# The European Standard

Issue 7 3<sup>rd</sup> Term Edition June, 2020.

Students from the 10<sup>th</sup> and 11<sup>th</sup> grades in the European section are honoured to share their riveting articles which move their argument forward on various topics: Enjoy the immersion!



The International language week in October 2020



The European section in German

# Die europäische zeitung



## Section Européenne Allemand à

#### Objectifs:

-Le BAC avec Mention Européenne
-Un plus pour Parcoursup
-Un atout indéniable pour la poursuite d'études dans de grandes écoles

#### Pour qui?:

- -Les Germanistes (LV1 et LV2) entrant au lycée.
  -Curieux, volontaires.
  -Quelque soit le niveau en mathématiques.

#### Sujets abordés :

A travers le prisme des mathématiques seront abordés des thèmes variés : Histoire, Economie, Sciences, Architecture, Arts, Nouvelles Technologies, Sport, Développement durable, Santé...

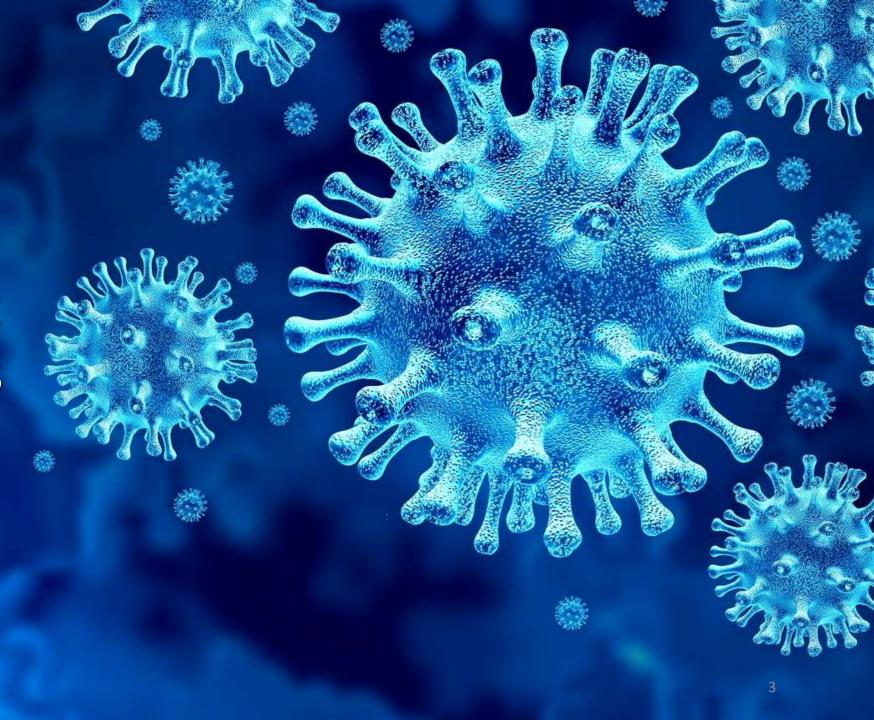
#### Au travers:

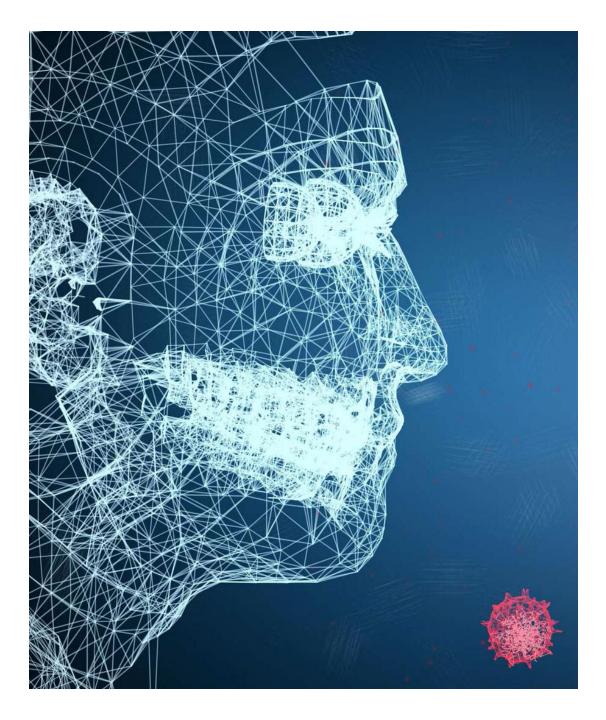
D'exposés, de vidéos, de travaux de groupes, de podcasts, de visites, d'échanges,... et bien d'autres activités de mise en actions...

Mmes BILLING et DOUHERET Professeur d'allemand et de mathématiques

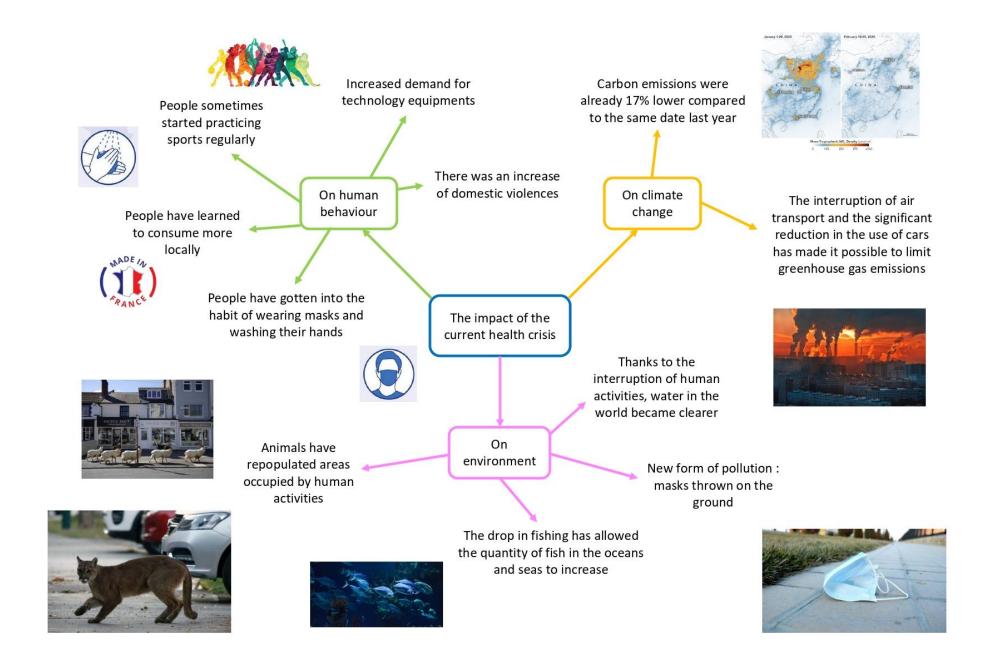
# The Current Health crisis

2<sup>nde</sup> Euro





• The coronavirus is a global pandemic that has caused a lot of deaths and has brought many changes in our daily life. The lockdown that we have lived has lead for instance to a huge decrease of the international economy, to a transformation of the human behaviour, to a pollution decline and much more. We, students of 2nde Euro have explained the diverse consequences of this current health crisis and the quarantine with the help of varied articles and a mind map



## The impact of the current health crisis and the lockdown on human behavior:

During the health crisis due to the coronavirus (as known as COVID-19), several countries decided to initiate a lockdown in order to protect their citizens. Nonetheless, the lockdown had different consequences on human behavior.

Numerous studies have reported that a long period of isolation conducts to psychological consequences, due to a reduction of social contact with friends or family when you are alone. Moreover, the fear of the virus and the thought of losing relatives weaken people even more. This is especially true for the people who are psychologically delicate. In that case, it can lead to insomnia, depression, stress and emotional troubles.

There was an increase in domestic violence. The number of the cases during the lockdown rose by a third during the first week in some European countries. So as to protect the victims, countries had to set up platforms to report this abuse. Nevertheless, it is difficult for the victims to call for help, because the perpetrator is always around. So, some signs have been created to report domestic violence during call in visio conference, like in France, where they used a black spot in the hand. There was also a rise of divorce cases around the world. Due the unusual amount of time spent together with their better half, some people started to see behavioral issues which annoyed them. The accumulation of these attitudes for almost two months, can conduct to divorces. This can explain how the divorce rate has increased by thirty percent in Italy after lockdown.

All around the world people have changed their daily habits at work, at home and in public places .refusing handshakes, kisses on the cheeks and definitely avoid hugging. Instead, gestures are adopted to reduce the risk of being infected with the disease and prevent it from spreading any further.

An obvious message of COVID-19 is that humankind bore an ultimatum. Debating on what to do to regarding large decisions, like holiday plans and where to live or work—is becoming a more anxious process. Many acquisitions are being postponed. All of this will make risk less tolerable.

LAVAL Loris, BENASSIS Nicola-Henri, GHERARDI BOITIERE Oriana, CHITOROG Daniel and KELLER Mathilde

### The new bloom of the environment:

Due to the pandemic, humans have been lockdown and it has been beneficent for the environment.

Due to the reduced usage of cars and the partial stopping of human activity, the pollution has gone down in big cities, especially air and noise pollution.

In addition to pollution, animals are rediscovering the city. For example, in Venice, the water became crystal clear, the fishes could be seen, and they were happy because there were no boats.

In some ports and even in Venice, dolphins have been seen enjoying this new atmosphere.

Hinds and foxes roamed the empty streets of cities, and we can hear the songs of birds.

Air pollution in Paris before and during the lockdown Plants have found new habitats to live. For instance, plants have grown on the beach in Belgium.

In some parks and gardens, there is no more trampling, people who usually lie down, play football, jog...

The lawns are no longer mowed systematically. The flora can express itself freely, especially since we are in spring, a much favorable period.

A negative aspect of confinement is, however, its impact on the time spent on screens: we are all connected to work, study or spend time. Traffic that weighs on the environment: the only viewing of videos online normally represents 1% of all global greenhouse gas emissions.

In conclusion, lockdown has allowed nature to regain its rights despite certain negative effects.



MENIGAUX Gabrielle, BEAUFILS Jeanne and TARAVELLA Brune

### Impact on climate change

Many countries have been confined by the fact that the coronavirus circulates widely and their health systems would have been overwhelmed very quickly if there had been a large flow of patients due to covid-19.

In France, Airparif has investigated since the beginning of containment on the quantity of particulate emissions. It reveals that the air is 20 to 30% less polluted than before the containment measures, with a significant drop in nitrogen emissions of more than 60%. On the other hand, PM2.5 and PM10 particles have not decreased, yet according to the WHO, these particles kill more than 4 million people per year. CO2, a greenhouse gas, has also been reduced.

The Copernicus program (European program for monitoring the Earth) has led to an 80% reduction in road traffic in France, a 95% reduction in air traffic and a 29% reduction in industrial emissions.

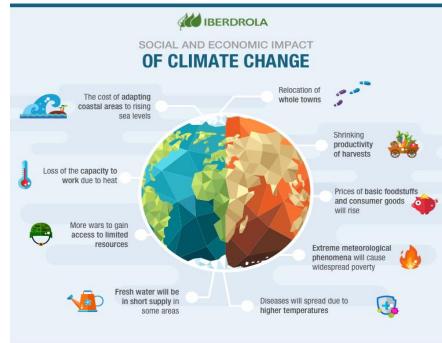
Ineris has set up a map updated daily showing the difference in pollution between a forecast day and the day during containment.

During quarantine, the zoos noticed that the animals were breeding more than usual. This is due to the quietness of the place which gives them less stress. Animals living in semi-liberty also had the chance to benefit from more space for them.

Animals in the wild also took advantage of this quietness with many rare births or endangered animals as reported by The Guardian with the birth of 97 hawksbill turtles on the coasts of Brazil. This species is classified as Critically Endangered because it is hunted for its scales.

Despite all these improvements, the issue isn't solved: the proportion of the greenhouse gas continue to raise, so it won't be enough to stop the global warming. Moreover, new ways to pollute have appeared. For example, we can see even more garbages on the streets: a lot of people are throwing masks on the ground.







### **COVID 19 ON A ATHLETE'S BODY:**

#### The current evolution of the corona



It has been more than 1 month since the end of quarantine in France. So we can expect that after this pandemic, athletes will train and their sport routine will come back to normal.

#### A disease not to be taken lightly

Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.

We will talk about how athletes reacted to the Covid.19 In fact, no one was prepared to train himself indoor. Furthermore, all championships were cancelled so it can be difficult for an athlete to be motivated if some of his targets don't exist anymore. So let's see how the consequences of Covid-19 on the athletes body and the solutions they have found to workout.

Coronaviruses (CoV) are a large family of viruses. COVID-19 is a new strain of coronavirus that causes illness ranging from the common cold to more severe diseases.



#### Consequences and alternative for athletes

The corona virus has had many repercussions on sports and especially on athletes' bodies. Indeed, athletes such as footballers, basketball players and all other team sports have had to be suspended to comply with safety regulations.

Furthemore, training sessions and competitions have been cancelled. But how to keep these athletes in shape, maintain their muscles and keep up their level?

Alternatives are therefore put in place. Indeed, sportsmen and women can continue to practice a sporting activity by making videos on YouTube. In addition, some of them are creating programs and challenges to encourage people to stay in shape. For example, Cristiano Ronaldo created an abdominals challenge on Instagram and Pamela Reif, a you tuber, posted a workout program. on her YouTube channel.

. But in fact, athletes who contracted covid-19 may have to train slowly, because they may have lost abilities like breathing or a lower muscular level in the body. Their bodies are going to need time to reacclimate. For example, Ngapeth, a volleyball player, has been infected by the virus and he says that the corona Virus was a good challenge for a player like him but it was very tiring. Now, some sports have started again, individual sports like for example athletics or tennis. Whereas, team sports did not came back to normal. In fact the major group sports like karate, volleyball or water-polo, have not yet begun.

To conclude we can say that COVID 19 has a lot of consequences for the athletes. Their everyday routine has changed since this virus. Team sports are always prohibited; however individual sports respecting safety precautions can start. The athletes have to change their habits and for some of them, it is way more difficult.

Auriane, Amélie, Angèle, Louise B, Louise C, Mathilde, Lou-Anne

9

# PE Lessons in Lockdown "Champions are made in the off season"

Lockdown. At first, we thought it would be fun but as time went by it started getting boring. Luckily, it was still an occasion to start doing things we usually don't have time for such as sports at home. We were given some exercises by our PE teachers and we had the opportunity to try them out.

Every day, we did 15 to 20 minutes of sports. We were able to try out new exercises and to perfect the technique of others such as pushups or mountain climbers. To do this, we were given links to YouTube videos, documents from the Académie de Créteil and links to different websites. Some of us even participated in live sessions on Instagram from influencers. We worked on our cardio, arms, legs and abs. Each of us organized our day however we wanted so some of us preferred doing sports in the morning before our homework while others would rather do it in the afternoon or before bed.

We then proceeded to fill out our "Workout of the Day Notebook" in which we wrote everything concerning our training that day such as our heart rate, our feelings, the exercises done and the number of reps...

Overall, most of us saw a positive outcome from these lessons: they were great ways to discover new things while staying fit, maintaining a form of routine and to escape from the outside world and from work .

"Since I was at home more often, I developed the bad habit of snacking often so this was an occasion to stay fit."

— Lily B.

"I am usually not a really sporty person but I was able to discover new exercises and experiences."

– Florent H. 1

Here are some of our feelings about these lessons:

"Personally, it was very hard to find the motivation to start sports and to keep it for the entire duration of lockdown."

— Naomi B.

"Sport breaks were an opportunity to escape from the situation that was at hand as well as from the work given by our teachers."

— Chloe Q.T.

- Chioe Q.I.

Lily Beaufils, Shana Berrebi, Naomi Bourgeois, Paul Feldman, Florent Hinh, Chiara Pesce, Chloe Quach-Ta, Estelle Ziebelin

## Covid-19's impacts on Sports in the European Union economy

In the European Union, sports have a great importance in the EU, so we'll see the impacts of Covid-19 on sports tournaments and on the European economy.

In this article will appear all the numbers generated by sports, the revenues of a postponed event and the consequences of Covid-19 on sports in the EU.



#### **Sport in numbers**

Across the European continent, the sport sector represents **3.4% of GDP** and around **15 million jobs** 

In terms of practice, the continent is characterized by its diversity. (While certain sports are practiced in many countries, such as football, basketball, tennis or athletics, others are more specific to certain countries or regions, as for skiing and rugby, especially popular in the British Isles, in France and in Italy.)

In addition, many 28 years-old Europeans, practice an amateur sports activity. According to the European Parliament, almost 60% of the population is affected, while around 700,000 sports clubs exist in the EU.

#### Revenues of a postponed event



UEFA champions League is an annual football competition where the best European club are competing. The Union of European Football Associations is one of the pillars in the sport economy in EU. For instance, last year they achieved a turnover of 4 billion euros!

But the real question is "how?":

TV rights are UEFA's main source of revenue. Indeed, 85% of its revenue came from retransmission rights ...

They are also different ways like the tickets, commercial right, sponsoring .

#### Consequences of Covid-19 on jobs in sports

Out of the 15 million jobs related to sport, **1.3 M are at risk** due to COVID shutdown.

The most impacted ones are fitness and aerobics trainers, the coaches and scouts and finally amusement and recreation attendats.

Moreover, athletes capacities also suffered from this situation, which we'll probably be able to see it in future championships ...



#### European Union plan against economic crisis in sports

The European Commission has presented its plan in reaction of the Covid-19 crisis, but another plan has drawn all the attention, the one suggested by **France and Germany**. Since the beginning of the crisis we have not heard of any **news concerning any help given to the Sports industry**, we can just hope for the best...

# Global sporting events in disarray because of Covid-19

Had you ever seen a football match with robots and loudspeakers for a crowd? Well, now you have ...
From the Tokyo 2020 Olympic Games to the Champions League, many events have been either canceled or postponed, so let's have a closer look on that situation :

#### **Rugby:**

- The men six nations tournament taking place every year in March had to reschedule some games such as: Wales VS Scotland and France VS Ireland
- The women six nations has also been rescheduled because of COVID-19 such as the match in which France was supposed to fight against Scotland on March 7

#### **Athletics:**

As for athletics, lots of events have been postponed or canceled. For instance, the London Marathon is postponed to Nov. 15 when it should have happened on April 26!

The World race walking team championships in Minsk (May 2-3) was even cancelled!

The **NBA** has been suspended since March 11.

Nevertheless, NBA boss Adam Silver could very quickly announce the outright cancellation of the current season. A choice which, without provoking very big financial losses, would allow everyone to concentrate serenely on the preparation of the next season.

#### Soccer:

- Among the five national football competitions 4 were postponed (Bundesliga, Calcio A, Liga Santander ...) and 1 was cancelled (Ligue 1 in France).
  - One of them is the Premier League. It is the most watched championship, so its return has made many people happy.
- Euro 2020 now became Euro 2021
- UEFA champions League is an annual competition where the best European club are competing. From August 7th, the championship will be back, for the pleasure of its fans!

**Roland Garros** will not be cancelled like Wimbledon. Economically speaking, the English have insurance against the pandemic, unlike the French. Roland Garros still generates 80% of the turnover of the French Tennis Federation. Under these conditions, there was only one option: postponement until 20 September.

### Year projects in 1ère Euro: History & Geography

#### In geography

In the middle of our European year, we had to make a video clip illustrating the influence of global cities around the world.



To begin with, we analyzed documents like maps and articles revealing how these cities were established worldwide. To start with, we scrutinized the impact of London. Indeed, we watched a video showing two sides of London: the first one being a description of the prominent and influential Heathrow airport and the second pointing at London slums in which poverty is still present. London has, in fact, a significant heterogeneity. The video put to the fore the airport modernity and the crucial issues concerning the development of slums. We then started making mind maps showcasing aspects of London. For instance, we talked about the economic perspective, which was represented by the Central Business Districts and the Western Crescent. Each student in his respective group had a role in realizing the project. Photographs were reminiscent of the development of London, that is to say, the globalization in which the city was involved. Besides, we later watched a video about Mumbai and opposed both towns. Whereas London only grows a little nowadays, Mumbai's prominent evolution consists of people arriving from rural areas hence terrible conditions and poverty. Nonetheless, Mumbai still develops fast and is trying to modernize its districts to build concrete buildings. Later this year, we started producing the final task. We had to present a global city exhibiting its assets. Some groups chose to make some advertisement videos and other parodies. We did some research about our selection on the Internet, and we picked the details we estimated would have been exciting to explain. We all decided to emphasize the pros and cons of the town we presented. This final task was highly engaging: we could express ourselves while highlighting our hobbies. We learnt countless pieces of information while composing a neat video. Creativity, imagination and culture were qualities we could exercise thanks to this work. Some groups had the opportunity to discover how to film. Some also learnt how to improve for the next time. For instance, some showcased universities and landmarks, whereas others revealed typical food and activities. A storyboard summing up our video was also requisite.

## In History

As you may have seen in the previous European standard, we did a mock trial (cf: "Britain and Europe facing Napoléon; Napoleon Bonaparte on trial: a hero or an enemy of democracy?!"), which helped us start thinking about a role play.

This time, we are going to show you our work in a play



- Event: A play performed by the euro class in September on the American Civil War!
- As part of our Geography and History euro lessons this year, we had the
  opportunity to work on the American civil war with our teachers, Mrs Amid
  and Mr Boschet.
- We first made some research in groups about the main causes of this war and tried to find some key-dates. This conflict, which lasted from 1861 to 1865 was mainly caused by the economic and political tension between the Northern and Southern states. Indeed, while in the North, manufacturing and industry was well established, the South's economy was based on a system of large-scale farming that depended on the labor of black slaves to grow certain crops, especially cotton and tobacco. Following the election of Abraham Lincoln in 1860, public opinion in the cotton states of the South swung in favor of secession and the war began a few months later, on the 12<sup>th</sup> of April 1861. We have become aware of the violence of conflict with many deadly battles and studied the most important events of the war (the Emancipation of Proclamation in 1863, the assassination of Abraham Lincoln, etc.) by watching some documentaries in class. We also made some group presentations in order to work in more depth on one aspect of war, such as the Confederate States of the USA, the transformations after the war in the South, or otherwise the legacy of the Civil War. It was very enriching and helped us a lot to better prepare our theatre project through the context.





After several weeks, we thus started reflecting on our Role Play which would be dealing with living through the American Civil War and Reconstruction. Despite the Corona lockdown, we continued this project via our Forum on Neo and video conferencing classes. Indeed, we had to think about characters, their place in the American society, portray their feelings, and their views on the different events of the War. We also had to map out the structure of our play in order to make the different scenes as realistic as possible. For this, each student had to choose a historical war figure among a list provided to us (slaves, politicians, lawyers, plantation owners, merchants, and authors and journalists). Then, we had to discuss in groups on how the different characters chosen would react on the different events, such as slavery, Nat Turner's Rebellion, or otherwise John Brown's Raid. It was very interesting as it allowed us to put ourselves in the place of each of our characters and it thus gave us more ideas for our play. The next step was of course scripting in group and then repeating and improving our dialogues.

Due to the containment, our representation has been postponed and should be held at school in October. We are looking forward to performing and exhibiting our dramatics skills.

Students from 1ère Euro-His/Geo Serrano Jean-Léo, Fijean Emilie, Premadas Julia and Tran—Kosaka Ayumi

## **OUR LOCKDOWN**

• On March 16, Macron announced the start of the lockdown. At this moment, we have ignored that it was the beginning of a new historical ordeal for everyone. Out of these 66 million citizens in France, the daily life of millions of students would change radically. In fact, in France, the President and his government have decided to close all schools. Thus, something that never happened in the history before: homeschooling for each student of the country. In that sense, we are going to talk about our experience with this peculiar type of school that we hadn't experienced before, our feelings, how we organized ourselves, how our concentration and our motivation evolved and finally how we passed our time outside the "school part": new opportunities and new hobbies...

#### **Concentration and motivation**

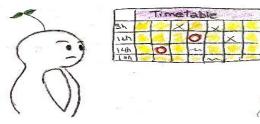
• If staying focused is not always easy at school, it is even harder to stay concentrated at home. First of all, when you are at school the environment incites you to work, as opposed to when you are at home, where you have millions of excuses not to. But this means that we had to take initiatives, which can be as the same time hard and beneficial. Because having the choice to push ourselves or let ourselves completely go is a great experience in a way. It is a chance to discover how much we care about our ambitions and how hard we are ready to fight for them.



#### A new organization

Staying at home for a while means finding a new organization. When we talk about it, we mean a new rhythm, a change of environment, but above all efforts. Indeed, suddenly moving from school to your room can be disruptive for many. So you shouldn't let yourself go, put everything off until the next day or whatever. On the contrary, it is good to structure your day. For instance, why not creating or establishing a fresh timetable? Of course, it is still necessary to respect it... In fact, having a schedule allows us not to let ourselves go, to know

what to do and especially when.



### Time table

Setting specific times for waking up and going to bed was also a good idea. On weekdays, going to bed at 3 a.m. when you have a videoconference the next day or sleeping in until noon is not very wise.

A new timetable already allows us to start off on a good footing. However, the quality you may have discovered and which has been crucial for all of us, students, is autonomy.

Doing your exercises, rereading and learning your lessons, cleaning your room all these tasks require you to be autonomous. To be autonomous is to be able to work without being asked. It also means being able to work without your teacher to help you, to manage on your own. For some of us autonomy is not really our area of expertise. Nonetheless we are truly convinced that this lockdown has allowed us to sketch it out or perfect it.

If the organization may have been experienced as an never ending hardship or an ease during this confinement, the fact remains that the majority of us will come out of this experience enriched.

• At the end, why not maintain this new organization?

	Week day	Weekend
8.00 - 9.00	Work out 🏋	Sceeping zZ
9.00 - 10.00	Shower + Breakfast	Sceeping zZ
10.00 - 11.00	Speciality 🝃	Shower + Breakfust
11.00 - 12.00	Speciality 😫	Face firme
12.00 - 13.00	Speciality 🛢	Cooking 👼
13.00 - 14.00	Lunch	Zonch
14.00 - 15.00	History / English	Baking
15.00 - 16.00	Gearmon 💆	Speciality 🛢
16.00 - 16.30	Snach + Not" To do list"	Speciality 😫
16.30 - 17.00	Speciality 😫	Snach
17.00 - 18.00	Speciality 😫	Meet family/go for a wolly/
18.00 - 19.00	Catching up w/ family and faileds on the phone	Catching up w/ family and faireds on the phone
19.00 - 20.00	Dinner	Dinner
20.00 - 23.00	Achivilies:	Activities:
	Movie, Sewing, Reading	Hovie, Sewing, Reading
23.00 - 23.30	Get heady for bed	Adivities

## New opportunities, new hobbies

- It's no secret that the lockdown that lasted almost 2 months pushed French people to change their habits, or their way of consuming. Indeed, the Parisian routine: subway, work, sleep has been shaken to make way for a rather sedentary lifestyle.
- Since March 16, many supermarkets and other stores have opted for a solution that will please customers, even though it was already there before: the drive. Nevertheless, they were already used to food drives, but the lockdown has given way to all types of drives, DIY, household appliances, or even gardening
- "I've been playing ping pong almost every day, and I've been watching more TV shows. I'm also spending more time on my phone, up to five hours a day." Olivier, 17
- During this unplanned period, many families got together and to pass the time, they bet on board games. "The result: sales quadrupled," describes journalist Viktor Frédéric
- "I took the opportunity to discover new series, cooked new things (fresh pasta, lasagna, "gratin dauphinois" ...), played board games with friends that sometimes lasted several hours." Timothé, 18.
- On another side, people discovered a new way of working from home, communicating with close friends, attending events which were opened to the public like concerts and TV programs or getting family meetings.
- Besides, we had the opportunity to learn languages or to study differently, sometimes with videos, applications or TV shows. We learnt the importance of going to school because it was sometimes difficult to understand lessons that weren't taught to us physically.
- We could also discover new habits like reading, cooking, working out or doing DIYs even if our screen time was higher than usual.

Students from 1ère Euro His /Geo: Iris T, Océane W, Julia P, Noé D, Clea R, Chloé T, Hugo S, Priscille T, Tidjan S, Marine M,

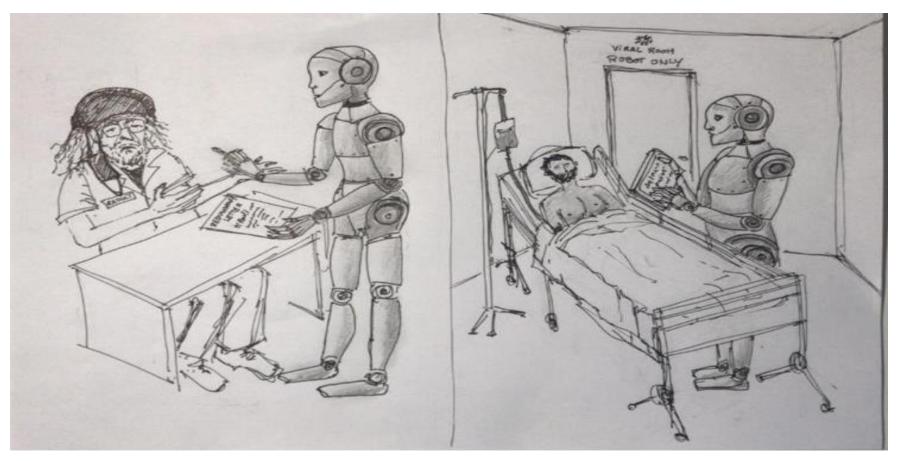








## 1 ère Euro – Physics and Chemistry Term 3 PROJECT :THE CONTROVERSIAL PLACE OF AI IN OUR SOCIETY



Al in Health Crisis Ema Jones, Côme Videlaine, Maeva Agostino

#### Al: Our Future?



Al is part of those things you won't forget; Al is an incredible invention that could help humans to improve their living conditions in the future. However, is that truly realistic? You may wonder why this issue has become so controversial nowadays in our society. Let us tell you this subject is neither white nor black, and you will soon be able to understand why. We are sure you have heard about Al through medical or environmental applications, and more generally through science.

To begin with, the medical field has encountered the hugest grows in AI. In fact, with their algorithms, robots can easily diagnose disease even if they usually need concrete examples to learn from: that is what we call deep learning. For instance, indicators of diabetic retinopathy in eye images may be found by AI and cancers based on CT scans may be as well detected. But the most amazing is that AI will cure cancers in the future! We are almost sure you think we might be totally mad, but it will be our new reality one day...

For the moment, we have chemical treatments that kill our infected cells but also the good ones. To avoid that problem, AI nanotechnology will travel through our venous system and destroy only our affected cells. Furthermore, in the environmental field the margins of progress are still significant, but the results are here!

As an example, we can mention the smart grids that can use artificial intelligence strategies to regulate and control parts of neighborhood power grid in the city, to deliver exactly the amount of electricity needed. Those smart grids are a better solution compared to the use of conventional power grids that can be wasteful due to unplanned power distribution.

In addition, AI has some benefits in the security field, as it avoids human mistake such as the self driven cars which are one the most stunning inventions of our decade, even if some people still don't agree with that... In fact, those cars could reduce the risk of accidents due to alcohol or to a lack of attention on the road.

We demonstrated that robots could bring advantages in humans' lives. To figure out if robots are yet a benefit for humans, we are going to show that it might also generate some dangers... On the other hand, self driven cars could be dangerous. In fact, let's put ourselves in some background. You are in a real urge: you need to get to the airport quickly. So you ask the taxi to get you there as quickly as possible, however "quickly" may have different meanings in that situation.

First of all, it can mean that you don't want to take any extra turns or make unnecessary stops, which is your case here. But if the machine takes that statement too literally, in that case quickly would mean fast and it could create havoc. Your self-driven taxi is now risking your life. We could take different examples to show you the dangerosity of the Al. In fact, what if robots become more intelligent than humans? What will happen? You could tell that we are crazy, that they are safe and that all is under control...

One should still have in mind this possibility though, even if it is a small one. I'm sure you all know the robot named Sophia. She is a social humanoid robot developed by the Hong Kong-based company Hanson Robotics.

Human gestures and facial expressions have been programmed by the engineers and can now be imitated by the machine. She is able to answer some questions and to make simple conversations on predefined topics. Moreover she is "designed to get smarter over time": it is called "deep learning". After having studied the abilities of this robot we can even wonder if one day they will control humans. Furthermore if they are smart enough why couldn't robots like Sophia replace humans! Don't tell it doesn't scare you that a robot can have a nationality or a sense of humor!

Let's take a precise example of someone who studied the question a lot during his entire life. Isaac Asimov was a brilliant Russian and American biochemist who wrote more than 500 books! It includes several famous series of science fiction novels (*Foundation*, *Robot Series* and *Galactic Empire* are the most famous). He put loads of scientific knowledge in them and his goal was to make understandable to everyone.

The novel that is interesting for us concerning robots and AI is *I, Robot*. It is the first book of the series *Robot series*. In this novel Asimov is approaching the idea of Artificial Intelligence and trying to answer the question that we are asking ourselves: could robots become dangerous?

The story takes place in the future, in a world where humans have travelled a lot through universe and are able to make very sophisticated and intelligent robots. Some of them are used as help for science: to make difficult calculations or to find the better solution to a problem.

Others are made look like humans and to keep company to them. At the beginning of the story Asimov presents, through his characters, the three laws of robotics. Their aim is to make sure that humans keep control on their creations.

"First Law

A robot may not injure a human being or, through inaction, allow a human being to come to harm.

Second Law

A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

Third Law

A robot must protect its own existence as long as such protection does not conflict with the First or Second Law."

The goal is that robots don't access to singularity, which is in robotics the moment when a robot realizes that he is existing (that is what we call consciousness for human beings) and that he, as he is has better capacities than his creators, could disobey to them or even control them.

Asimov is writing a story that is divided in several different short stories. In everyone of them he is showing a problem that is caused by these laws. For instance it can be a situation where the AI is confronted to a problem that is impossible to solve while following the rules. It can be an unclear order from humans, rules contradicting each others, etc... Each time, the characters Gregory Powell et Michael Donovan have to find where does the problem come from and how to solve it. It is every time ingeniously invented and explained for the reader. By sharing this, Asimov is destroying the myth of robots taking power by showing us that every "bug" has its solutions and that the laws may cause problems but will always protect us from the worse situations that we imagined.

He is also making robotics more accessible and understandable to everyone so that we can all participate in the debate while knowing what we are dealing with.

Moreover, as we know that we are going to be confronted to AI more and more often in the future, shouldn't we try to be involved to make sure we can be a minimum independent when using them? You don't want to become as your grandparents who have to ask for help to use a phone, do you?

It is really interesting to see how Asimov predicted what we would be dealing with half a century later: indeed this book was written in 1950! The rules that he created are now used in robotics. It is now time to see his work not only as fiction but as a kind of prediction. Will the situation become exactly the same as in the book? Only the future will tell...

The burning issue is now to weigh the pros and cons of having robots everywhere in our everyday life. Robots seem to become more and more "humanized": you might have seen that Sophia is already named by the pronoun "she" instead of the usual "it" for the objects. It should although be borne in mind that humans still have the creativity and the capacities to think about how to build robots and guide them. That is why this issue has to be taken unconditionally carefully and seriously.

It is now up to everyone to discuss and argue about how much should Robots be in our life even though we don't decide on a large scale. Don't forget although that everyone has the right to raise its voice about what might be considered as dangerous for the humankind, while staying well-informed and aware to fake news! What about if the run to scientific innovations in robotic was made in order to show the power and the capacities of the organization that invents the machine, and not only to improve human's' life standards? It is the initial goal of building robots: if they are exactly similar to us, why building them instead of keeping real human beings? Indeed here are enough people on this planet not to create artificial ones! What and where is the real point so?

Maelle Guille des Buttes, Erin Lamandé, Anaïs Reysset, Palmyre Lartigot, Juliette Valot

### Is AI really a progress for mankind?

#### **Benefits for Health**

One of the great benefits of AI is improved care. Indeed, AI makes it possible to increase the precision of the recommendations of applications and connected objects.

For example, IBM has announced partnerships to integrate their AI with many connected objects. AI also makes it possible to develop intelligent medical objects that facilitate diagnostics.

Two French startups have developed a smart watch that fights against sleep apnea. The AI analyzes the data collected to better understand the sleep patterns of the user.

Finally, in the fight against the Covid-19 epidemic, a lot of data has been collected which has enabled AI to anticipate possible scenarios.

#### A Giant Leap for Industry?

Al in the industry has a lot of benefits and has also a lot of drawbacks. First, Al is always learning and adapting to the situation it faces, it considers all possibilities. By this, Al can counter all sudden problems, and it is faster, more productive, more precise and more reliable than human intervention, and most importantly: it's cheaper. In fact, it permits to the worker to focus on one hard task while Al is making monotone and repetitive works, it lightens his job. Al may seem complicated to use, but nowadays every company can use one.

Even if it's a huge advantage to the industry, AI has drawbacks. To begin, as you can see it does a better work than humans in sectors like factories with chain working. So, it creates massive unemployment. Furthermore, a bad use of AI can affect a firm, with wrong analysis, or unfinished products. To conclude, AI is a new revolution to the industry, but it is limited, it cannot do all human works. There must always be a human intervention.

#### **The Spread of Autonomous Weapons**

Stephen Hawking said: "Success in creating AI will be the biggest event in the history of our civilization. But it can also be the last, unless we learn how to avoid the risks. Alongside the benefits, the AI will bring dangers, like powerful autonomous weapons, or new ways for the few to oppress the many."

In 2015, Hawking and numerous world-renowned AI experts such as Steve Wosniak and Elon Musk called for a ban on artificially intelligent autonomous weapons. They want to ban weapon that can "select and engage targets without human intervention." The letter they published described autonomous weapons as "the third revolution in warfare, after gunpowder and nuclear arms," and warned us about an enormous potential for devastation and the beginning of a new arms race.

The letter said: "They will become ubiquitous and cheap for all significant military powers to mass-produce. It will only be a matter of time until they appear on the black market and in the hands of terrorists, dictators wishing to better control their populace, warlords wishing to perpetrate ethnic cleansing, etc. Autonomous weapons are ideal for tasks such as assassinations, destabilizing nations, subduing populations and selectively killing a particular ethnic group."

#### **Facial recognition**

The facial recognition is another problem of the IA evolution. First of all, in a democracy like France, or United States, it could lead to some racism because of the unjustified interpellations to colored people.

Moreover, the classification of citizens may be considered as a racist act. In a dictatorship like China, the consequences of this new technology could be devastating for citizen's freedom. For instance, the freedom of moving around is reduced to nothing. The government can know where you are at every moment.

Théo Deschler, Alexandre Gouraud, Malo Fouquet, Paul Guilmin

## The controversial place of Artificial Intelligence in our everyday life

The notion of "Artificial Intelligence" appears in 1950 with Alan Turing. We must distinguish two types of AI: the weak and the strong. The strong one is the one which is feared, it refers to a machine able to have an intelligent behaviour, to model abstract ideas, but also to experience a sense of real consciousness, "real feelings" and an "understanding of one's own reasoning". Today, this type of AI doesn't really exist, but we can find weak AI, or narrow AI, quite easily in our everyday life. In fact, the weak AI is a pragmatic engineering approach: the robot act like it is intelligent, but the reality is that they only seem to be as they only obey to programs.

The weak AI is helpful nowadays, some fields of application are the motor industry with the autonomous vehicles (drones and self-driving cars), the medicine (medical diagnosis, robots to operate), the security (image recognition in photographs, face ID...) or in everyday life with for instance search engines (Google search), online assistants (Siri, Google home...), targeting online advertisements (helps to show a better content on social medias), it can be a game opponent (chess, go...) or help to cook (cooking robot). The advantages of the weak Artificial Intelligence or not even questionable, we already need them more than we think.

Concerning the strong AI, we can only think of what it will be. As a matter of fact, any of them have ever been created but a lot of specialists are working on it. However, some AI that learn by themselves have already been created.

OpenAI observed AI playing hide and seek. At the beginning, it was a chaos, but slowly the hiders developed a strategy, and the seekers found a "counter-attack" (in a few million games). Finally, they developed a total of 6 strategies, and some of them were absolutely not expected (AI used the way the map was coded).

This experiment shows that creating strong AI should be possible on the future, even though it's not for today! The strong AI may even, one day, become more intelligent than human and could may be create a better robot than the ones made by humans.

To sum up, we have to be aware of dangers of AI in the future, but this new technology will give us the opportunity to improve our knowledge and capacities. These robots would be of a great help in various sectors like medicine (biotechnology) as well as in everyday life.

Marie Lapoulvailarie, Clément Richer, Orphé Rabesaotra, Laurène Chesnel

#### The Future of Mankind with Al

"The major challenge of the sixties is to maintain full employment at a time when automation is replacing men", said President Kennedy, in 1961. In the 1980s, the advent of personal computers spurred "computerphobia" with many fearing computers would replace them. Today, we are not wondering anymore if AI will change the way we live; but we are wondering how and when. Would the replacement of the human workforce by AI allow humanity to progress or would it rather lead to instability? We will be exploring both optimistic and pessimistic views of how artificial intelligence could impact our future workforce.

First of all, one of the major benefits of automation in the workplace is the reduced risk of high-stakes occupations. Indeed, especially in the medical environment, a robot does not feel the tiredness nor stress and can thus be more effective and more accurate. this would greatly reduce the risk of mistakes. Furthermore, this benefit may also apply to other jobs, including those related to justice. For instance, if some members of the police or judges were AI, the penalties would necessarily be applied justly, since a robot would simply follow the laws and would not have the opportunity to question itself or get personally involved.

Moreover, increased automation would reduce dangerous or tiring tasks. Police, firefighters, military personnel and people working in the building often face danger and could be replaced in the future by AI. That would reduce the number of individuals dying or being hurt when they are working. Also, some occupations are tiring or considered degrading by those who practice them. This is the case, for example, for maintenance occupations or workers working in factories. These jobs are increasingly being replaced by robots and this could increase in the coming years. One would then hope that these workers would find works they like better and in which they would be more fulfilled.

Finally, increasing the number of AI would also increase the benefit of the firms that would use it. Androids do not need to be paid and can work continuously and perform a large number of tasks without being tired. It is also conceivable that this reduction in jobs might increase the salaries of those remaining in the company.

Let's wonder what could possibly happen in a more pessimistic perspective. In the past, more jobs were indeed created than destroyed by technology. Workers were able to reskill and move into other industries instead. But the past is not an accurate predictor of the future. An important distinction between now and the past is the speed of technological progress. Al progress does not advance linearly, but exponentially. Consider Moore's Law: the number of transistors on an integrated circuit doubles roughly every two years. If we consider now the past as a good predictor of the future; some jobs will disappear, but other jobs will be created to replace them. The question is, what kind of jobs are we dealing with? It would deal with jobs that require middle-skills. this leaves high-skill jobs that require high levels of training and education. But will the people who lost their middle-skilled jobs be able to move into these high-skill roles instead? Obviously not without qualification. What about moving into low-skill jobs? As a result, the number of these jobs is unlikely to increase, particularly because the middle-class loses jobs and stops spending money on food service, gardening, home health...

The transition could be very painful. The rate of unemployment would significantly increase and would engender, not surprisingly, negative impacts on society: less volunteerism, higher crime, and drug abuse are all correlated. A future in which millions of people are incapable of getting a job because they simply don't have the necessary skills will be our reality if we don't adequately prepare and anticipate.

To put in a nutshell, the future of humanity with AI is pretty murky. Doubts remain about the pros and cons of such a seemingly inevitable transformation. The humankind will have to find a point of balance to make the most of AI while limiting its disadvantages. Will we be able to stay in control?

As a technology pioneer, Elon Musk is an entrepeneur very smart. So when Musk <u>tweeted</u> that artificial intelligence competition with Russia and China would be the "most likely cause" of World War III, it got people pretty worked up. However, the controversy over AI isn't new for Musk or society at large.

**Artificial Intelligence: Terrifying For some ...** 

- We were worried about dangers of creating an artificial being long before AI became a science. The term "robot" comes from a play written in 1920 by Karel Čapek called R.U.R which significate Rossum's Universal Robots. The play starts in a factory that manufactures synthetic people to serve as workers. The robots are initially created without human emotions, but as more human robots are developed, they became an army of sentient robots.
- It's an idea we have seen so many times that it's become a cliché.
- Nevertheless it's not just a science fiction trope, some modern scientists have similar worries about artificial intelligence. Stephen Hawking <a href="https://has.said">has.said</a> that "the rise of powerful AI will be either the best, or the worst thing, ever to happen to humanity. We do not yet know which."

#### Innovative for others ...

• However, AI is such a wonderful innovation in our daily life... Thanks to it, we could do more things everyday without being worried about the human factor (fatigue, anxiety, etc.). It simplifies most of the activities we're doing today manually, and some of the tech industry runners are seeing this as the solution for our future problems. In fact, AI learns from itself, with its experience, problems it has known in the past (as if it was a human brain). The big advantage is the precision, and the low rate of failures that can happen. If we take the example of aviation, imagine millions of people travelling in the sky without pilots! It may sound crazy or scary at the beginning, but 99 percent of the crashes happen because of a human error, and not a system malfunction. All of this thanks to AI. That's why we need to weigh the pros and cons before saying loudly that AI is a dangerous invention...

#### In a Nutshell ...

• To sum up artificial intelligence takes a big place in our everyday life and should even take a bigger place in a near future. We can conclude that AI splits people in two opposite teams. The first one thinks that AI is the future and we need to believe in it in order to improve our lives. Whereas the other one sees AI as in movies as a real danger. They see it like an untrusworthy and underestimate invention. For the moment there has never been any problem and AI is trustful. But we may need to be attentive for the next years.