainian military? The separatist rebels? Or are they just lining their own pockets? Certainly, in Yanukovych's time, the protestors against his regime got rough justice. "We've had some unfortunate experiences of adjudication," I was told by Judge Volodomir Mazurok, a Vice-Rector at Kyiv's School for Judges, "especially the mishandling of cases of peaceful protestors in Maidan." Mazurok now teaches tomorrow's judges how to run a fair trial and how to abide by the European Convention of Human Rights in their judgements. The School, in Kyiv, is supported by the Council of Europe and funded by the European Union and has its work cut out: Ukraine covers 600,0002 kilometres and employs eight thousand judges, all of them relatively poorly paid.

To be honest, though, nobody in Ukraine is particularly well paid, which explains a willingness on the part of some to carry out nasty jobs for cashin-hand. It's alleged that Shaitanov was recruiting an unnamed person - a former Ukrainian intelligence agent - who was to murder Osmayev, for which he would receive \$200,000 (€184,000), a Russian passport and the identity card of a reserve officer in the Russian military.

The evidence so far released suggests that Shaitanov's FSB handler was Colonel Ihor Yehorov from the Department of Counterintelligence Operations, which is involved in planning, directing and carrying out intelligence, sabotage and terrorist missions inside Ukraine and, indeed, elsewhere. A part of the deal was allegedly that Shaitanov would set up the murder of Osmayev, either doing it himself or arranging for it to be done.

A first attempt to kill Osmayev had failed when his wife, Amina Okuyeva, drew a handgun and shot the wouldbe killer, who had posed as a French journalist. In a second attempt, in 2017, Osmayev and Okuyeva were driving back to Kyiv when a group of gunmen, possibly as many as seven, opened fire on their car with assault rifles. Osmayev was wounded but Okuyeva was shot in the head and died. Both Osmayev and his wouldbe killer ended up in intensive care. There was speculation in the Ukrainian media that the attacker could be Artur



FSB handler Igor Yegorov

Denisultanov-Kurmakaev, known by the code name 'Dingo', who had also been involved in the murder of Umar Israilov, the former head of security for the leader of the Chechen Republic at the time, Ramzan Kadyrov. Israilov was killed in Vienna after accusing Kadyrov of torture. He had applied for political asylum in Austria. Russian media at the time laid the blame on Artur Denisultanov-Kurmakaev, who they referred to as 'the Bandit of St. Petersburg'.

An investigation by the New York Times suggested that Denisultanov-Kurmakaev was to have received \$100,000 (€92,000) with the aim of bringing Israilov to Russia, dead or alive. Denisultanov-Kurmakaev became famous, the NYT said, because of a high-profile story concerning his exchange for a Russian soldier, held in captivity in Chechnya after the first Russian-Chechen war in 1998.

THEY COME NOT SINGLE SPIES. BUT IN BATTALIONS

It's claimed by the SBU that Shaitanov used his position to collect intelligence from his fellow officers. The Pre-trial investigations must now establish if they passed intelligence to him innocently, believing they were merely sharing with a colleague, or if any of them knew exactly what, if anything, Shaitanov was up to. The phone-tapped conversations between Shaitanov and his FSB handler Egorov that the SBU has made public suggest that the Osmayev murder was planned as a "turn-key project", according to one of the speakers. Shaitanov said he was concerned with how to bury the body and how to dispose of the boots Osmayev would be wearing, because forensic science could use the mud on them to trace where he'd been.



Meanwhile, his other work for Russia continued, it's claimed, supplying details about covert operations and personnel, about cooperation between defence departments and foreign partners, and about the internal workings of the SBU. He was also allegedly trying to recruit brother officers to work for the FSB. The SBU is fairly sure that Russia had - and probably still has - other assets in high places. Their homes, along with Shaitanov's residences and places of work, are being thoroughly searched. The SBU have already arrested a former employee who apparently retained contacts with Ihor Yehorov. In a statement, the SBU said they had found at his home an impressive arsenal of firearms and ammunition.

The law enforcement officials found an RPG-26 hand-held anti-tank rocket-propelled grenade launcher, an underbarrel grenade launcher, together with two grenades, a Steyr 1914 pistol with silencer, three RGD-5 grenades and the fuses to fit them, a quantity of plastic explosive, together with twelve detonator caps, and more than 9,000 rounds of ammunition in a variety of calibres. The Steyr is interesting, largely because of its vintage. The pistol was designed in 1912 and manufactured by the Austrian arms company Steyr-

Mannlicher for the Austro-Hungarian army, just in time for World War One. Venerable, then, but if it's been well looked after, still a deadly piece of ordnance in skilled hands, especially with a silencer. However, it only takes Steyr 9mm ammunition, which must be getting harder to find these days. Incidentally, it was not a Steyr that Serbian nationalist Gabrilo Princip used to murder Archduke Franz-Ferdinand in Sarajevo; that was a Belgian-made FN-Browning 1910.

Needless to say, Russia has retaliated for the arrest of Shaitanov. Several claimed, "divulged state secrets". Sound familiar? The English expression "tit-for-tat" springs to mind.

The FSB says the unnamed female officer passed intelligence to the Ukrainian military in 2017-18 and that a Ukrainian national also spied on them, they said, on orders from Kyiv. Both are being investigated for alleged treason and espionage. The Ukrainian national is being held in detention facilities but the female officer is under house arrest because she has a child. The FSB claim the plot was masterminded by Colonel Oleg Akhmedov, head of





Valeriy Shaitanov

people have been arrested in Crimea, which was annexed by Russia in 2014, just after the Orange Revolution had displaced Ukraine's pro-Russian president Yanukovych. When he fled Ukraine, he went first to Crimea, which is mainly Russian-speaking, before settling in South Russia. Now the FSB says it has uncovered a Ukrainian-controlled "sabotage and terrorism group" in Crimea, including a female Russian military officer who, it's

military intelligence in the southern Ukrainian city of Kherson and that it all came to light during a separate investigation into a Russian suspect, accused of amassing a weapons cache in Crimea, allegedly on orders from Colonel Akhmedov.

HISTORY REPEATS ITSELF

It's all highly suspicious, coming just one day after the arrest of Shaitanov for supposedly working for the FSB with murderous intent whilst spying on his own countrymen. It's strange how events seem to repeat themselves in this way; as Karl Marx famously put it, "the first time as tragedy, the second time as farce". Shaitanov's supposed handler, Yehorov, has won a number of medals during his service for Russia, including one "for the return of Crimea". Shaitanov, whose code name in his dealings with Yehorov was "Bobyl", was a head of special operations at the elite Ukrainian unit Alpha at time of the Maidan protests. The unit took part in the assault on the House of Trade Unions, then being used as a base by the protestors. Shaitanov came to the notice of the SBU following the arrests



Glock pistol used to kill Osmaev



Amina Okueva wife of Adam Osmaev

in January of several members of a criminal gang of professional killers, the same group, it's believed, who attacked Osmayev and killed his wife on a road near Kyiv. One of the group is now a suspect in the murder of Amina Okueva. His DNA was found on one of the weapons used in that attack.

Russian media has, as always, been quick to dismiss the story; the Russian news site Stalker Zone described the SBU evidence as 'delusional', whilst admitting that it's possible that a member of the SBU could have been pro-Russia. "It's impossible to rule out that in the SBU there are decent people," the article says. By 'decent people' the writer means traitors to Ukraine who are working instead for Russia. The article suggests the SBU arrest was a publicity stunt and that it was unlikely that the FSB would have been involved in attempts to murder Osmayov, whom it dismisses as "a washed-up Chechen terrorist, also known for stealing money." It seems to be known only to the writer of this extremely biased article, which also makes the mistake of saying that the \$200,000 pay-off was supposed to be for Shaitanov, when it was for the killer he allegedly hired. Oh, and he says the phone-tap exchanges were faked, although without providing evidence. It was, perhaps, the inevitable Russian

What do we know about Shaitanov? According to Yuri Butusov, a Kyiv-

based journalist, Shaitanov was linked with the initial failure of the Ukrainian military in Slavvansk, which is in the oblast of Donetsk and was taken by pro-Russian forces, then eventually taken back by Ukraine. Butusov claims that the Ukrainian commanders negotiated with the separatists and refused to carry out assault operations, for which, says Butusov, Shaitanov was temporarily suspended. In this mish-mash of truth, obfuscation and downright lies, it's very hard to work out what's really happening, although there's no doubt that the people of Slayvansk, whoever's side they're on, have suffered greatly. If you look up Slayvansk on-line you get conflicting news reports, propaganda reports and - interesting, this - an advertisement from Booking.com for a two-room holiday apartment to rent there "with balcony and city views", plus, from Trip Advisor, a link headed "10 things to do in Slavyansk-na-Kubani". I would have thought the best thing to do, very probably, is "duck".

The fact is that Ukraine is struggling to develop into a modern free market economy with the sort of democracy that might one day qualify it to join the EU. It has a long way to go, although it's a delightful country in many ways and Kyiv is a beautiful city. It also makes the best vodka I've ever tasted. Like other former Soviet states, its economy fell back by around 10% after the Communist bloc collapsed but it was picking up before the corona virus came along. The Ministry for Development of Economy, Trade and Agriculture is now predicting that Ukraine's gross domestic product (GDP) will drop by 4.2% in 2020, while inflation will climb from 4.1% to 7%. They think things will improve next year. I hope so; it deserves to do well, once it has got rid of corruption and criminality. That will be more difficult with supporters like the Council of Europe and the EU bogged down in their own problems.

The disinformation campaigns being run by Russia don't help, either. NATO has been forced to put out rebuttals to Russian claims that, for instance, the Alliance is falling apart over Covid-19 (it isn't), that it's failing its member states (it's actually helping enormously the almost one billion people living in NATO countries), that it is spreading the virus, either deliberately or by accident, and even that it created the virus. There are, of course, lots of stories about the corona virus being a biological weapon, while virologists have said repeatedly that it isn't. I'm with the scientists: propagandists tend to get the science wrong. No doubt we'll be hearing much more in the coming days about Shaitanov, Yehorov and others involved in this alleged plot. With Russia also having arrested alleged spies, can we now expect a prisoner swap? Whatever we hear, listen carefully, sceptically and keep your own council. Where espionage is concerned, it seems truth is whatever you choose it to be. As the French playwright Jean Cocteau wrote, "History is a combination of reality and lies. The reality of History becomes a lie. The unreality of the fable becomes the truth."

Robin Crow



Ukrainian President Zelinski (middle) on a working trip to the Donetsk and Zaporizhzhia regions.

THE GEOPOLITICS OF THE CORONA

he most international crisis of history, the Covid-19, has so far officially taken 171,000 lives, and has officially contaminated over 2.5 million people on the planet as I am writing. The numbers go up every hour. Like an invisible fire-breathing dragon with humongous wings as wide as the whole earth reaching from East to West, it hovers upon our heads, and we, unitedly confined, no matter who and where we are, rich or poor, black or white, homogeneously wonder: What is next?

The world as we have known it is over. If we, optimistically, translate this peculiar event to a "Reset all" button and disregard the severe economic damages, the shock and the recession on short term, we may also expect gains in humanity, solidarity and global responsibility, more innovation, a deeper care for animals and nature, and a return to the essential human values in the post-Corona era.

All we can do now is pray for recovery. The recovery can be a V- shape (the most common shape of recession recovery for developed economies), or U-shape, W-shape or L-shape, with our preference going for the first one, depending on how long the crisis is going to last and the probability of the freeze of the real economy. While some analysts argue that a "U" will be the most plausible shape to expect, others argue that we might have to come up with a new letter to illustrate the post-covid19 recovery, given the oddity of the phenomena.

But just like World War I and II, and September 11th that changed the geopolitics of the world, this too will leave an impact on the map of the nations.

The beginning of the 21st century the world saw the first signs of what later was called "The global power shift from West to East". The term LDCs (Less Developed Countries) was upgraded to the "Emerging Markets" by the World Bank economist Antoine Van Agtmael in 1981, and became the new interesting asset-class for the investors willing to take risks in exchange for performance. The Emerging Market Hedge Fund capital reached \$239 bln in 2019, with the BRICs (Brazil, Russia, India and China) leading the trends. In 2019 the return on the Emerging Markets equities amounted to 18.2%, and 14.3% on debt. Earlier this year the IMF (International Monetary Fund) had forecasted the 2020 economic growth for the Emerging Markets at 4.4%, versus 2% for the US and 1.8% for Europe.

However as the political scientist Ian Brammer puts it, an emerging market is "a country where politics matters at least as much as economics to the markets". Just when the market was under the impression that the US-China trade war was about to settle, a pangolin came and took everything back to the point zero, opening the gate to an undeclared cold war.



lan Brammer

While Beijing is capitalizing on its victory against the virus to promote its political system, the West points the finger to Beijing more and more for its lack of transparency on the deathly disease and not informing the World

Health Organization on time, silencing the whistleblowers and sugarcoating the excess death numbers. For info currently China is on the 9th position of the table with 4,632 deaths reported behind the USA, Spain, Italy, France, Germany, Turkey and Iran. Born from this attitude is a true Chinese distrust that is about to change the game in international geopolitics.

After soured international relations, the first shift likely to occur on the long term will be in China's power engine, its manufacturing. With the supply chains being in China almost the entire world is at the mercy of the Chinese factories for masks and white coats, and all of a sudden the idea of manufacturing independence has woken up in the Western collective consciousness. The blue collars hopes and dreams of finding employment and security on the European soil again may come true at some point thanks to the Coronavirus. On the other hand the sovereignty and national borders arguments behind the populist moves like Brexit - will force the European leaders to come up with a new innovative structure for Europe. The European leaders' imminent video meeting on the 23rd of April may very well take the Eurozone a step closer to a debt mutualising entity, and therefore consequently also a step closer to a true European Block if the European leaders manage to take the opportunity.

However China will not be destitute of its status of the factory of the world before some serious power struggle - a move that will involve discrediting the West. The Chinese communist party has already



Wuhan has gradually returned to normal. The lockdown in the city was lifted on April 8 $\,$

accused the US intelligence services of having engineered and brought the bioweapon virus to Wuhan, and mostly putting the accent on the comparison of powers of the two states by saying the US has been slow in handling the pandemic while China built two hospitals in just ten days.

The US says the same false allegations were also made by the Russian trolls on various social media, and the EU's foreign policy arm, the European External Action Service reported 150 cases of pro-Kremlin disinformation on COVID-19 circulating on the internet between January and March. Russia - China's top partner-denies the allegations.

In the meantime the aid kits sent by Beijing and Moscow to countries like Italy, Venezuela, Iran, Mongolia and North Korea, were not seen by the West as pure philanthropy but rather a move to influence and expand their political agenda. "Of those Russian supplies, 80 percent were completely useless or of little use to Italy. In other words, the delivery was more like a pretext," an Italian government official told the leading newspaper *La Stampa*.

While Russia has closed its borders with China, there were some reports of the Russian discriminatory treatment of the Chinese residents in Russia. The reports are dismissed by the Chinese Communist Party as rumors, as in the greater scheme of things the both economies are counting on each other more than ever, especially in their joint struggle in degrowing the USA as the world leader.

India at the other side of the spectrum has a different stand on things. The pandemic came right when China and India were about to celebrate their 70 years of Sino-Indian diplomatic relationship by undertaking 70 different joint projects in the years to come. However once more given Beijing's role in the pandemic that is going to result directly in a serious economic crisis for India, the odds are strong that the celebrations will be limited to not more than a few congratulatory formulations.

At the other side of the planet, the populist Brazilian leader Jair Bolsonaro claimed that the Coronavirus concerns are overblown, and that Brazil will stay committed to its biggest trade partner - China - in combating the virus. But a little while later the president's son, Eduardo Bolsonaro, an influential politician and Brazil's de facto foreign minister, also a friend of Steve Banon, enraged Beijing by a tweet saying "It's China's fault". A bloody exchange between the president's son's entourage and Beijing's officials was ongoing on Twitter for some days.

Last but not least the Coronavirus also seems to have put an end to the honeymoon of China and Africa. The rise of the Chinese influence and money in Africa in recent years - investment against infrastructure and resources had already raised concerns over the continent's overdependence on the Chinese lending. Between 2018 and 2020 the Chinese government and the China Development Bank lent more than \$150 billion to Africa, overtaking the World Bank as the biggest single lender to Africa. Taking Angola as an example, the second oil producer of Africa and heavily reliant on oil (90% of exports), with a fiscal deficit of 7% of the GDP and a debt representing 64% of its GDP, one can also guess where the Angolan oil revenues go to and the catastrophe scenario for Angola if the oil collapses. As an Angolan newspaper put it several years ago, every Angolan owes \$745 to China, China being Angola's biggest creditor after Israel. Furthermore Djibouti's debt to China is \$1.2 billion, nearly equal to its annual economic output. Some 55% of Kenya's debt also belongs to China, it seems that Beijing was playing on a new neocolonial field.

However the recent reports and anger over the treatment of the African citizens living in China in the middle of Pandemic - pulling out random African men out of their homes to undergo mandatory covid-19 tests and quarantining them in isolation - has led to a rare diplomatic clash between Beijing and African leaders. Also contrary to G-20 endorsement, China seemed reluctant to suspend Africa's debt payments temporarily (until the end of the year) amid the pandemic, a move that frustrated the African leaders and their voters. Diminishing dependence on China seems to be a popular quote to gain voters in Africa these days.

On the other hand as the African economy is likely to be hit quite hard, as long as the need for cash persists there will be ongoing relations with lenders.



Federal Open Market Committee Chair Jerome Powell answers a reporter's question at the March 3, 2020 press conference

Given the turmoil it is not surprising that the entire logic of emerging-market investing has gone into reverse. Within 53 days between January to March some 55 billion Dollars have flowed out of the stocks and bonds of the BRICs, the MSCI Emerging Markets Index is down almost a quarter this year. Since the Covid-19 crisis the European investors' profiles are getting conservative if not orthodox, with capital fleeing into the safe havens like dollar (dollar debt is getting more and more expensive), with innovation and money (the 2 trillion stimulus package issued by the US) being the only exit windows out of this crisis for now.



Federal Reserve Board Building in Washington

Amid the crisis, the USA is scheduled to elect a new president in November, and while the current one is using his every recent media intervention as a campaign meeting, one should not forget that Donald Trump was the first politician who initiated the trade war with China. Whether he will be reaping the fruits from the current climate for his campaign will depend on how he will be judged on his crisis management performance. According to the most recent Harvard CAPS/Harris Poll Trump's approval rating is at 49 percent, the highest since March 2017, and the top two issues on the minds of voters - economy and Corona - seem to be scoring well with 56 percent of voters approving of Trump's grip of the economy and 51 percent supporting his handling of the coronavirus.

Is the Coronavirus paving the way for "America First"?

The odds are strong, but still a lot can change in the coming months.

The world as we have known it is over, and no wall and no borders will be able to block what is about to come. Welcome to the new world.

By Vianne Savoli



Speech by President von der Leyen in a virtually empty hemicycle at the European Parliament Plenary on the EU coordinated action to combat the coronavirus pandemic and its consequences. Ursula Von der Leyen told Germany's daily Bild that older people might have to be kept isolated until the end of the year

PLAYING OUT OF TUNE

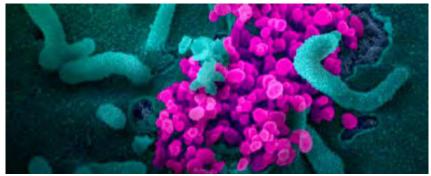
Europe's discordant reaction to a pandemic

Many years ago, I went with two school friends to Newcastle's Theatre Royal to see the cellist Paul Tortelier perform Dvorac's Cello Concerto in B minor. He was, as always, brilliant. I'm afraid time has erased the name of the orchestra, excellent though it was, but the programme was odd, with the Dvorac concerto forming the second part of the evening's entertainment, after the interval, and the only symphony - Michael Tippett's Third - rounding off part one. Rumour has it that the management feared that too many patrons might otherwise have decided to leave in the interval after hearing Tortelier; Tippett's music is more of a specialist taste. I have to be in the right mood for it myself, which probably means I'm a Philistine. When it was over, my two pals and I, finding the theatre bar still full, crossed Grey Street to the Turk's Head Hotel (where tradition claims that Paul McCartney and John Lennon wrote 'She Loves You' after the Beatles appeared at the Majestic Ballroom). There, in the beautiful Victorian bar, we met and had a drink or two with a few members of the orchestra. "Which do you prefer to play?" we asked a rather well-lubricated violinist, "the Dvorac or the Tippett?" The man smiled, sipped his whisky, and replied something along the lines of "Well, you can't beat the soaring harmonies of Dvorac. But there again, if you hit a wrong note when you're playing Tippett, nobody will notice."

In Europe's response to the Covid-19 outbreak, there have been a lot of wrong notes played. The European Union was supposed to act as conductor but it dropped its baton early in the proceedings and there have been more squeaks, snapped strings and dropped clangers since then than anyone might have expected. In short, the whole affair has been completely discordant, as if the orchestra is responding not to someone on the conductor's podium but instead

to a dozen or more amateur conductors somewhere in the upper circle waving a variety of batons in an inexpert way. We have to remember, of course, that health is not one of the EU's competences; it's a matter for individual governments. Even so, EU leaders seem to have turned a blind eye to what was clearly a looming catastrophe for far too long, as if they were afraid to face up to the obvious. Now the European institutions find themselves scrabbling on the edges in a bid to

preserve some of the values upon which the European Union was built, while governments seek solutions in a wide variety of uncoordinated and increasingly desperate responses. "It is of the utmost importance," said Commission President Ursula von der Leyen, "that emergency measures are not at the expense of our fundamental principles and values as set out in the Treaties." True, but I'm not sure that anyone is listening. They certainly weren't when it all began.



SARS-CoV-2, also known as 2019-nCoV, is the virus that causes COVID-19. The virus shown was isolated from a patient in the U.S. NIAID-RML

Let us get a few facts straight. Covid-19 is not just a very bad cold, nor is it ordinary influenza. It is a serious and sometimes deadly disease caused by a novel virus, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) to which we have no immunity.

It affects different people in different ways. Some exhibit mild symptoms, not unlike those of a cold. The virus attacks the respiratory system because the protein spikes on its surface can latch onto a cell surface protein called ACE2, especially found in the respiratory tract. It's believed that ACE2 has a rôle in controlling blood pressure and some evidence suggests that Covid-19 is especially deadly for people who have high blood pressure. But the disease is new and not all the indications point the same way. In the United States some doctors are questioning whether ventilators are the appropriate treatment, for instance. A worryingly high proportion of patients put on ventilators die, but whether that is simply because they are the most serious cases or that as some doctors suggest - it's the wrong treatment is unknown as yet. According to MedicineNet, Dr. Cameron Kyle-Sidell, a Brooklyn emergency room physician, said that around 70% of Covid-19 patients put on ventilators do not recover. He reported that many of them showed very low blood-oxygen levels, more akin to altitude sickness than to normal lung infections.



Staff of Elmhurst Hospital in Queens, bring in a new patient during the COVID-19 outbreak in New York UN Photo/Evan Schneider

New York hospitals have reported a death rate for patients on ventilators as high as 80%. Perhaps the virus prefers an anaerobic existence, like the organisms that died out when oxygen first spread over the earth, 2.5 billion or so years ago?

A NASTY SURPRISE

So it's not really surprising, if doctors are unsure what to do, that politicians are all at sea. That's why Europe remains the epicentre of the pandemic, with more than 600,000 infected and almost 50,000 dead. The EU economy looks to be holed below the waterline and even after this health crisis is consigned to history, the long term damage it's done will still be with us. There's not much point in attributing blame now, although the disorderly 'mefirst' response drew savage criticism from Commission President Ursula von der Leyen at an almost-empty European Parliament. "When Europe really needed to be there for each other, too many initially looked out for themselves," she said. "When Europe really needed an 'all for one' spirit, too many initially gave an 'only for me' response. And when Europe really needed to prove that this is not only a 'fair weather Union', too many initially refused to share their umbrella."



Dr. Richard J. Hatchett, Chief Executive Officer of the Coalition for Epidemic Preparedness Innovations (CEPI)

But from the outset, most leaders had failed to grasp the seriousness of what was happening. They saw the spread of the corona virus as a Chinese problem, despite a warning at the Davos conference from Richard Hatchett, who is in charge of the Coalition for Epidemic Preparedness Innovations (CEPI). He warned delegates "China was unfortunate in that that's where the epidemic started, but it is now a global problem." That was on 22 January this year and it seems few if any were really listening. By the time the world was paying attention, the virus was spreading more quickly than most people had expected and more widely than health facilities could cope with. Certainly, in the last week of January, corona virus was not being talked about.



Stella Kyriakides, European Commissioner for Health and Food Safety

During that week, the European Commissioner for Health and Food Safety, Stella Kyriakides, attended the Parliamentary Assembly of the Council of Europe in Strasbourg. I interviewed her there. The topic we discussed was not the all-consuming pandemic of today but the longer-term plan by the von der Leyen Commission to address the spread of cancer. "On February 4, on Tuesday," she told me, "we're launching the consultation phase of the 'Europe Beating Cancer' plan, which we hope we'll be able to roll out by the end of 2020." I'm not sure that target will prove achievable under the changed circumstances. The prospect of Covid-19 was simply not in her mind, nor mine, just that short time ago.

It was not until late in February that alarm bells started to ring. It was then that Italy activated the EU's 'civil protection mechanism', requesting face masks and other items of protective equipment and expecting (even demanding) that other member states respond. None did. Suddenly, the countries of the EU had become aware that if the virus could

cause such problems in a country like Italy, with its excellent health service, then its neighbours could be vulnerable, too. Furthermore, despite their boast of preparedness, politicians suddenly realised that personal protection equipment (PPE) may well be in shorter supply than they expected. Then came Carnival week, a traditional Christian festival in many parts of Europe, held during the last week before the start of Lent, the season of fasting in the Christian calendar. Once upon a time, it was a way of using up produce that the faithful may well be giving up for religious reasons, back in the days before refrigeration. Lent begins 46 days before the Saturday of Easter weekend, which in 2020 Lent fell on the 25 February. Traditionally, there are a great many festivals and carnivals held in that time, not only in Rio and other exotic places but also in Europe. Many find it a good time to go skiing, as a lot of Europeans did in late February and early March. It's thought that it was in those ski resorts, with so many people from different countries partying together, that much of the damage was done, leaving the merry-makers to carry back the corona virus to their home countries.

IS ANYBODY LISTENING?

The European Commission created a corona virus emergency response group at the beginning of March, but behind the scenes, many leaders were growing increasingly alarmed. The EU's main attention at that time, though, was focused on the Turkey-Greece border, after the Turkish president, Recep Tayyip Erdoğan, opened his country's frontier to allow migrants and asylum-seekers to rush towards Greece. It remains an ongoing issue for Europe which successive leaders have so far failed to resolve.

When, on 3 March, France announced measures to take control of the production of personal protection equipment, Germany decided unilaterally to ban exports of the equipment, even to other EU states. These were signs that the EU's two biggest and most powerful countries were turning their back on working together for the common good. Other member states started taking similarly selfish measures. It's not just that countries were making moves without consulting the others, they weren't even telling them what they were up to. Some government ministers complained they were only finding out what was going on by reading the newspapers. Meanwhile, the citizens of Europe remained, in the main, blissfully ignorant of the dangers. In Belgium, the Flemish and French parliaments couldn't agree on whether or not to close schools. The Francophone side won in the end and schools were eventually closed. Public

events continued, though, such as the marches to mark International Women's Day in Spain, although anyone exhibiting symptoms was advised not to attend.

When some of leaders of EU countries reassured people that the wearing of masks was not necessary, despite the evidence from China, rumours said it was because they knew their country didn't have enough to go around. However, the European Centre for Disease Control (ECDC) was (and remains) unsure that face masks would help in Europe, because most people are too inexpert to know how to wear them correctly or even to recognise if the mask in question could stop the virus; there are many out there designed to hold back dust or pollen which wouldn't work against the virus, but which various unscrupulous merchants are keen to offload to a gullible and fearful public. There is also the fear that if everyone tried to obtain one, the supply for medical professionals could run out while too many members of the public could abandon 'social distancing' in the false belief that they were safe. Face masks worked in Wuhan because they were all officially sanctioned and wearing one was a legal requirement, which the Chinese were able to enforce, partly by tracking mobile phones so that they could control people's movement. The same approach wouldn't be legal in Europe. But rumour has had a field day during this crisis.



Health workers in Wuhan carry out physical examinations on employees returning to work at a company on April 9, 2020

RUMOURS ABOUND, TESTS FAIL

In the United States, it was claimed that the Trump administration had declined an offer from the World Health Organisation (WHO) of testing kits for the virus in order to let American firms make them, prioritising profit over public health. It was even claimed by Presidential candidate Joe Biden at a Democrat rally.

But it was never true; the WHO made no such offer. It's probably as well: so far, testing kits have proved a disappointment. The



UK Premier Boris Johnson during his speech on corona virus while in isolation

British government bought 17.5 million of them, which Prime Minister Boris Johnson, now recovering from Covid-19 himself, said would be a "game changer". They were supposed to work with just a pin prick of blood and would take up to 20 minutes to detect antibodies. A person showing the presence of antibodies would test positive for the infection. The idea was to sell them openly at pharmacies and online, and they were central to UK plans to ease the lockdown. Like many other such tests, however, the kits simply don't work, and Britain is trying to get its money back. "There are many challenges to creating accurate tests" explained Professor Sir John Bell, Regius Professor of Medicine at Oxford University and Government Advisor on Life Sciences, "hence these tests need to be validated carefully. Other countries such as Spain have already sent test kits back because they don't work. There are 100 or more such kits from different suppliers available for identifying Covid-19 antibodies, and it is important that each of these is checked for accuracy before making them available to the public."

In fact, Professor Bell says, no test currently available seems to be fool-proof, requiring examples of blood donated by the person being tested before the pandemic started. "Multiple tests have been provided for evaluation, and a range of convalescent sera has been used to determine whether the tests can identify both low and high levels of antibodies. We have been very careful to test using gold standards checked against a sensitive enzyme-linked immunosorbent assav (Elisa) of the spike protein and other viral proteins. Sadly, the tests we have looked at to date have not performed well. We see many false negatives (tests where no antibody is detected despite the fact we know it is there) and we also see false



Professor Sir John Bell, Regius Professor of Medicine, University of Oxford, received the degree Doctor of Science, honoris causa, for his advancement of our understanding of immune activation in a range of autoimmune diseases

positives." The problem seems to be that the corona virus family is very large with many closely-related cousins, and the tests cannot always or reliably tell the difference between people who've had infections of SARS-Cov-2 and those from other, similar viruses. Both Germany and China believe that really effective tests may still be some way off. In any case, they take time to show a result. The problem with the Spanish testing kits was, according to the Chinese embassy in Madrid, because they had been bought from an 'unauthorised' manufacturer in China, as well as from South Korea. In this case, the 640,000 'rapid testing' kits were sent back because 9,000 of them failed to meet specifications. However, they were not part of a €432-million contract with China announced by the Spanish government, which will include 5.5-million testing kits. The faulty kits are reported to have had an accuracy rate lower than 30%.



A patient is taken to Mount Sinai hospital in Astoria, Queens, during the COVID 19 outbreak in New York

According to the European Centre for Disease Control and Prevention (ECDC), "Statistics suggest the United States may ultimately be hit hardest, having reacted even more slowly than Europe, and with deep societal divisions that created obstacles to the unity of purpose in countries like Germany that have fared relatively better." Complacency would be unwise, however, says the Centre: "it is also clear that untold lives were lost because Europe did not react as fast and forcefully with lockdown measures as China, or as aggressively with testing as South Korea, which they had learned from the traumatic experience of the 2015 MERS (Middle East respiratory syndrome) outbreak."

Meanwhile, the disease, still rampant despite the lockdown currently in force in many countries, marches on, with no sign of an anti-viral treatment, still less a vaccine, with which to address it. "Based on data from EU/EEA countries," the ECDC reports, "32% of the diagnosed cases have required hospitalisation and 2.4% have had severe illness requiring respiratory support and/or ventilation. The crude fatality rate was 1.5% among diagnosed cases and 11% among hospitalised cases." Meanwhile, Covid-19 is starting to spread across Africa, with over 14,000 cases and nearly 800 deaths at the time of writing, and relatively scant medical facilities. The Central African Republic, for instance, has just three ventilators for a population of 5-million.

Things seem to be getting critical in the United States, meanwhile, where the seriousness of the disease was recognised even later than it was in Europe. The Verge website reports that "In New York City, for example, there's hardly a bottle of hand sanitizer to be found, and pasta and beans are in short supply. It's good to prepare for disruption to everyday life, but there's a difference between preparedness and panic buying - and the latter can cause shortages." It has in parts of Europe, sometimes exacerbated by supermarkets trying to prove they're enforcing the rules more vigorously than their rivals or by over-eager police forces trying to vie with each other in displays of keenness by going further than the law insists, or even allows. In Britain, one police force was threatening to put police officers on every aisle in a supermarket to ensure that people were not trying to buy "non-urgent items". It took a letter to Chief Constables from Home Secretary Priti Patel to urge common sense.



Home Secretary Priti Patel

DASHING TO THE RESCUE, RATHER LATE

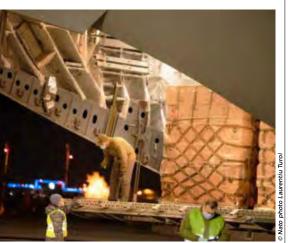
Back when the seriousness of the situation was first beginning to become clear, EU health ministers initially squabbled over what to do. Charles Michel, President of the European Council, managed, despite these disagreements, to get them to agree to four primary goals: containing the spread of the virus, ensuring an adequate supply of essential medical equipment, addressing the socio-economic fallout of the pandemic and supporting medical research into treatment and with luck - a vaccine. At the suggestion of von der Leyen, they agreed to commit €7.5-billion in unspent structural funds to help countries deal with the problem. Additionally, the European Commission has announced that it will directly support EU healthcare systems with €3-billion from the EU budget, to be matched with a further €3-billion from each member state, to fund the Emergency Support Instrument as well as a new initiative, called RescUE, which gathers together essential equipment.



Statue dedicated to Belgian industrialist John Cockerill, near the European Parliament in Brussels

That includes things like ventilators and personal protective equipment, as well as helping to mobilise medical teams to work with the most vulnerable, such as in refugee camps. This will allow the Commission to procure directly on behalf of Member States. It will also finance and coordinate the transportation of medical equipment and of patients in cross-border regions, as well as trying to scale up testing.

Another Commission initiative has been the creation of an advisory group, made up of seven epidemiologists and virologists, chaired by President von der Leyen with Commissioner Kyriakides as Vice-Chair. The idea is to give guidelines on sciencebased and coordinated risk management, advising on response measures, gaps in clinical management, the prioritisation of health care, civil protection and other resources, as well as policy measures for the long-term consequences of the pandemic. More recently, the Commission adopted guidelines to optimise the supply and availability of medicines that included guidance on the application of anti-trust measures to allow limited cooperation among businesses. Von der Leyen announced other measures to bring down the cost of medicines and other essentials, too, by suspending customs duty and VAT. "In Italy, customs duty of 12% and a Value Added Tax of 22% is levied on some face masks or protective garments that we import from countries like China," she explained. "Our decision will make them one third cheaper." And it's not only the EU that has been trying to sort out the mess. NATO has been active in ferrying supplies of essential medical goods to wherever they are needed, as Jens Stoltenberg, the Alliance's Secretary General announced at the beginning of April. "Our airlift capabilities have delivered significant amounts of crucial medical equipment and field hospital tents," he said. "Just this morning, a military cargo plane with masks, protective equipment and other medical supplies has taken off from Turkey, heading to Italy and Spain, in response to



Allied plane brings 45 tons of supplies to Bucharest



European Parliament

requests made through NATO's disaster relief coordination centres." Just how much of this essential PPE is needed, and how much each member state already has, is something the Commission is working hard to discover. It has also adopted Recommendation on conformity assessment and market surveillance, which it says will increase the supply to civil protection authorities, of 'certain types of PPE', such as disposable face masks, without, they say, compromising health and safety standards. In addition, it's in discussion with industry about converting production lines, so that, for instance, textile manufacturers can produce face masks and even distillers of vodka and gin can switch to providing hand sanitizers and disinfectants. Incidentally, the export of PPE outside the EU now requires special authorisation at national level. The biggest threat could be in Europe's prisons. Across Europe, there were over 1.5 million prisoners in 2019, according to the Council of Europe. On average, 2.4% of inmates were aged 65 or over. The highest number of elderly inmates was in Turkey, the second highest in the UK and the third highest in Russia. The Czech Republic and Greece have hardly any.

CURING A SICK ECONOMY

If the people survive, and it's highly probable that most of us will, will the economy recover? A lot of businesses have been hit hard, not least in the hospitality and entertainment industries. Furthermore, a number of employees and self-employed people whose jobs cannot be done from home have been unable to get to work because of the lockdown. There is financial support for farmers and fishermen, and the European Investment Bank, based in Luxembourg, is aiming to invest an additional €20-billion in small and medium-sized businesses, partly from its own capital and partly backed by the EU budget. The Commission has unlocked another €1-billion in EU budget guarantee to the European Investment Fund, so it can provide liquidity to businesses. This, they say, will mobilise €8-billion in total that will help at least 100,000 companies. The European Central Bank is also taking steps to relieve the crisis: a €750-billion Pandemic Emergency Purchase Programme of private and public securities, which is in addition to the €120-billion already announced. As for the pandemic itself, the European Commission has mobilised €140-million to help develop vaccines, new treatments, diagnostic tests and medical systems to prevent the spread of the virus, as well as €48.5-million for eighteen projects and 140 research teams from the Horizon 2020 research and innovation programme. The hunt for cures goes on, and the Commission has offered up to €80-million to the European vaccine developer, CureVac, in the form of a European Investment Bank loan. The company says it hopes to begin the clinical testing of a vaccine by June. Everyone is doing something but it might have been helpful if they'd started doing it earlier and in closer harmony.

The piecemeal response of member states shows that, yet again, they're prepared to blame the EU for everything and without ever acknowledging its advantages. Hungary's Victor Orbán and Polish president Mateusz Morawiecki blamed the EU for not doing enough, even though the EU had ensured that the two countries could use funds of around €1-billion each from unused cohesion funds, which would normally have to be returned to the EU. The problem, especially in the case of Orbán, is that he only sees the value of the EU in terms of the cash his country can get out of it. He does not seem to accept that this requires anything in return, such as the correct application of EU laws and respect for the EU standards Hungary signed up to. "Most governments' response to the Coronavirus crisis has included a strict curtailment of the right to freedom of movement," writes Jakub Jaraczewski of Democracy Reporting International (DRI).

"Some EU Member States have imposed these, and further limitations, as part of an officially declared 'state of emergency'. This special measure provides governments with the constitutional or legal means to impose extraordinary legal measures." Jaraczewski warns that some countries are coming dangerously close to breaching their international obligations under not only the EU Treaties but also the European Convention of Human Rights (ECHR) and the Organisation for European Cooperation and Development (OECD). "While one can expect limits in the ability to administer justice and see non-essential court cases delayed due to shutdowns," he writes on DRI's website, "elements of the right to a fair trial, such as the right to challenge an arrest before an independent court, must be preserved. Moreover, some regional and international instruments, such as the ECHR, feature a mechanism for countries to notify the relevant organisation that they are suspending some elements of the legal instrument when facing an exceptional, clearly identifiable threat by enacting temporary, extraordinary measures." Very few countries have done so. Jaraczewski points out the problems involved in getting a united response from such a disparate set of countries: Poland has laws that apply in a national emergency, Germany does not and its response is further complicated by its federal structure. Other countries have assumed almost dictatorial powers to get around sclerotic law-making systems while parliaments are not sitting. But it's not without risks, says Jaraczewski: "While fighting existential threats can require limits to fundamental rights and freedoms, there is a high risk that governments will overstep and excessively impede rights and freedoms in response to covid-19. In extreme cases, a permanent, unlimited state of emergency, could lead to the removal of checks and balances and undermining the rule of law to the point where a country ceases to be democratic. Indeed, the Hungarian bill appears to be just that, a push towards autocracy masqueraded as a measure that ensures the safety of citizens." It could also be argued that Ursula von der Leyen's suggestion that all elderly people should remain in lockdown until the end of the year is excessive and would cause more problems than it might solve. Impose sensible, understandable rules and people will abide by them. Exceed those, and you tempt provoking rebellion and chaos. The United States is already seeing widespread opposition to a lockdown, with one protester carrying a placard bearing the famous words of the 18th century American statesman, Patrick Henry: "Give me liberty, or give me death." The protester was part of a large crowd, opposed to social distancing, so she may get both.



Maria Demertzis



André Sapir



Simone Tagliapietra



Guntram B. Wolff

ARE WE THERE YET?

Few people are suggesting that the EU should have increased responsibility in the field of health but this crisis has shown how very far from unity the European Union has fallen. There is no magical cure, but some countries have shown wisdom in dealing with the crisis. "If necessary, health insurance can be supported by public budgets," argues the Brussels-based Breughel think tank. "Second, a support fund could be established to assist those sectors that are most affected. The German Kurzarbeitergeld (short term compensation) and the Italian Cassa Integrazione Guadagni are good possible examples of ways to support companies and workers that have to reduce their output. Third, we consider the provision of monthly lump-sum transfers to the selfemployed that are immediately vulnerable to a collapse in demand as key to safeguard this vulnerable group of workers until the end of the emergency period." The Authors of the report, Maria Demertzis, André Sapir, Simone Tagliapietra and Guntram B. Wolff, are concerned about the longterm affect on the economy, which may require drastic action. "Uncertainty has led to major volatility in financial assets and broad-based stress in the financial system," they write on Breughel's website. "Some companies and households will be late in meeting their financial obligations, for example mortgage payments. Central banks need to provide abundant liquidity to support the financial system and prevent short-term liquidity needs from jeopardising productive economic activity. Stress in interbank markets and money markets needs to be addressed. Swap lines need to be robust and substantial so that the European central banks can provide dollar liquidity if needed."

But at the moment it's all up in the air. Most of us sit at home, in self-isolation, unsure what's going on and what we should do about it, like a flock of sheep (maintaining our woolly social distancing, of course) whose sheepdog has wandered off to sniff a distant tree. We could all try shouting "Baaaa!" at the same time in the hopes that he'll wander back, but even if he does he's unlikely to have many answers. Until this disease starts to diminish, we're in unknown territory. We're witnessing a change in the world. It's a change, though, that demonstrates the need for cooperation, for working together, not for division and disunity. Otherwise we're on the road to chaos, anarchy and war. In many towns and cities, the lack of people in the street is leading groups of wild animals to explore empty suburban gardens and eat the plants. They sense the end of humankind. We have to hope they're wrong.

By Jim Gibbons

NEWS IN BRIEF



Hywind Tampen floating wind turbine. Illustration: Kværne

HYWIND TAMPEN: THE WORLD'S FIRST RENEWABLE FLOATING POWER FOR OFFSHORE OIL AND GAS APPROVED BY THE NORWEGIAN MINISTRY OF PETROLEUM AND INDUSTRY

Hywind Tampen is an 88 MW floating wind power project intended to provide electricity for the Snorre and Gullfaks offshore field operations in the Norwegian North Sea. It will be the world's first floating wind farm to power offshore oil and gas platforms.

It will also be the world's largest floating offshore wind farm and an essential step in industrialising solutions and reducing costs for future offshore wind power projects.

Hywind Tampen will be a test bed for further development of floating wind, exploring the use of new and larger turbines, installations methods, simplified moorings, concrete substructures and integration between gas and wind power generation systems.

The floating wind farm will consist of 11 wind turbines based on one of Equinor's floating offshore wind technologies, Hywind. The wind farm will have a combined capacity of 88 MW and is estimated to meet about 35% of the annual power demand of the five Snorre A and B, and Gullfaks A, B and C platforms. In periods of higher wind speed this percentage will be significantly higher.

The wind power solution will help reduce the use of gas turbine power for the Snorre and Gullfaks offshore fields, while also offsetting 200,000 tonnes of CO2 emissions and 1000 tonnes of NOx emissions per year.

Together with their partners in the Snorre and Gullfaks fields, they reached a final investment decision (FID) in October 2019 and awarded key contracts for the NOK 5bn project in the same month.

GLOBAL SALES OF PSYCHIATRIC DRUGS COULD REACH MORE THAN \$40BN BY 2025 DUE TO CORONAVIRUS, SAYS GLOBALDATA

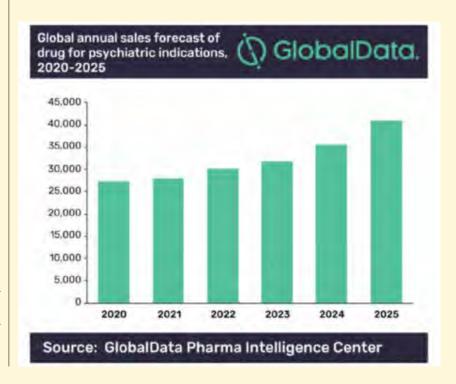
An estimated 1.5 billion people around the world have been asked to practice social distancing amid the outbreak of coronavirus (COVID-19) that has caused the deaths of more than 69,000 people. The rapid spread of the disease, escalation of pulmonary symptoms, financial disruption, travel restrictions and social isolation have been cited as a catalyst for increased prevalence of mental disorders such as depression across a variety of age groups, says

GlobalData, a leading data and analytics company.

Magdalene Crabbe, Pharma Analyst at GlobalData, comments: "Sales of drugs for psychiatric disorders such as depression, anxiety and obsessive compulsive disorder are expected to reach \$27.4bn in 2020 – an increase of \$717m from the previous year. Sales are then expected to increase from \$27.4bn in 2020 to \$40.9bn in 2025, growing at a compound annual growth rate (CAGR) of 8.4%.

"Personalized treatment strategies are important for treating psychiatric disorders, which may be exacerbated by the COVID-19 crisis. Responses to therapy are highly diverse, and drugs that work for some people may not be effective for others.

"It is important that people realise that depending on pharmaceutical drugs is not necessarily the solution to the negative impact that COVID-19 will have on people's mental health. Recovering from the worst pandemic this century has experienced so far will be achieved through a combination of approaches, including psychotherapy, physiotherapy and financial assistance."



US SPACE EXPERTS TO HELP CORONAVIRUS PATIENTS

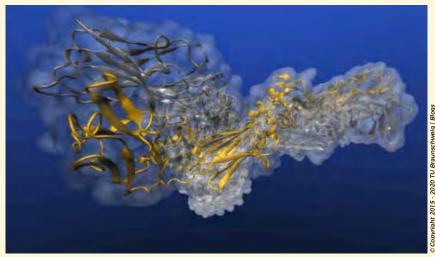
Virgin Galactic and The Spaceship Company (TSC) joined with experts from the NASA Armstrong Flight Research Center, Antelope Valley College and the City of Lancaster to assemble a COVID task force

According to George Whitesides, CEO Virgin Galactic and The Spaceship Company, Antelope Valley Hospital (AVH) approached local aerospace engineers to work on fast solutions to the problems of providing care to COVID-19 patients. In response, engineers and technicians from Virgin Galactic and The Spaceship Company (TSC) joined with experts from the NASA Armstrong Flight Research Center, Antelope Valley College and the City of Lancaster to assemble a COVID task force. The group's aim has been to help hospitals in this region manage the patient surge that is increasing demands on PPE and breathing assistance mechanisms and risking doctor and nurse health.

One of their main achievement is the design and manufacturing of several prototype patient oxygen hoods, which allow oxygen rich pressure to support those admitted with COVID-19 – opening up the alveoli in the lungs, and helping to delay or prevent Acute Respiratory Distress Syndrome (ARDS) from developing.



NASA engineer Mike Buttigieg works on an oxygen hood system prototype worn by Dr. Daniel Khodabakhsh from the Antelope Valley Hospital in California. The hood is designed to help coronavirus patients who don't yet need a ventilator, but who are experiencing breathing troubles. The hood forces oxygen into patients with mild coronavirus symptoms, minimizing the likelihood that the patient will need to use a ventilator



Antiviral Antibodies

By mitigating ARDS, they hope this will then reduce the subsequent need for ventilator support.

"NASA Armstrong and TSC engineers have designed and built several prototypes, and already delivered 50 working hoods to the hospital. These prototypes are now being tested for comfort, ease of use and functionality. We hope they will serve as pathfinders for other communities who see the therapeutic benefits of non-invasive oxygen therapy and who may also have shortages of ventilators." Says George Whitesides.

ANTIVIRAL ANTIBODIES RESEARCHERS FROM BRAUNSCHWEIG EXPLORE NOVEL THERAPIES FOR CORONAVIRUS

Researchers at the Department of Biotechnology of Technische Universität Braunschweig started a research project to develop novel antibody based therapy for coronavirus infections. To increase the chances of success, the international consortium pursues several parallel approaches of antibody-based therapies against the lung disease COVID-19 caused by the SARS-CoV2 virus. The research team of the Department of Biotechnology Braunschweig will be TU responsible for the development of human antibodies, working in close cooperation with partners in Sweden, Belgium, Italy and Switzerland.

The consortium "ATAC" (Antibody Therapy Against Coronavirus) will be financed by the European Union with about 3 Million euro. In total, the European Commission has allocated 47 Million euro to 136 laboratories in 17 teams for the development of vaccines, diagnostics and therapies for COVID-19.

Antibodies for therapy have been in use for 125 years, because in contrast to conventional vaccines, they can be also used for the treatment of patients that are already ill. Emil von Behring was the first to use this therapeutic approach against diphtheria, which yielded him the Nobel Prize for medicine in 1901. From that date until today antisera from horses are still used for this type of therapy in most cases. In contrast, at TU Braunschweig, human antibodies will be generated with a technology called antibody phage display. This approach allows to generate human antibodies entirely in the test tube. Because this method also provides the molecular blueprint of these antibodies right away, they can be produced in cell culture in unlimited amounts and very high quality. Professor Stefan Dübel, head of the department of Biotechnology, an inventor of this technology, Professor Michael Hust, the principle investigator of this project, and their team have many years of experience in the development of neutralizing antibodies against viruses like Marburg virus, Ebola and HIV.

The development of therapeutic antibodies against COVID-19 is expected to take several months to a year, in particular because of necessary efficacy and safety tests.

TIMELESS CHIC

Standout Fashion and Beauty trends

By Clara Bauman

Spring fragrances: The Great Escape

To help you ease out of confinement, perfumes are a wonderful way of embarking on virtual trips. Here are a few motivational tips that will inspire you to travel with just one push of the "spray button".



Lady Million Empire (Paco Rabanne)

Olfactive family: Chypre floral

Distinctive signs: A cocktail of femininity and daring with contrasting

fragrance notes

Ingredients: Orange blossom / Magnolia / Patchouli, Vanilla, Cognac

Blu Mediterraneo (Acqua di Parma)

Olfactive family: Floral, fruity and aromatic

Distinctive signs: The unmissable discovery collection of the most loved Blu Mediterraneo fragrances is brought together in a box, decorated for just this limited edition, by the fashion and lifestyle designers "La Double J"

Ingredients: A powerful cocktail of lemon, bergamot, myrtle leaf orange and basil depending on the fragrance (Arancia di Capri, Bergamotto di Calabria, Fico di Amalfi and Mirto di Panarea)





Océan Infini (Rituals)

Olfactive family: Floral, fruity

Distinctive signs: Inspired by the fragrances of beautiful Bali, Océan Infini fuses the sweet sprays of soft, dewy ocean water with refreshingly fruity notes

Ingredients: Nashi pear / lily of the valley / musk

TIMELESS CHIC

Standout Fashion and Beauty trends

By Clara Bauman

Bling!

Swarovski's latest collection is brimming with gift ideas for 'Mother's Day'. It's also a pretext for pleasing someone or to spoil oneself on any other occasion.

What marvels can we find in the boxes? Rings, necklaces and earrings inspired by nature's wonders and, of course, inlaid with those twinkling, iconic crystals.



Back to the 90s (time and again)

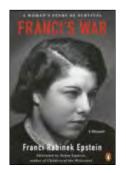
Feeling nostalgic for the Nintendo generation? Then, this is for you! Levi's has launched a limited-edition collection that celebrates iconic characters from the popular franchise, with colorful streetwear styles. In the title roles: the inescapable characters, Mario, Luigi, Yoshi and Princess Peach.

We have selected the most 'all-purpose' item that can accompany you in your everyday life, regardless of age: this denim tote bag.



Available on (levi.com)

BOOKS



FRANCI'S WAR

By Franci Rabinek Epstein

A WOMAN'S STORY OF SURVIVAL

The engrossing memoir of a spirited and glamorous young fashion designer who survived World War II, with an afterword by her daughter, Helen Epstein.

In the summer of 1942, twenty-two yearold Franci Rabinek-designated a Jew by the Nazi racial laws-arrived at Terezin,

a concentration camp and ghetto forty miles north of her home in Prague. It would be the beginning of her three-year journey from Terezin to the Czech family camp in Auschwitz-Birkenau, to the slave labor camps in Hamburg, and Bergen Belsen. After liberation by the British in April 1945, she finally returned to Prague.

Franci was known in her group as the Prague dress designer who lied to Dr. Mengele at an Auschwitz selection, saying she was an electrician, an occupation that both endangered and saved her life. In this memoir, she offers her intense, candid, and sometimes funny account of those dark years, with the women prisoners in her tightknit circle of friends.

Franci's War is the powerful testimony of one incredibly strong young woman who endured the horrors of the Holocaust and survived.



MBS By Ben Hubbard

THE RISE TO POWER OF MOHAMMED BIN SALMANY

NEW YORK TIMES EDITORS' CHOICE • A gripping, behind-the-scenes portrait of the rise of Saudi Arabia's secretive and mercurial new ruler

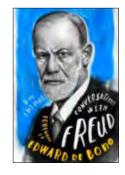
"Revelatory... a vivid portrait of how MBS has altered the kingdom during his half-decade of rule."-The Washington Post

MBS is the untold story of how a mysterious young prince emerged from Saudi Arabia's sprawling royal family to overhaul the economy and society of the richest country in the Middle East-and gather as much power as possible into his own hands. Since his father, King Salman, ascended to the throne in 2015, Mohammed bin Salman has leveraged his influence to restructure the kingdom's economy, loosen its strict Islamic social codes, and confront its enemies around the region, especially Iran. That vision won him fans at home and on Wall Street, in Silicon Valley, in Hollywood, and at the White House, where President Trump embraced the prince as a key player in his own vision for the Middle East. But over time, the sheen of the visionary young reformer has become tarnished, leaving many struggling to determine whether MBS is in fact a rising dictator whose inexperience and rash decisions are destabilizing the world's most volatile region.

Based on years of reporting and hundreds of interviews, MBS reveals the machinations behind the kingdom's catastrophic military intervention in Yemen, the bizarre detention of princes and businessmen in the Riyadh Ritz-Carlton, and the shifting Saudi relationships with Israel and the United States. And finally, it sheds new light on the greatest scandal of the young autocrat's rise: the brutal killing of journalist Jamal Khashoggi by Saudi agents in Istanbul, a crime that shook Saudi Arabia's relationship with Washington and left the world wondering whether MBS could get away with murder.

MBS is a riveting, eye-opening account of how the young prince has wielded vast powers to reshape his kingdom and the world around

Published by Tim Duggan Books



CONVERSATIONS WITH FREUD

By D.M. Thomas Foreword by Edward De Bono

A FICTIONAL DIALOGUE BASED ON BIOGRAPHICAL FACTS

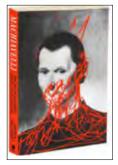
Imagined by one of the world's leading

experts on Freud, this fictionalized conversation presents the essential biography of the father of psychoanalysis.

Sigmund Freud was no stranger to controversy. He shocked many with his revolutionary theories on human development, desires and sexuality, and transformed the way we think about ourselves today.

Starting with a brilliant foreword from renowned psychologist Edward de Bono, the book is then divided into two parts: a biographical essay that provides a concise overview of Freud's life, achievements, theories and controversies; and a Q&A dialogue based on rigorous research and incorporating Freud's actual spoken or written words whenever possible. D.M. Thomas carefully guides us through Freud's life and theories that would lead to him become the father of psychoanalysis. In frank conversation, full of energy and spiced with cynicism and wit, he'll interpret your wildest fantasies and strangest dreams, and even let you in on a few family

Published by Watkins Publishing



MACHIAVELLI

By Patrick Boucheron Translated by Willard Wood

THE ART OF TEACHING PEOPLE WHAT TO FEAR

In a series of poignant vignettes, a preeminent historian makes a compelling case for Machiavelli as an unjustly

maligned figure with valuable political insights that resonate as strongly today as they did in his time.

Whenever a tempestuous period in history begins, Machiavelli is summoned, because he is known as one for philosophizing in dark times. In fact, since his death in 1527, we have never ceased to read him to pull ourselves out of torpors. But what do we really know about this man apart from the term invented by his detractors to refer to that political evil, Machiavellianism?

It was Machiavelli's luck to be disappointed by every statesman he encountered throughout his life—that was why he had to write The Prince. If the book endeavors to dissociate political action from common morality, the question still remains today, not why, but for whom Machiavelli wrote. For princes, or for those who want to resist them? Is the art of governing to take power or to keep it? And what is "the people?" Can they govern themselves? Beyond cynical advice for the powerful, Machiavelli meditates profoundly on the idea of popular sovereignty, because the people know best who oppresses them.

With verve and a delightful erudition, Patrick Boucheron sheds light on the life and works of this unclassifiable visionary, illustrating how we can continue to use him as a guide in times of crisis.

Fly with Royal Jordanian to Brussels and Back!

At least two indirect flights daily

We also provide rail & fly solutions to/from Brussels – Midi station via Schipol & CDG. Enjoy your stay at a city known for its delicacies, history and life. What more could you ask for?

For more information and to reserve, please call us on +32 2 512.70.70, email brutrrj@rj.com or visit your preferred travel agent, our website rj.com or our RJ app.



BY YOUR SIDE IN MONACO FOR MORE THAN 100 YEARS

Discover our solutions in Private Banking, Retail Banking and Corporate Banking.

privatebanking.societegenerale.mc



The present document has been distributed in Monaco by Societe Generale Private Banking (Monaco) S.A.M., located 13/15, bd. des Moulins – 98000 Monaco – Principality of Monaco, governed by the Autorité de Contrôle Prudentiel et de Résolution and the Commission de Contrôle des Activités Financières. The financial products marketed in Monaco can be reserved for qualified investors in accordance with the Law No. 1339 of 07/09/2007 and Sovereign Ordinance No 1.285 of 10/09/2007. Further details are available upon request or on www.privatebanking.societegenerale.mc. © Getty Images.