

Editor's Note

Editor's Note:

Dear reader,

In this edition, we try to highlight some of the most important issues our world is currently facing. From the rise of populism to the deterioration of the Earth, humankind is approaching its own implosion.

It may seem that millions of years of evolution and thousands of years of development have not been enough to help us set our priorities in order. If we continue on letting our economic interests eclipse our own survival, the window to take action will vanish in front of our eyes.

For the time being, Rostra Economica advices you, our reader, to get informed about the latest issues weakening our survival as a specie, since it will be us, the youth of today, who can take action tomorrow.



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The Age that Shaped the Netherlands

Modern capitalism was largely influenced by the way the Dutch Republic did trade during the 17th century. How did such a small country become the richest and most powerful of Western Europe?

Mathematical Analysis

Ever since Isaac Newton saw an apple fall right in front of him, he began to model our world with mathematical parameters. Today, mathematics serves as a model to explain almost anything surrounding our reality.

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The New Era of HealthCare

Artifical Intelligence has now been included to the healthcare industry. What are the benefits and what is stopping us from developing even faster?

Our History

Rostra Economica was founded in May 1953 as the new magazine of the faculty study association (SEF) of the faculty of economics at the University of Amsterdam. Its formal purpose was to provide current information and to publish, mostly, academic articles. However, the magazine also served as a means for students to reflect on the faculty. Through contributions by professors it connected the academic community at the faculty. Over time, Rostra Economica became an important part of the SEF, and a burden on the budget of the association. At one point, Rostra Economica represented over 90% of its budget.

To make the magazine financially sustainable, economics students of the University of Amsterdam and the VU University Amsterdam decided to cooperate. In 1965, at its 52nd edition, the magazine was renamed Rostra Economica Amstelodamensis, now published for both universities in Amsterdam. The marriage did not last long. In 1968, the magazine was discontinued after an argument between the SEF and the editorial board on the future cooperation with the VU. An attempt to start over was funded by the University of Amsterdam. The magazine, now called Rostra, started publishing again in 1970. It was a short magazine, hardly four pages long, and not at all appealing to students at the faculty. It seemed the magazine had lost its right of existence.

The new editorial board of 1972 did not agree with that notion. With a new layout and renewed enthusiasm to be more than an announcement bulletin for the SEF, the magazine gained new life. Topics were increasingly less academic and focused more on current affairs in economics and at the university. In 1981, the magazine celebrated its 100th edition. The magazine was again named Rostra Economica in 1986, a name it has retained until now. Under its new (and old) name, the magazine pushed on towards its 200th edition in 1994 and its 50th birthday in 2003. The magazine featured more and more interviews with key figures in economics and politics, from Nout Wellink to Mark Rutte.

Although the history of Rostra Economica has been vibrant to say the least, the magazine has gone through some of its biggest changes in the last ten years. In 2010, Rostra Economica was published in English for the first time. Recent changes in the media landscape did not pass by for Rostra Economica unnoticed either. When the magazine arrived at its 300th edition in 2014, it was clear that the future of the magazine is online. In 2015, Rostra Economica launched its new website, providing more content at a higher frequency. It is by no means the final destination of the magazine, as it continues to adapt to any challenges that the future brings.

Today, we're celebrating our 66th anniversary and just as we saw the 102nd edition, we're looking forward to our 100th anniversary too.

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Do you want to write for Rostra yourself?

We will be recruiting during this academic year (May & June) and also during the beginning of next year. Stay tuned to our Facebook & Instagram platforms for more details.

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Playing Tag

This month brought another postponed Brexit date. With a failed deal and still no particular plan, Theresa May seems to struggle to keep her position until 31st of October, the new deadline. New pressures hint at the destabilized political climate. The seeking of a new Scottish Referendum by 2021 and the violence in Londonderry are signs that people are no longer patient and sensed the weakness. With the UK now participating at the 2019 European Parliament elections, many hope that the whole ordeal will come to an end. After all, the talks of a new Brexit referendum are not completely off the table yet.

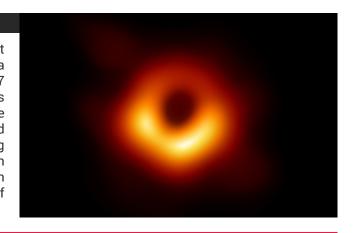


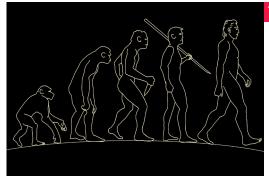
Change of Seasons in Turkey After 17 Years

On the 1st of April, Turkish provencial election results were officially announced. The results were unique as Tayyip Erdogan's party AKP lost 6 biggest cities to the opposition, including Istanbul and the capital Ankara, for the first time in 17 years. The results put pressure on AKP in that scale for the first time as criticiques regarding economic mismanagement and restriction of freedom are emerging more undauntedly than ever. Even if the public is curious about in what way Erdogan will digest his first absolute defeat, there is one thing certain; seasons are changing in Turkey.

Proof of the Existence of Black Holes

During the last month, a group of scientists working on the Event Horizon Telescope project (EHT) produced the first real image of a black hole. The black hole is located in the galaxy called Messier 87 which, although lying 55 million light years away from the Earth, is large enough to be observed. The EHT collected data to produce the image using a network of eight differently located telescopes, and the data was interpreted using an algorithm developed by a young computer scientist Katie Bouman. The image is a breakthrough in the understanding of black holes, whose existence has long been difficult to prove. It is particularly important for testing the theory of general relativity.





The Human Family Tree is Still Growing

Some researchers have found In the Philippines remains of what was a yet unknown hominin species; scientists named this new member of its tree family: Homo luzonensis. This discovery reached in Callao Cave includes a thigh bone, several teeth, two foot bonesand two hand bones. This is the second human relative found in the Southeast Asia (the first one was the Homo floresiensis); however, a great deal of differences has been pointed out with respect to the other hominid species. The main relevance of such discovery is that it sheds some lights on ancient migrations through Africa and Asia.



International Efforts for Notre Dame

The evening of 15th April, a massive fire extended in the interior of the 850-year-old cathedral of Notre Dame (Paris) and destroyed the church's windows, roof and spire. President Emmanuel Macron called for contributions and said he would draw on experts to restore the cathedral. It was only a day after that a number of companies and business tycoons had pledged up to €600m between them to help with reconstruction efforts. Donations keep rising every day both from worshippers and high-powered magnates. Group Kering (parent company of brands such as Gucci, Saint Laurent or Balenciaga), LVMH Moët Hennessy Louis Vuitton, L'Oréal Cosmetics or Total SA are some of the French tycoons that have contributed with generous amounts to the cause. On an international level, companies such as Apple, The Walt Disney Company or KKR have pledged to do their share too. It is still unclear how much it will cost to repair the cathedral, but according to the French Culture Minister, the normal annual budget for restoring national monuments is about €300 million euros.

Truth Seeker or Attention Seeker

On last 11th April, WikiLeaks co-founder Julian Assange was arrested at the Ecuadorian Embassy in London. After seven years, the Ecuadorian Government revoked Assange's asylum status due to repeated violations to international conventions and daily-life etiquettes, according to the President of Ecuador. The opinion public is divided over the arrest. While the UK government defend it asserting that no-one is above the law, supporters claim it is a concern to free speech.

In 2006, Wikileaks released a footage showing US soldiers shooting dead 18 civilians from a helicopter in Iraq. Julian Assange faces a possible extradition to the United States for charges related to one of the largest ever leaks of government secrets.



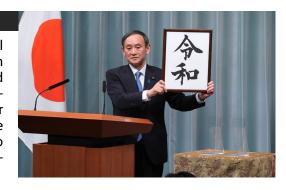
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The Day SpaceX Wrote History

On the 12.04.2019, SpaceX launched today's s most powerful rocket, and the second most powerful one in history - The Falcon Heavy. Elon Musk, the founder of the company and lead designer of the rocket, said himself that in the event of a successful launch, it is game over for any other operator in the field of heavy-rockets. Watched by more than half a million people, the company successfully launched the rocket and, most importantly, was able to safely land the boosters back on earth. This proved the company's ability to keep cost of one launch as low as \$90 million, as compared to the other offers which are around \$435 million per launch.

New Era, Similar Morals

On April 1st, it was officially announced that the emperor of Japan, Akihito, will abdicate. He is the first Japanese monarch to renounce the throne in more than 200 years. His eldest son, Naruhito, inherits Japanes sacred treasures at the end of this month and afterwards prime minister Shinzo Abe will welcome his accession on behalf of the Japanese people. From then on the Reiwa era, Japanese for beautiful harmony, will commence following up the Heisei era under Akihito. The latter will be remembered by a modernisation of the imperial household. Akihito created a more symbolic role for himself after the ruling of his father during wartimes. This is a tendency likely to be carried forward by Naruhito.



Easter Bombings in Sri Lanka

On Easter Sunday, a series of simultaneous suicide bombings across Sri Lanka, killed at least 350 people and injured more than 500 others. The bombs targeted Christian churches, which were delivering easter services at the time, and five-star luxury hotels were at least 36 foreigners lost their lives. This is the deadliest co-ordinated acts of terrorism Sri Lanka has ever suffered, as well as the first directed there Christian minority. The Islamic state has already claimed responsibility for the bombings. Ranil Wickremesinghe, the country's prime minister acknowledged that there was a prior warning of the attacks, as result attention has begun to focus on the government's failure to prevent this catastrophe.

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The Decentralized Viking State

hen somebody thinks about the Viking Expansion, they are likely to imagine iron-cuffed warriors sailing towards Northumbria and raiding monasteries. While the warriors on board a *snekkja* (longships) certainly did that, a *knaar* (cargo ship), sailing alongside them, was about to revive trade around Europe and shape history for centuries to come.

On board a *knaar*, a community of sailors is stuck at sea for months. They left from a small village of the coast of Norway and are heading towards the trading city of Dublin. There they will make the first stop of the journey; a voyage across Europe's rivers and seas that could even take them to Constantinople. Those people were neither rich nor fighters. However, they are the ones driving the Nordic expansion.

The exact reason why Nordics set sail is still debated. While economic reasons such as lack of land in Scandinavia and the recovery of Europe from the fall of the Roman empire are certainly at the basis of the migration, political factors should not be ignored. The Norse people were independent and usually self-sustainable. The society, which was largely influenced by a religion which did not mix with authority, was sceptical of an all-powerful leader. The rising power of particular clans and attempts of centralisation might have driven them away to unexplored lands where no authority was present. Iceland, which Vikings first discovered by mistake, became a much-needed refuge for those having problems with obeying authority and in need of more land for farming.

Whilst the 9th century Norway did not provide much writing records about their societal and economic organisation, 13th-century Icelandic people did precisely the opposite. It is likely that the decentralised society that reigned in Iceland for more than two centuries has been developed from ancient Norwegian culture.

Each small community had a chieftain and a non-written rule of law, which was to be fully memorised by the *logsogumadr* (law-speaker). Highly important state matters that could not be resolved at the community level were taken to the general assembly, the Althing. All the property was privately owned,

and the lands were divided between clan captains which constructed the pagan worship temples, referred to as godis. However, no free peasant was forced to follow a certain *godi*. People could shift at any point from one landowner to another. This freedom helped to keep only the deserving ones as leaders of the community and maintained a stable power balance.

The medieval Icelandic people was an open economy, with trade playing a central role to the stability of the country. Around the year 1000, the increased connection with the European peoples, Iceland faced higher pressure to convert to Christianity. While many of the inhabitants and chieftains were still pagans, some had already turned to the new religion. The conversion was made and the tithe, 10% of the income church tax, was introduced in 1096. However, pagan religions were still accepted.

The aforementioned conversion could be considered the beginning of the end for the decentralised Icelandic society. With chieftains exempt from the tax, money and power accumulated between a handful of families. After almost 290 years of stability, Iceland would be reintegrated into Norway in 1262.

It is often the case that people get caught up in war stories and forget that history is as much about ordinary people as it is about heroes. The footprint left by the ordinary traders from the Viking Expansion and Iceland is still very present today.

Talks of decentralization have been given more attention lately, due to the development of blockchain. Many companies advertise a movement towards a decentralised economy facilitated by the new technology. Looking back at the Norse decentralised way of living and their open economy provides interesting real-life examples of how it worked in practice.

Ana Popovici

I'm Ana and I get extremely worked up about anything related to European politics. Also, I can watch any chick flick without cringing once and I am guilty of making things way too complicated.





he Netherlands has trade in its DNA. It has a trade surplus of around ten percent of its GDP, ranking fifth worldwide in terms of volume. Not bad for such a small country, but not surprising given Dutch economic history. During the 17th century, called the Dutch Golden Age, the Dutch Republic (which approximately spanned modern-day the Netherlands) was the world's main economic power. It shaped the Netherlands and the age of colonialism for good and may even have laid the groundworks for capitalism as we know it.

The Netherlands: an accident

The Netherlands were not a single entity until the late 1500's. Before that, the northern Low Countries were merely a collection of small states that spoke a somewhat similar language. Flemish cities like Bruges and Ghent had developed to industrial and mercantile powerhouses during the Middle Ages, specializing in the production of textiles. Antwerp developed to be the bridge between Portuguese and Spanish merchants bringing goods from their overseas colonies and the Low Countries and Germany. This strategic position in European trade made Antwerp the most important and prosperous city in the Low Countries, but this could not last forever.

In 1555, the Low Countries were inherited by the Spanish king Philip II. The new king initiated some unpopular policies, like the fierce persecution of Protestants, new taxes and centralization of power. This led to an 80-year long civil war which, at first, was merely fought more autonomy and less persecution. Once it was clear that the Spanish king would not concede, the rebels searched for another monarch to rule them, at which they failed. There was no other option but to become a republic, hence the Dutch Republic was pronounced in 1588.

An 80-year long war sounds destructive, but it was exactly what the northern Low Countries needed to flourish. Antwerp, which was initially on the side of the rebels, fell to the

Spanish in 1585. The waterway leading from the North Sea to Antwerp, which was in Dutch hands, was closed off. This meant Antwerp was no longer able to host the Low Countries' trade, making Amsterdam its logical successor.

Amsterdam had developed in defiance of the major trade monopoly of its time: the Hanseatic League. This trade league of mainly North German and Scandinavian cities controlled trade in the Baltic Sea until the late middle ages. However, once Amsterdam set up its Baltic trade, it did not join the Hansa. A choice that later paid out, as the Hanseatic League crumbled, and Amsterdam grew out as the major player in the Baltic Sea. Despite general perception, not spice trade but the trade in grain, wood and salt from the Baltic Sea-region was the main source of income for the Dutch Republic, often called the 'mother trade'. It was not until later, in the early 1600's, that Amsterdam also grew out as the primary European hub for goods from Asia and the Americas.

Birth ground for Capitalism?

The Dutch Republic was special for its prevalent mercantile culture. It had its own parliament where representatives of the seven provinces decided over the faith of trade, foreign policy and the ongoing war. By far the most powerful group was the urban merchant class from Holland and Zeeland, the Regenten, who were mainly worried about their economic interests.

But the mercantile culture does not mean the Dutch Republic was 'capitalist'. Competition, for instance, was only allowed when it suited the Regenten. The Dutch East India Company (VOC), which was tasked with building and maintaining the spice trade networks in East Asia, had a government-backed monopoly. While the VOC was a private company, it hosted its own army which it used to wage wars against their competitors and the indigenous population.

The VOC forced Indonesian island states to exclusively trade with them. In their book Why Nations Fail, Daron Acemoglu and James A. Robinson refer to this as one of the main reasons many Indonesian island kingdoms halted in their development after the Dutch arrival. The infrastructure for the spice trade had been established well before the Europeans arrived. Indonesians sold their products to Arab, Indian, Ottoman or Chinese merchants, and the Indonesian peninsula hosted some well-developed and prosperous states. However, after having established a presence on the Indonesian peninsula, the VOC forced these states to exclusively trade with them. This meant the proceeds of trade for the Indonesians were lowered. A lot of Indonesian states even destroyed all valuable crops in order to avoid the Dutch violent retaliation.

Hence, it was not the capitalist spirit of the Dutch that brought them their wealth in the East Indies, but their willingness to violently exploit other nations. The way trade was conducted these days had nothing to do with Ricardo's comparative advantages. The dominant theory of trade was that of mercantilism, where trade is a stone-cold zero-sum game. This invites politics into trade, as national governments would do anything to get their merchants the edge over other merchants and reap the incomes.



Portrait of Dutch textile merchants, painting by Rembrandt van Rijn

Even the well-known tolerance of the Dutch Republic was largely economically motivated. For instance, Amsterdam had a thriving Jewish community which, unlike Catholics, could openly profess its faith. Sephardic Jews, fleeing Spanish persecution, took not only capital but also knowledge and contacts with them, and were therefore warmly welcomed. Another example is how critical writers who could not publish their works at home, came to the Dutch Republic to print their writings, which led to a massive Dutch printing industry.

Still, the Dutch Republic did develop some capitalist features. Especially the financial innovation stands out. The VOC was the second privately traded company in the world, which meant it could raise more capital than its competitors. It did so via the stock market, which was first developed in the Dutch Republic. Not long after, derivatives, indices and even short selling were introduced. This financial infrastructure allowed companies to gather capital quickly which was a major factor in the Dutch economic success. It also allowed a lot of people who were not involved in trade to still profit from it, via stock ownership.

Financial and technical innovation allowed the Dutch to set up a huge trade fleet which, during the 1600's, was larger than all competing fleets combined. To support this, a large part of the Dutch economy was geared towards trade. Cities like Leiden and Haarlem and the Zaan region (known for the Zaanse Schans) were the industrial centers, which produced mainly for the exports. This wealth allowed for great developments in science and art, and incomes in the Dutch Republic were about twice as high as in the rest of Western Europe.



The Dutch fleet steals the confiscates of the British fleet after winning the second Anglo-Dutch war in 1667, painting by Willem van der Velde.

The end of the Golden Age

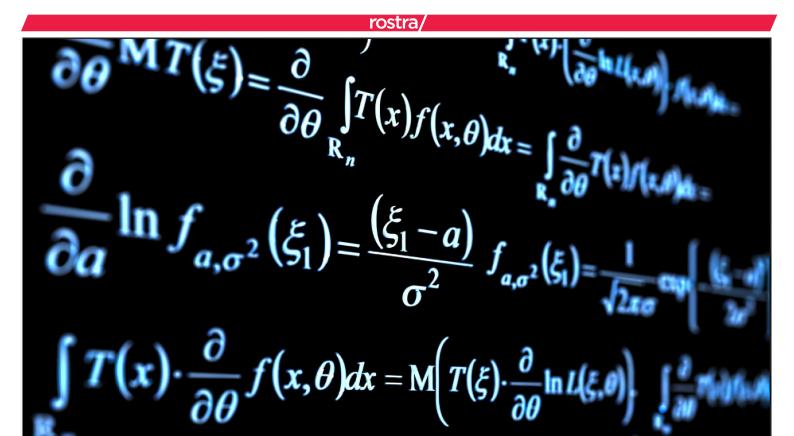
The Dutch Golden Age could take place due to the strategic position the Dutch had in European trade. However, once the British and French started imposing stricter trade restrictions on the Dutch in the late 1600's, trade became more difficult. In 1672, they invaded the Dutch Republic, wrecking the Dutch economy and effectively ending the Dutch Golden Age. The mercantilism that enabled the Dutch Golden Age had now ended it.

Still the impact of the Dutch Golden Age on the Netherlands and the rest of the world is large. It created the Dutch colonial empire, hosted great artists such as Rembrandt and Vermeer and shaped modern financial markets. The Dutch Golden Age shows what a small country is capable of under the right circumstances. It also shows that trade being used as a political tool is no novelty, and that those who practice mercantilism often lose in the end.

Joos Akkerman

Hi, I'm Joos. I am a third-year economics student. I write about politics, history and economics.





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Mathematical Analysis: A Journey Towards Our Understanding of the World

ccording to the legend, Sir Isaac Newton, while lying next to a tree at Trinity College (at Cambridge), saw an apple fall, leading him to formulate the gravitation theo ry. Although this anecdote has been useful to teach in most schools, it is highly believed to be untrue. What is not arguable, nevertheless, is that Newton became an important figure in the history of science and mathematics. His main contribution was to use mathematics to explain nature and to be one of the inventors of calculus. Still, Newton's influence transcends physics.

Almost two centuries later Léon Walras, influenced by his father (who was an amateur economist) and Isaac Newton, proposed a new way of explaining economic theory. He planned to do the same thing that had been done in physics; hence, he published his book *Éléments d'économie politique pure*, in which he proposed mathematical models to explain market interaction and formalized what was going to be thereafter the most used (and simple) model in economics: the supply-demand model.

A mathematical model is defined as a simplified version of reality expressed in terms of mathematical objects, such as equations, functions, algebraic expressions, and so on. That is usually useful to build up theories, which are usually distant from what is observed in the real world. David Romer, a well-known economist from the University of California, states that "the purpose of a model is not to be realistic. After all, we already possess a model that is completely realistic – the world itself. The problem with that 'model' is that it is too complicated to understand".

Walras' contribution could be considered a turning point for economic science. It is credited to him the field of mathematical

economics and what is nowadays known as the general equilibrium theory (including the Walrasian Equilibrium). Regarding the former, Irvin Fisher concludes that "the economic world is a misty region. The first explorers used unaided vision. Mathematics is the lantern by which what before was dimly visible now looms up in the firm, bold outlines. The old phantasmagoria disappear. We see better. We also see further". The same way it has worked in economics, mathematical modelling has been useful in many disciplines and has contributed to understanding how the world is.

To see an example in epidemiology, let us consider an application on vaccinations. For this type of model, mathematicians usually use the so-called differential equations. In brief, this consists in examining the rate at which a set of variables grow (in this example, the diseases, the population and the people that has been vaccinated) and how they behave over time. These models led to several important conclusions. Let us look at some of them.

In epidemiology, community immunity is defined as a form of indirect protection from infectious diseases. This happens when a large number of the population is immune to a disease, providing protection to those that are not immune. To reach this state, there exists a cutoff of people that must be vaccinated. If less people are immunized, then the disease spreads through some of the population. If no one is immunized, the contagious spreads through all the population. However, if the number of persons vaccinated is at least at the cutoff, the disease is contained, and it can be eliminated among this population. When this happens in all populations, we say that the disease has been eradicated.

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As one can imagine, the context at which each one of these scenarios occurs is given according to the way the model is constructed. This allows us to draw some important conclusions. Currently, some diseases are considered to be eradicated, such as smallpox and nearly polio. The problem is that sometimes new outbreaks emerge even when eradication had happened. Why? Because of ignorance and prejudices, some people decide not to be vaccinated and hence the collective immunity weakens and the disease spreads again. There is a recent famous case of a teenager in the United States, Ethan Linderberger, who claims that his mother believed in conspiracy theories about vaccines. For this reason, he was never vaccinated until reaching the legal age.

As one can see, this type of applications is useful for policy making and helps society to develop even further. It is interesting to see how theoretical models can give an intuition on how things actually happen. Mathematical modeling stopped being just classrooms exercises to help students to develop logical reasoning. It became a powerful tool that is behind sciences and is undoubtedly one of the greatest collective achievements constructed by mankind through history.

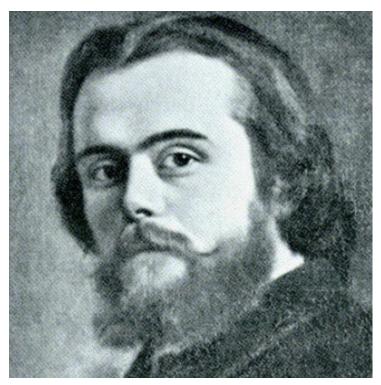
As another example, Gregory Mankiw, David Romer and David Weil tested the theoretical predictions of one of the most influential economic growth models, proposed by Robert Solow (Nobel prize winner of 1987). They predicted, using the variables that appear in the model, the long run growth rates of diverse countries. Their result showed how a simple model could be very consistent with empirical evidence. However, it also led the authors to propose further inspection on how tax policies, education policies and political stability could explain cross-countries differences in growth (this is, why is that some countries have higher economic growth rates) and level of economic well-being.

One could also come up with applications on several different disciplines that found in mathematical theory a powerful and useful way of coming closer in their understanding of the world. Robert Lucas, 1995 Nobel Prize winner, once concluded about economic theory "I came to the position that mathematical analysis is not one of many ways of doing economic theory: it is the only way. Economic theory is mathematical analysis. Everything else is just pictures and talk".

Epilogue

There are those who already thought about the mathematics of zombie attacks. An example is the paper published by Philip Munz, Ioan Hudea, Joe Imad and Robert Smith, entitled "When Zombies Attack!: Mathematical Modelling of an Outbreak of Zombie Infection". It is widely known (by movies, tv series or fiction novels) that zombies zombify normal humans by biting them. The idea of this research was therefore to model zombie's invasion using biological assumptions (the same way that propagation of diseases is modelled) using differential equations (similarly as in the vaccination case). Although the solution of such a model is quite complex one can give a shallow explanation of how it works.

Zombification propagates according to the rate at which the zombies convert the human people into zombies. The latter can counter this process by killing the formers or by reproducing fast enough. The authors find a solution in which eradication might occur and they show that "... only quick, aggressive attacks can stave off the doomsday scenario: the collapse of society as zombies overtake us all". Apart from being a 'recreational' application, the techniques to solve this model are useful for solving some other more useful applications. The same principles that appear to regulate this model apply as well in the analysis of cancer, malaria and many other diseases.



Leon Walras 1834-1910

Juan Contreras

I am a student of master's in economics (track in Development Economics) passionate about science, mathematics and literature.



The Dilemma of Growth

he environment not only provides the substance and space for economic activity but also is the container of castoff produced by human activity. Economic growth not only improves people's life quality, but also brings several environmental problems, such as air pollution, water pollution, soil degradation, desertification, and so on.

The traditional path to development

The issues of development and poverty reduction have been on the focal point of debate through most of world history. In the beginning, the 'third world' made use of decolonisation in an attempt to bring about economic and social progress, yet it failed. At the same time, European and North American states experienced unprecedented increases in productivity due to the industrial revolution. Over time, economic disparities among the poor and the rich widened.

Development is commonly seen as a synonymous with economic growth and is also used as the answer to reducing poverty. Governments, therefore, seek the stimulation of economic growth on the basis of gross domestic product (GDP) per capita.

According to the traditional view, development follows a linear path as is reflected in western countries, from pre-industrial, agricultural based economies to industrial and mass consumption societies. To find the best effective way for economic stimulation, developed economies have followed a market-oriented approach. In the case of developing countries, they are to follow the same framework and turn into 'developed' states sooner or later. Basically, in order to achieve development, the poor should imitate the rich.

The dilemma and global common goods

Especially developing countries suffer from the tension between development and environmental protection. But, among the many frustrations, they come up against, perhaps none looms larger than the worst development outcomes. Poverty, inequality, and deprivation, are often found in those countries with the greatest natural resource endowments.

For instance, the vast majority of rainforest is located in developing countries, which face the moral duty to protect and guarantee the quality of life in the present and in the future. In a further step, all countries are affected by economic activities that take place in other countries making environmental processes of an intrinsically transnational character. Meaningful progress on the environmental agenda, therefore, must be at an international and global scale. Also, global public goods such as the air, sources of water, and rainforests are of interest to the entire globe. These goods are non-exclusive, in essence, no one can be excluded from their benefits or avoid the negative effect in case of absence of the goods. Reasons why the public demand for environmental protection has intensified. Global population, governments, and



NGO's urge developing countries to mitigate pollution due to the clear increases in their production along with the negaive externalities.

However, poor states also contain the vast majority of the world's poor population. Given the development framework, governments are to reduce or eradicate poverty as fast as possible. Who would like to live in deprivation conditions a little more? Fossil fuels are still the cheapest, most reliable energy resources available for low-middle income states. Hence, when a developing country wants to build a functional economic system and end poverty, it turns to fossil fuels.

These economies are dependent on its natural resources, exporting raw materials for example. Countries using low developed technology can consume more resources and pollute more which is typically a feature of poor states. Developing countries currently cannot sustain themselves, let alone grow, without relying heavily on fossil fuels. Furthermore, the weather fluctuations and consequences of climate change are already impacting food growth in many of these countries.

The right to development is recognized by the United Nations since 1986. Following the right, governments of poor states defend the extraction of natural resources with the argument that rich countries have already gone through it to grow. They pose why they should sacrifice growth to tackle climate change, a problem caused mainly by rich countries. In this sense, countries with more possibilities must encourage and facilitate development and eradicate poverty. Some alternatives have been provided, wealthier countries develop cheaper forms of energy, and developing countries can take advantage of the new technologies. Another alternative, powerful economies should provide monetary incentives to developing ones to absent from natural resources exploitation and use capital investment in social programmes like free education or health.

Nowadays, aspects like national interests, conflicts among developed and developing states or ideological obstacles impede effective international cooperation. Yet, countries should not forget that we are in the same boat.

Achic Lema

Hey! I am Achic a second-year student in the Economics Faculty. An indigenous woman from Ecuador moved by inequality and injustice. I believe that education and the equality of opportunities have the power to change the status quo of the vulnerable. I enjoy writing, drawing and dancing.



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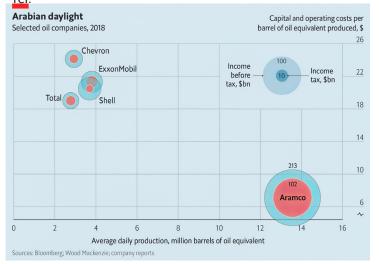
The Dawn of the New Oil Era?

he attitude towards oil products is changing. Share-holders and stakeholders of oil companies demand carbon footprint to be reduced and sustainability to be increased. The public opinion has a great positive impact on oil company activities. But is it enough to transform the oil industry completely?

On April 1st 2019, Saudi Aramco, an oil concern that is currently wholly owned by the government of Saudi Arabia, published its first bond prospectus. The 469-page bond prospectus revealed a staggering \$111bn net income last year, more than the five major oil companies — Royal Dutch Shell, ExxonMobil, Chevron, Total and British Petroleum — combined.

There are two important factors that determine the profits of oil companies, namely, cost per barrel and daily oil production. Aramco has a world leading position in both. At its largest fields, the price per barrel is as low as \$3 and at mature fields, it reaches \$10 per barrel. Aramco's main rivals spend from \$19 to \$24 per barrel (see chart). Moreover, Aramco produces roughly four times as much oil as any other oil company (see chart).

Yet Aramco also bears an unusual burden. In 2018 it paid \$102bn in income tax to Saudi Arabia. To put that into perspective, that is more than the profits of Apple and Samsung (the most profitable listed firms in the world) combined. The income tax is on top of royalties of \$56bn and a dividend of \$58bn. These expenses limit Aramco's profitability. It earns only \$26 a barrel, less than Shell's \$38 or Total's \$31 per barrel.



Aramco's history and corporate culture is strongly tied to the West, particularly America. Aramco carries the DNA of its former shareholders, the predecessors of Chevron and ExxonMobil. Politically, Saudi Arabia, currently Aramco's only shareholder, is an American ally. Yet it appears that the relationship between the markets is changing. Lately America has been producing more of its own oil. In April 2014 Aramco provided more than a fifth of America's crude imports. In January 2018, its share was less than a tenth.



Aramco's bond prospectus also gave an insight in the company's view on the future of the oil industry. It projects that oil consumption is expected to continue to grow until 2030 with an average of just 0.5 % a year. This is a sharp slowdown from the average annual growth of 0.9 % over 2000 - 2017. Improvements in fuel efficiency and the rise of electric vehicles are expected to put a brake on oil demand growth, but not to stop it.

The decrease in American's consumption of Aramco produced oil and the focus on sustainable energy by its Western competitors seem to put Aramco into a tight position. Nevertheless, Aramco seems better prepared for a less fossil-hungry future than its rivals.

Aramco is becoming a huge player in Asia, where much of the future demand for petroleum products is expected to come from. It hopes to soon become one of the world's largest producers of liquefied natural gas. The company also predicts that the consumption of oil-made chemicals will grow faster than the demand for refined products. This "downstream" ambition was brought to life by accruing 70% of Sabic, Saudi Arabia's biggest petrochemicals company. This makes Aramco the world's leading downstream concern, as well as its largest upstream one.

There is cold logic to the strategy. The collapse in oil prices in 2014-2016 reminded the industry that refining and chemicals are a useful hedge against volatility. Moreover, with the world burning fewer hydrocarbons, Aramco's plan is to shift to petrochemical production and by doing so keeping the world dependent on its petroleum products.

The threat of climate change is a significant risk for Saudi Aramco. Policies to reduce greenhouse gas emissions could substantially decrease the scope of production and the profitability of the company. However, the Aramco bond prospectus highlights that there is a way climate policies could potentially even help. The characteristics of Saudi reserves and the company's production techniques mean that it has relatively low greenhouse gas emissions per barrel of oil produced. This means that pollution policies can cut down the company rivals' production and thus, make Aramco better off. Therefore, the question arises: What is the new oil era and who will benefit from it?

Nastasiia Sokil

Dear readers, I am a master student in Quantitative Finance. Being a part of Rostra means having an opportunity to express my interest and opinion in finance, international relations, and psychology.





No Man is Illegal

egative rhetoric has for long been a weapon used against immigrants. Labelling as "illegal" those who arrive to a country in a way that disrespects its law is one such example. Those who use that adjective to describe a person who has illegally come to a Western country do not find anything wrong in it: if someone's migration is against the law, (s)he migrated illegally, and (s)he is also an illegal migrant. Logical, right?

Focusing on the EU context, however, the legal glossary of the European Commission does not contain a definition of "illegal migrant(ion)". Instead, the alternative terms that it contains are the "undocumented" or "irregular migrant(ion)"; a third-country national present on the territory of a Schengen State who does not fulfil, or no longer fulfils, the conditions of entry (...) or other conditions for entry, stay or residence in that EU Member State. If the EU and various other political institutions consciously avoid using the adjective "illegal", why is it still so popular? Is its avoidance just a matter of excessive political correctness or a counteract to the rhetoric of anti immigrants?

Let's explain why calling this group of migrants illegal is wrong. The word "illegal" means "contrary to or forbidden by law". An act, such as selling heroine or committing fraud, can be illegal and a person committing such an act bears its consequences through receiving legal punishment. However, a person cannot be illegal and people who do something illegally are generally never called that way. A football player who does not pay his taxes is never called an illegal player, nor is a sexual offender called an illegal member of a society. If you were caught with marijuana in another European country, you

could receive a high fine or even be imprisoned. Would that make you illegal? If you do not think so, why should then a person acting contrary to immigration law be called illegal? Why should their identity be reduced to "illegal"?

One can counter argue that the examples above and the case of irregular immigrants are not the same thing because the irregular migrants' mere presence in that country is against the law; they do not have a citizenship or a valid residence permit. However, I do not find the lack of residence permit a legitimate justification for the label "illegal", and neither does the EU legislation. Moreover, according to the presumption of innocence, a legal principle stating that one is considered innocent until proven guilty, not even the acts should be called illegal until an appropriate legal authority confirms the wrongdoing. This might sound far fetched in the context of migration as, if we trust the news and political authorities, illegal crossings of the EU borders are undeniable. Still, the presumption of innocence warns that we should be careful with labelling people. Not only a person cannot be illegal, but their acts should also not be called as such until sufficient legal proofs exist for that.

I am far from promoting any illegal behaviour, including migration against the EU law. However, naming someone illegal is not only insulting, but brings negative associations with it as well. For many, the word "illegal" has a connotation with "criminal". Anti immigrant commentators on social media openly point out that we should focus on the word "illegal" and accept that they are criminals because their presence in a country is against the law. One does not need to hold an extremely opposing position towards irregular immigrants to (un)consciously start thinking that illegal immigrants are more prone to criminal behaviour because they have already done something against the law. This belief is not supported

by official data. On the contrary, it could even be the case that irregular migrants are more careful about abiding the law in order to prevent being detected and deported. However, although their illegal behaviour is in most cases restricted to a lack of residentship or citizenship, they are still depicted as threats to a country's security, its traditions, norms and values.

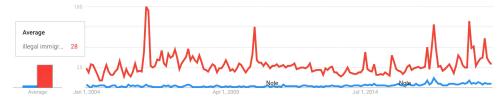
In all these discussions about the right phrasing, one can easily get detached from how these people have actually become undocumented or irregular migrants, and how much situations they have gone through were under their control. Focusing on the EU, many of these people do not have documents, such as a birth certificate or a passport, required to get a residence permit or asylum. In numerous cases, such as in the African country Eritrea, passports are not regularly issued to citizens and leaving the country often means secretly escaping from it. Others may have been denied asylum and do not have anywhere to go. A home country may not want to accept them, or the country itself is unsafe to go back to.

In addition, the current EU regulation called the "Dublin III Regulation" defines that an immigrant from a third-country needs to request asylum in the first European country of arrival. If the request is rejected, they may be allowed to apply again later, but still in the same country. Since fingerprints of all fingers are taken in the country of arrival and entered into a central database called the Eurodac, the EU has strict control over the asylum requests. This all serves to say that this group often migrates against the law because either the law is too restrictive, or they come from chaotic countries. It is not necessarily an excuse for acting against the law, but rather a call for empathy.

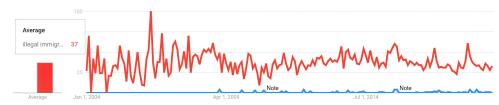
Although this article is focused on the EU, the debate about the language of illegal immigration is more present in the United States. Online sources on the issue largely cover the immigration to the U.S., so it seems that the negative rhetoric towards undocumented or irregular immigrants is less prevalent in Europe. When it comes to Google search trends, however, it seems like the U.S. has seen more improvement regarding the transition from "illegal" to "undocumented" (irregular and unauthorized are even less popular than undocumented). Various American newspapers have decided to stop using the terms "illegal" and "illegal migrant", such as the Huffington Post in 2008, and later the AP and the L.A. Times. As seen on the graph below, this improvement is unfortunately still small. It is even worse in case of Europe. The graph depicting the trends in the UK shows the dominant popularity of "illegal" instead of "undocumented" immigrant. Taking Brexit into account, this may not come as a surprise, but other European countries are even worse in this regard. Searches are limited to language barriers but this would be a more important factor if searches consisting of the term "illegal" were unpopular as well.

If we accept that the graphs validly represent the popularity of different terms, it seems like the public is not aware of the consequences of migration rhetoric or/and there are more useful online sources that use the term "illegal". Neither of that is positive considering the rise of populism and anti immigration views in both the EU and the U.S. As Robert Stribley argued in his great article "The Language of Illegal Immigration", "illegal" has become so popular because "it is a slur that comes with an excuse. It's the word it's safe to use when you can't use those more traditional pejorative terms. It bears the patina of respectability and supposed judicial accuracy, but still operates to reduce a group of human beings to an 'other' or an enemy."

If we are to build a more harmonious and peaceful society, we should take care of the words we use. It does not mean that political correctness should be our main guide in life, but words do hurt and it is our own responsibility to use them carefully.



The United States of America. The red line represents the trend of search "illegal immigrant", while the blue one represents the trend of search "undocumented immigrant".



The United Kingdom. The red line represents the trend of search "illegal immigrant", while the blue one represents the trend of search "undocumented immigrant".

Katja Komazec

I come from Croatia and I am a second-year PPLE student majoring in Economics & Business. I have wide interests, but I am generally interested in different ways that people try to make the world a fairer and more sustainable place to live in.





oliticians tend to follow certain strategies in order to win political campaigns. Theoretical games and advanced statistical regressions are often performed prior to the elections in order to forecast the results. A very frequent game used by political administrations to predict outcomes is the Hotelling Game, which advises to positionate the candidate rhetoric in a very central position relative to competitors in order to acquire more than half of the votes. However, in recent decades there has been a frequent deviation from this strategy, and it seems to be working for the majority of candidates. Although not necessarily considered a negative tendency, populism must be closely watched out since it could easily polarize societies and yield detrimental social consequences.

Populism is often misunderstood to follow one single ideology, whether this is left or right; however, populism is more of a strategy rather than an ideology, and it is quickly gaining ground among the political spheres of Western countries. The use of the term "populism" began in 1890, but it was not frequently mentioned until the 1950's when various journalists and academics began to apply it more broadly. According to Cass Mudde (2004), a political scientist at the University of Georgia, populism will often include a nationalist agenda that invites the masses to end the current order by polarizing societies between pure people versus the elite. Mudde states a distinction between populism and pluralism. The latter accepts the legitimacy of many different groups, while the former is a merely installed framework that could be attached to any social ideology (e.g. socialism, nationalism, racism, etc).

Jan-Werner Muller, a political scientist from Princeton University, has stated that populism may have more than one divergence. For instance, the discrepancy between exclusive and inclusive populism. The former tends to stigmatize certain minority groups (usually migrants since they have no right to vote) and it is currently found mostly in Europe and North America (e.g. Donald Trump, Marine Le Penn, Boris Johnson, etc.). Inclusive populism follows the opposite approach. It demands that politics include the rights of stigmatized groups. This type of populism is currently mostly found in Latin America (Lopez Obrador, Evo Morales, Hugo Chavez, etc.). Although these types of populism may be classified by geographical areas, they are not exclusive to these. For example, Podemos (a recently created political party in Spain) is said to be inclusive, while Jair Bolsonaro is an exclusive populist who serves as the current president of Brazil. Populist leaders position themselves as messiahs that arise

Populist leaders position themselves as messiahs that arise from within the population, someone who understands

the people and their needs. They tend to advocate the urgent need for structural change by creating a sense of crisis, whether it is true or not (e.g. Let's Make America Great Again). Although always being a homegrown phenomenon, populism carries a high degree of responsiveness toward foreign influence. Javier Corrales, a political scientist from Amherst College explains that populism expands when confronted with opposite, antagonistic populism from abroad. For example, exclusive populist Donald J. Trump boosted Lopez Obrador inclusive candidacy by constantly attacking Mexico. Also, inclusive populist Hugo Chavez in Venezuela, gave rise to exclusive populist Álvaro Uribe in Colombia.

Besides the social implications of the recent rise in populism, there seems to be an economic danger regarding the independency of central banks. The simultaneous junction of populism and nationalism are making monetary policy political again. Brexit supporters frequently question the legitimacy and competence of the Bank of England. In addition to his threat to fire the current chairman of the Fed, Donald Trump has requested a drop in interest rates. Also, India's government has appointed an insider as chief of their central bank who has slashed rates prior to an election. Also, the presidency of the ECB (along with many other top positions) is up for grabs. This comes at the same time of a change in leadership of the European Commission and the European Council, a once in-40-years overlap according to The Economist. As a result, a political struggle may emerge as to who controls Europe's institutions.

Although populism does not necessarily yield negative consequences, it is advised to keep an eye on its leaders in order to avoid polarizations and economic uncertainty. Populism can be misleading. The constant talk of extreme economic restructuring may alert investors and global markets about a potential economic default, hence leading to a massive capital outflow and a consequent and undesired devaluation of the domestic currency. As a result, the cost of imports becomes higher, while the cost of exports decreases; therefore creating a boost in inflation that worsens the local population's standard of living.

In the past few years, several politicians have followed a populist approach to gain the sympathy of the people. The Americas and Europe are two focal geographical points (but not exclusive to) where populism can be found today. For the remainder of this article, a few examples of the American Hemisphere will be mentioned, along with the positive and negative effects that these leaders have yielded among their populations.

Donald John Trump (Exclusive - USA):



Arguably, the best-known populist to hold a political position today. His presidential campaign arose by creating a sense of crisis and a constant mention of the phrase: "the American Dream is dead". He blamed immigrants and minorities for the "fouls" of the country and promised that, if elected, he would install stronger immigration controls in order "to keep rapists, drug-dealers and terrorists out of America". Trump positioned himself as a man of change that would Make America Great Again, implying that the US is no longer great, but certainly was before.

Today, Mr. Trump has come forward on some of his candidacy policies. For instance, he cut corporate tax as he promised, withdrew the US from the TPP agreements after calling it a "disaster", he called on Canadian and Mexican authorities to review the NAFTA agreements and also imposed a travel ban from nine Muslim countries. However, his focus, rather than practical, has been symbolic. Some of his most representative policies are the withdrawal of the US from the Paris agreements, the transportation of the US embassy in Israel from Tel Aviv to Jerusalem, the roll back of certain aspects of the Obama-imposed deal with Cuba and the constant struggle to build a wall at the US Southern border.

Jair Messias Bolsonaro (Exclusive - Brazil):



Bolsonaro or "The Trump of the Tropic", is an army veteran who follows an extreme right-wing approach. He has relaxed weapons restrictions and even mentioned that his focus will solely be on economic growth without regard for the environment. More than once has Bolsonaro attacked the most vulnerable sectors of the population (e.g. LGBT, women, indigenous groups, etc.).

Bolsonaro's policies are also strongly related to safety. He has advised to castrate rapists, restore capital punishment and use torture as a legitimate safety practice.

Although frequently being matched to Donald Trump, Bolsonaro has also being compared to the current president of The Philippines; Rodrigo Duterte, who is known to follow a violent approach against drug promotion and consumption.

Andres Manuel Lopez Obrador (Inclusive - Mexico):



After running for president (and losing) twice, AMLO (as they call it in Mexico) made it to the presidential chair in 2018. His popular approach has always been aimed to the marginalized stratums and the poor states of the south (from where he is from). AMLO's rhetoric always carried a belligerent tone against the elite and the ongoing corruption that, according to him, is the mother of all messes in Mexico. He portrayed

himself as the savior of the poor and a man of the people, someone you could easily trust. He promised to install various social programs in the country in order to help the most needed ones.

Lopez Obrador promised to increase government spending without increasing taxes. When asked about the origins of the extra funds, he said that once corruption was eradicated, the financial means obtained would be "more than enough" to carry out his plans for the country. So far, he has dismantled more than one previously installed social program in order to restore it without corruption. He halted construction of a new airport in Mexico City that he said also involved huge deals of corruption.

Hugo Chavez Frias (Inclusive – Venezuela):



Chavez was a great influencer of the "Pink Tide", which marks the beginning of a series of left-wing governments all over Latin America; such as Rafael Correa in Ecuador, Lula da Silva in Brazil, Daniel Ortega in Nicaragua, Evo Morales in Bolivia, etc. After failing to gain power during a military uprising, Chavez won the presidency through democratic elections. His rhetoric was focused on the lowest stratums and on his anti-imperialistic approach. Chavez demanded full sovereignty for Latin America and a type of isolation from the United States whom, in his opinion, had done more wrong than good to these countries.

Chavez constantly attributes Venezuela's decay to the traditional political parties. He created a massive polarization in the country that culminated in the actual fight between supporters and opponents of his regime. Although being highly criticized for the increase in insecurity, Chavez managed to reduce poverty from 50% to 25% throughout his years in office

The previous examples mention some of the promises, achievements and failures of a few populist leaders in The American Hemisphere. As proven, populism is not about one single ideology, but more about a strategy that could easily be attached to any social or political movement. Populism tends to disrupt societies and polarize populations; also, as can be seen among the mentioned examples, populism is an excellent platform to launch dictatorial regimes, therefore threatening the foundations of democracy and the Rule of Law. For this and for other reasons, populism must be closely watched and criticized by both the local and international media.

Alfonso Garza

Recently graduated from BSc Economics Minored in Latin American Studies Interested in human geography, history and literature. Fascinated by the study of human displacement (i.e. migration)



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or decades now, Gross Domestic Product (GDP) has been widely used to track a nation's well-being. However, it is becoming increasingly clear that economic growth may not induce a rise in individual happiness. Particularly, GDP does not always add value to the quality of our environment – often, as nations become richer, environmental factors such as surrounding green spaces or air quality are posed on serious threat. In the last few years, however, there has been a growing interest in cities in addressing some of the major sustainability challenges. Whether it is to improve their image or because of a genuine concern for the quality of their environment and citizen's wellbeing, several projects have caught the world's attention in these last few months. Take air pollution, with examples such as China's Nanjing Vertical Forest or Oslo's plans to halve its emissions by 2020. However, is this all enough?

Air Pollution, An Expensive Health Problem

While the broader environmental and societal benefits of lowering cities' air pollution are self-evident, the question remains still whether it is also economically advantageous for them to do so. Because air pollution in cities has generally been linked to their respective levels of industrialization, it may be suggested that more polluted air is the price that cities, especially those in emerging economies, have to pay in exchange for improved economic activities. So how does it pay for cities to tackle major sustainability challenges?

Air pollution is an extended problem. Since 1990, global emissions of carbon dioxide have increased by almost 50%. At its current state, air pollution is causing, every year, 7 million deaths worldwide, almost double than cigarette smoking does. Furthermore, each life is being shortened by an aver-

age of 2 years because of the air we breathe. According to a 2016 World Bank Report, more than \$5.11 trillion is lost in welfare each year owing to premature mortality caused by exposure to different pollutants. In the 15 countries that emit the most greenhouse gas emissions, the health impacts of air pollution are estimated to cost more than 4% of their GDP. Furthermore, a recent study from the World Economic Forum affirms that it does pay for cities to be "green" for attracting Foreign Direct Investment (FDI) inflows. In their analysis, the researchers found that a significant improvement of air quality in a city like Shanghai could lead to up to a \$1 billion increase in FDI inflows every year.

On December 2018, the 24th United Nations Climate Change Conference (COP24) highlighted why health considerations are critical to the advancement of climate action and outlined key recommendations for policy makers. "The true cost of climate change is felt in our hospitals and in our lungs", words of Dr Maria Neira, World Health Organisation Director of Public Health, Environmental and Social Determinants of Health. She justified her argument explaining how reducing pollution levels by switching to cleaner and more sustainable choices for energy supply, transport and food systems would pay for itself. In fact, the negative consequences that air pollution brings along are diverse. Polluted air has been linked to many health problems, such as Alzheimer disease, heart attacks, strokes or diabetes. Furthermore, many studies have found a significant association between the polluted air a pregnant woman breathes in and the effect it has on the fetus. Toxic air increases the risk of low birth weight and premature births, and it is believed to be linked to birth defects. The first direct evidence of pollution particles in mothers' placentas has also been revealed. "When health is taken into account, climate change mitigation is an opportunity, not a cost", said Neira.

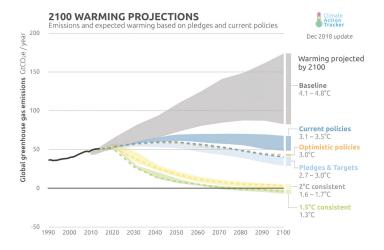
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Global warming can only be mitigated only with global action. So does air pollution. Solutions are possible, yet hard—they require little new technology but involve action across many areas, and they are usually neither politically palatable nor very profitable to implement. It is for this reason that global agreements on pollution emission have to be established and monitored. One of the most sounded global initiatives to tackle air pollution is the Paris Agreement.

Global action and The Paris Agreement

The Paris Agreement is a global agreement established in 2015, in the 21st yearly session of the Conference of the Parties (COP21). As for today, 195 State Members have signed the agreement, and 185 have become party to it. The long-term goal of this agreement is to keep the increase in global average temperature to well below 2 °C above pre-industrial levels while pursuing means to limit the increase to 1.5°C. Meeting the goals of the Paris Agreement to combat climate change could save about a million lives a year worldwide by 2050 through reductions in air pollution alone. But what, in my opinion, makes the Paris Agreement special is that – for the first time – almost all countries have agreed on a universal, legally binding global climate deal.

However, as optimistic as the initiative commenced, most countries have not been able to keep up with their goals. The Climate Action Tracker, an independent scientific analysis of worldwide climate action, has been tracking the progress towards the globally agreed aim of holding global warming below 2°C. The map below reveals that few countries have achieved the goal.



As seen, only two countries in the world have consistent policies with the Paris Agreement 1.5°C limit: Morocco and the Gambia. No country is considered to be a "role model" (i.e. ambitious beyond Paris Agreement 1.5°C goal).

The Climate Action Tracker also shows the projected emissions in the next years, which are likely to increase to alarming rates given current policies.

Even though we know about climate change, its causes, its effects and its magnitude, we do not seem to be doing enough. Despite the innovative environmental projects that are emerging all around the globe and the increasing focus on the impacts of pollution, in every new environmental report we seem to not be acting adequately.

The Problem Is Not The Lack of Solutions

There are several solutions to fight climate change. As explained before, the problem is not the lack of solutions, but rather the lack of leadership. Politicians have to commit and lead global action. Dr Maria Neira calls for two big transitions needed to tackle air pollution: healthy energy transition and healthy urban planning transition. Some key ways in which regions can decrease ambient air pollutants is by investing in energy-efficient power generation and renewables, planning greener cities with energy-efficient buildings, and providing universal access to clean, affordable energy technology.

Effectively tackling air pollution gives us a great opportunity to address two major problems of our time: climate change and health. By linking the two, it may be easier for politicians to adopt a more favourable position towards the policies they implement. Setting common goals that address climate change is key — politicians may generally be influenced by short-term decisions in running a country. It is for this reason that international bodies are crucial to climate change, because they are not so pressured by short-term goals and are thus, able to adopt a long-term perspective. The leader in this, I believe, should be the government, but it is us the individuals who must form the social movements and demand policies that are in our benefit for the years that are to come. The health benefits of climate mitigation will undoubtedly pay for the costs of climate mitigation.

Maria Diaz

Hello! I am Maria, a second-year Business student from Spain. I enjoy writing about diverse environment-related topics.



Queering the Far-Right: LGBT+ Politics in the Age of Homonationalism

lobalization, recent refugee crisis, and a more contentious discussion on migration have opened up a new frontier in gender and sexuality discourse. In particular, the past few years have seen LGBT+ and women's rights co-opted by the far-right as a justification for racist and xenophobic views, as well as anti-immigration policies. While the positioning of women as an object in need of protection from the supposedly uncivilised and Orientalised other had a long history in western cultures, the casting of LGBT+ individuals in the same role is a more recent development.

The idea that there is an insurmountable incompatibility between liberal values undergirding the freedom of LGBT+ people and more conservative stances held by those from non-Western backgrounds – Muslims in particular – is often used to propagate nationalist policies. After a shooting in a Florida gay nightclub by an American citizen of Afghan descent in 2016, Trump reiterated a call for a Muslim travel ban. Geert Wilders, leader of a Dutch populist party PVV, responded to the same attack on Buzzfeed News: "The freedom that gay people should have — to kiss each other, to marry, to have children — is exactly what Islam is fighting against". Replying to the concern of D66's leader that many LGBT+ people no longer feel safe in the Netherlands - referring to the attack on a gay couple by four Moroccan-Dutch youths in Arnhem – Thierry Baudet of Forum voor Democratie tweeted on March 4, 2019 that 'uncontrolled immigration and open borders' were to blame. The message was clear to protect the gays, one must keep out the immigrants.

While one could dismiss these claims as a pose adopted by the far-right to appeal to LGBT+ voters, it would be remiss not to acknowledge the roles LGBT+ individuals play in such organisations. Alice Weidel, the leader of German anti-immigration and anti-Muslim party Alternative für Deutschland, lives openly as a lesbian. Florian Phillippot, a gay man, was the Vice-President of France's Front National between 2012-17. He and other high-ranking gay party members were key strategists in Le Pen's 2017 presidential campaign.

The campaign found some success. According to polling firm IFOP, support for the party among French lesbian, gay and bisexual voters rose from 9 to 16.5 percent between 2011 to 2016, 2 percent higher than heterosexuals in the latter. Similarly, another poll by CEVIPOF found that in the first-round of 2015 French regional election, 32.45 percent of married gay couples voted for Front National, compared to 29.98 percent of heterosexual couples. This suggests that among French gay married couples, most of which were older, there was a shift to the far-right. Notably, the poll also found this shift to mostly come from gay men, 38.6 percent of which voted for Front National, in contrast to only 26 percent of lesbians.

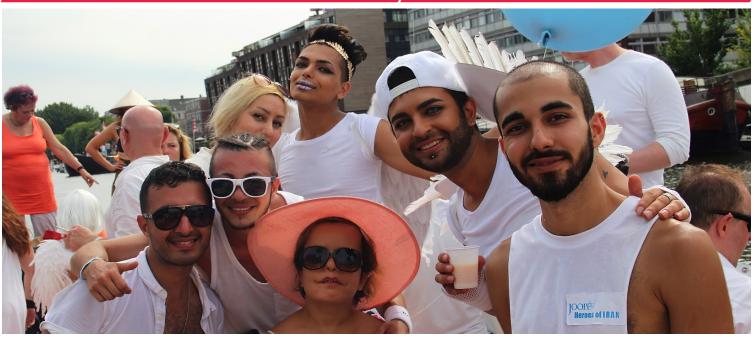
Why have some LGBT+ people turned towards the far-right, even though most legislative achievements enabling their lives' improvements were made possible by efforts from the left?

To explain this, one must refer to 'homonationalism' - an analytic framework developed by Jasbir Puar, a gender studies academic at Rutgers university. In her 2007 work Terrorist Assemblages: Homonationalism in Queer Times, Puar describes homonationalism as a process by which, as a result of 'queer incorporation into the domains of consumer markets' and 'social recognition in the post-civil rights late twentieth century', queer subjects have made a transition in the way they relate to nation-states. From being 'figures of death', identified with the AIDS epidemic, they have now become tied to 'ideas of life and productivity', as emblematized by their admission into traditional institutions such as marriage and families. This transition ensured that certain protection was afforded to some LGBT+ people, mostly Western citizens, as they became recipients of the state's 'measures of benevolence', integrated into the nation-state, and in some cases, the nationalist project.

While the identification of LGBT+ people with the nation-state reflects much welcome advancements hard fought for by generations of activists, this also led to the exclusion of other marginalized groups. While Puar wrote *Terrorist Assemblage* in the context of mid-2000s US' War on Terror, amidst the revelation of sexualized torture of Iraqi prisoners in Abu Gharib and the discussion on the possible invasion of Iran, she further clarified the critique of lesbian and gay liberal rights discourses in 2013: 'those rights discourses produce narratives of progress and modernity that continue to accord some populations access to citizenship – cultural and legal – at the expense of the delimitation and expulsion of other populations', and were built 'on the back of racialized others'.

This narrative's underlying assumption, as well as its discursive product, is civilizational politics, in which the supposedly secular, civilized, sexually exceptional 'West' – epitomized by LGBT+ rights among others – is binarily contrasted with the allegedly religious, backward, sexist and homophobic other, particularly those from the 'Muslim world'. While this politics' external expression is humanitarian intervention – sometimes with disastrous results – as exemplified by US' actions post 9/11, its internal effect is directed at those from ethnic and religious minority backgrounds. Consequently, LGBT+ people and those from such backgrounds are pitted against one another, both essentialized, and portrayed as if they cannot co-exist within the same society.

The Netherlands provides an interesting case for this dynamic. The sexual revolution that swept over Europe and the US in the 1960s had perhaps the most profound effect – legally, culturally, and morally – here. The long 1960s led to the country's liberal policies on drugs, euthanasia, abortion, as well as lesbian and gay rights, making it the frontrunner in progressive causes. In 2001, it became the first to grant marriage equality and full same-sex adoption rights. The Equal Treatment Act 1994 has prohibited discrimination in employment and provision of goods and services due to sexual orientation, with sex characteristics, gender identity, and gender expression added in March 2019 to the anti-discrimination list.



Iraanse Boot (Iran Boat) won public vote at Amsterdam Pride 2018 / Photo: Parisa Akbarzadeh - (CC) JoopeA

This normalisation of homosexuality - built upon secularisation decades prior - incorporated LGBT+ advancements into the Dutch's progressive national self-image.

Simultaneously, public debates in the Netherlands in the early 2000s foreshadowed the homonationalism that recently became apparent elsewhere. Pim Fortuyn, a Dutch, gay, right-populist politician denounced Islam and immigration, while also talking openly about his salacious sex life. After his assassination by an animal rights activist, his party gained 17 percent of national votes in the 2002 general election, but later fell apart without its charismatic leader. Fortuyn's flamboyant personality and civilizational politics provided a model for the likes of Geert Wilders and Thierry Baudet, who share many of his views.

The epistemological mistake of such a discourse is its essentialization of culture and religion. Firstly, different views exist within Islam, historically and contemporarily, with various configurations on gender and sexuality, especially once the religion interacts with cultural particularities. Secondly, it ignores queer Muslims, who face double exclusion due to their sexual orientation, gender identity and expression, as well as cultural and religious backgrounds. Founded in 2012 in the Netherlands, Maruf, an international platform for queer Muslims, is an example of an organization that provides support for those living at the intersection of these identities.

Although LGBT+ people in Islamic countries and others still face persecution unimaginable to us elsewhere, the far-right's anti-immigration, anti-Islam rhetoric and policies will further harm the most vulnerable within LGBT+ communities. It will make life for queer Muslims harder, as they are forced to denounce one of the two intrinsic parts of who they are. It will provoke anti-cultural imperialist response from non-Western countries, which will aim to define itself in civilizational terms against 'the West' by implementing laws that harm LGBT+ people who cannot migrate. It will contribute to a homonationalist discourse that prioritises the Western expression of queerness, which renders claims of LGBT+ asylum seekers from non-Western backgrounds more difficult to recognize.

On the other hand, it is also important to address the fear of hate crimes felt by many LGBT+ people in Europe and the US. In the Netherlands, according to a survey shown in the Dutch government's LGBTI equality in the Netherlands 2018 report, those from Moroccan, Turkish and Somali national origins are less likely than the Dutch to agree that 'gay men and lesbians should be able to live their lives as they wish', with those who said yes at 68, 65, and 57 percent, in contrast to 92 among the Dutch originated. Additionally, another report titled LGBT Monitor 2018 by The Netherlands Institute for Social Research shows that safety and perception of safety are lower among LGBT people compared to heterosexuals. However, it also states: 'In contrast to media reports of an increase in homophobic violence, in reality we see that over the past five years (2012 to 2017) LGBT people experience less disrespect' and that 'percentage of lesbian/gay people who have been the victims of violent crime has fallen to such an extent that in 2017 there was no difference between lesbian/ gay people and heterosexual people'. While the whole picture suggests that although LGBT+ acceptance is relatively low among those from certain backgrounds, the rate of actual violent crimes against lesbian and gay people was at the same level as heterosexuals in 2017.

Faced with a complex situation, one is tempted to find a simple narrative that restores order and wholeness in one's perception of the world. Such an understandable urge leaves one open to co-optation, by political factions whose ideology is based on division rather than solidarity with the oppressed. While advancements made by LGBT+ and other liberation movements must be protected, with values underlying them spread far and wide, one must do so without forgetting that inclusivity and intersectionality lie at the core of our cause.

Josh Jinruang

My name is Josh. I am a first-year student in Economics and Business Economics from Bangkok, Thailand. I am intrigued by the intersection between economics, politics, and culture.





The Leviathan

hat is a society's optimal political regime? Nowadays, most people feel rather unhappy with the ruling class for plentiful reasons, among which inequality, pollution and corruption. However, is the masses' resentment towards their governments ultimately legitimate? According to Thomas Hobbes, the answer is no, for it is the people themselves that required governments and directly or indirectly appointed individuals in functions of power.

In the Leviathan, Thomas Hobbes invites the reader to imagine a preceding time where no form of social organization existed – the state of nature. This would have been a nasty place with each individual following his or her interest, without regards to the others' needs. Consequently, when left to their own devices, humans would ultimately resort to violence: only the fittest survives. According to Hobbes, this does not illustrate a desirable outcome. In such an environment, security, as opposed to freedom would have been almost non-existent.

Humans would live in perpetual fear, without the certainty of making it through the day, while life would have been "solitary, poor, nasty, brutish and short". As Hobbes despised violence, he considered the establishment of a higher form of authority beneficial, simply because its emergence would save men from the hazard of violent death. As such, people should be thankful for the resulting sovereign power and should continue to obey it.

Therefore, it is the people themselves that, in order to continue their reign (although in tight competition with ants) on planet Earth, required someone to step in and stop them from killing each other: a strong ruler. They would have little to argue against such an authoritarian regime, for the ruler is he who saved them from a brutal outcome: "If men could rule themselves, there would be no need at all of a common coercive power". The only legitimate right to complain would

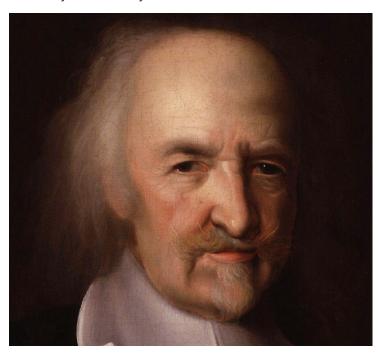
have resulted had the sovereign directly threatened to kill its followers.

Hobbes did not believe in the existence of a summum bonum, or that of the greatest good. He considered human desires to overwhelmingly vary and consensus next to impossible to reach. Therefore, would any community set out to provide the greatest good, it shall find itself torn apart from the inside by many competing perceptions. The result? Civil war.

Given the impulsiveness of human nature and the unruly nature of society, Thomas Hobbes regarded a strong central government as necessary to the functioning of nations. Essentially, individuals would sacrifice part of their freedom in favour of the sovereignty. In return, the latter was required to maintain peace and meet the masses' need for security, and thus the social contract between the two "parties". People faced an inherent trade-off: a higher certainty of tomorrow at the cost of diminished freedom. However, what can the former bring in the absence of freedom? It seems like this question is more relevant today than it has ever been.

With increased power coming from people, the central authority would now be able to control the people from whom it harvested its power. The Leviathan therefore symbolises the sovereignty created by the masses. Had it not been the citizens, there would not have been a Leviathan. In popular culture, it resembles a giant ruler made in its entirety by many small individuals.

All things considered, it is always in the power of the people to bring about a change, be it for better or for worse. And it will always be this way.



Mihai Vicol

My passions include wandering around the cinemas of Amsterdam and reading Sci-Fi books. I also like ants.





The Economics of Altruism

ne idea that is bombarded into students' minds as soon as they step into basic principles of economics is the assumption that everyone seeks to maximize their utility. From then on, we learn to solve complex behavioural microeconomic problems using utility functions and optimization techniques, in which the expected behaviour of an actor is completely determined by a couple of derivatives and the renown First Order Condition. Economists constantly assume that humans act selfishly and solely in their own interest, people caring about others is not something we hear much about during most microeconomic courses. Our view of man as utility-calculating machines leaves very little space for notions such as fairness, reciprocity and altruism. How can this behavioural science ignore such elemental aspects of social interaction?

In economics, the idea of self-interest refers to a person's preferences, which are measured in units of utility. Preferences can encompass anything from food-tastes to the welfare of others. It is also assumed that if a person is rational, they will always act in their own self-interest. This assumption has been highly fruitful in economic theory, as it allows models to be simplified, which in turn increases their external validity. However, altruism is incompatible with rationality as altruistic individuals are those who are willing to perform costly behaviour and make sacrifices for the benefit of other people without expecting a personal reward.

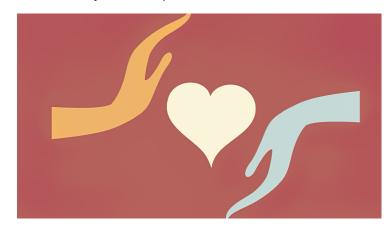
It is evident how altruism and rationality oppose each other. If the world is only full of selfish people, as rationality suggests, then why do we display acts of kindness towards others? In 1968, George R. Price addressed this problem by proposing the Price Equation. A model that links behavioural sciences with Charles Darwin's theory of evolution and natural selection. It essentially states that any organism is willing to take part in self-sacrificing acts if it increases the chance of survival of its own genes. His approach builds upon the work of biologist JBS Haldane who, when asked if he would be willing to sacrifice his life for someone, answered, "I would lay down my life for two brothers, or eight cousins." Since he shares 50% of his brother's genetic makeup and 12.5%

of his cousins, his own genes would end up surviving. This indicates that altruism is nothing more than self-interest in disguise. Tragically, Price found the implications of his work extremely difficult to deal with. Not long after publishing his results, he became obsessed with trying to prove that human beings can beat their own nature by becoming a "pure self-less altruists". He went to the extreme of allowing homeless people to sleep in his house. His behaviour ultimately left him penniless by the time he decided to take his own life.

Does Price's theory show there is no true altruism in human beings? The Price Equation can help to explain imperfect altruism in which the utility of some individuals weighs more for us than for others. But now, it's important to make a distinction between two types of altruism. Biological altruism which is only concerned with the results of an action and the survival of a species; and psychological altruism which focuses more on the intentions behind our actions. The Price Equation clearly encompasses the first type of altruism however, it fails to explain why we observe psychological altruism and morality in the real world.

Then how can economists deal with this genuine altruism? Currently, these people are just assumed to have a "weird" utility function which they still maximize but while also taking into account the prosperity of others. This means that even selfless acts only come to be because they give some kind of utility or pleasure to the individual that acts upon them. A person donating money or volunteering for an NGO is not motivated to do these things because of the good that they bring onto others, but instead for the gratification that they bring to themselves. Isn't this a bit insulting for truly altruistic people?

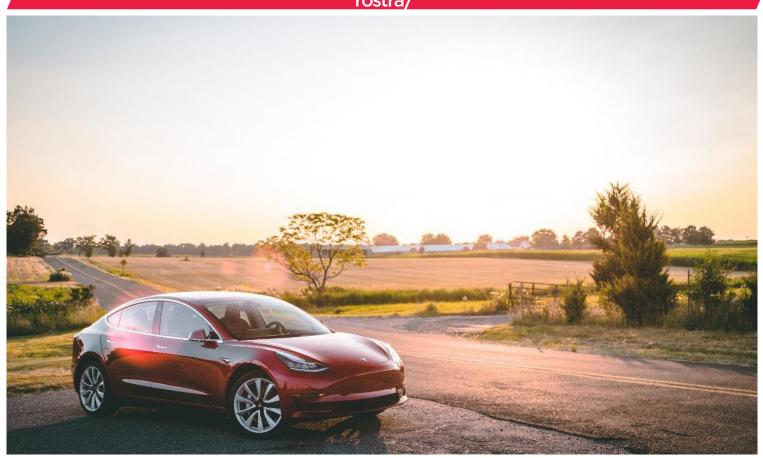
As Adam Smith pointed out, it is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their own interest. This perspective towards kindness might serve to explain why economic students have been found to be the most egoistic. After all, we are taught from day one that greed and selfishness are only the results of rational behaviour. Therefore, they are to some extent justified, expected and correct.



Daniella Sorrosa

Hello! My name is Daniella, I am a second-year economics student from Ecuador, fascinated about development and politics.





Tesla Motors – A brief summary

ounded in 2003, the history of Tesla Motors has been marked by incredible achievements, failures, and the willpower. Just within 16 years, the company managed to grow from a simple startup idea to one of the most well-known brands around the globe. Morgan Stanley, one of the most influential and recognized investment banks in the United States, described the company as the most important carmaker of our time. But how did all this happen? How comes that it took the car industry so long to start developing electric cars, given the huge benefits and possibilities this technology offers? In this article, I will discuss how it all started, what has happened, and where the company stands right now.

The origins

In July 2003, the car company Tesla was founded by Martin Eberhard and Marc Tarpenning, named after the famous pioneer in electricity – Nikola Tesla. Just one year later, the young entrepreneur Elon Musk joined the company, who brought with him \$6.35 million of his own money. As one of the co-founders of PayPal, Musk had previously made \$180 million by selling his part of the company. From the very first beginning, Musk had a very strong vision about the future of Tesla, and its ultimate goal to create a mass market electric vehicles at a price which is affordable for everyone. The first car ever produced by the company was the Tesla Roadster, which was the first electric car ever built with a range of more than 320 kilometers on a single charge. With this success in

hand, the company received huge amounts of funding from some of the most influential entrepreneurs of our time; two of them were the founders of Google, Sergey Brin and Larry Page.

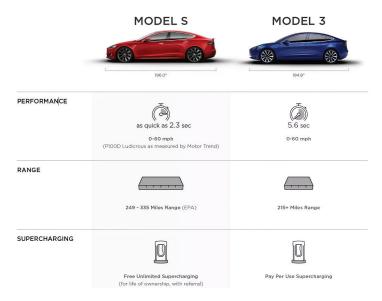
In the year 2007, Tesla strongly suffered under the consequences of the financial crisis, forcing it to lay off more than 10% of its entire workforce. For the company to be able to continue, Musk contributed \$70 million dollars of his own money, making him the CEO in late 2008. In 2010, Tesla had its Initial Public Offering (IPO), which was the first American car manufacturer going public since Ford Motors in 1956. Until 2012, the company was almost entirely focusing on the production of its Model S, the car that should be the flagship of the company worldwide.

Not well known to the public, Elon Musk almost sold the company in year 2013 to Google for \$11 billion. During this time, Musk was facing difficult times, with Tesla being almost bankrupt, his other company SpaceX reporting failure after failure, and a population unwilling to buy electric cars. Luckily, in the same year things started to turn around, allowing the company to continue. Just one year later, the Model S was considered the most loved car nationwide, receiving multiple rewards for its characteristics, and experiencing a huge demand. Within the same year, the Model X was introduced. By that time, it was the fastest accelerating SUV worldwide, accelerating in less than 2.9 seconds from 0 to 100 km per hour, and a range of roughly 540 km. However, at that point the cars offered were still expensive, starting from \$79.500 for the Model X, and \$68.000 for the Model S.

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The Model 3

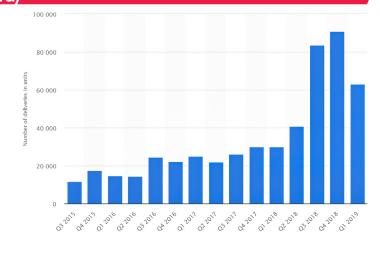
Finally, in year 2017, the Model 3 was announced, which was considered to be the representation of Elon Musk's dream – an electric vehicle affordable to the large masses. Just within the first 24 hours after the announcement, the company had already received more than 180 000 pre-orders of the car. However, as you might know, Tesla was heavily struggling for more than two years to be able to actually deliver the car. However, since late 2018 the company has been able to sustainably produce more than 5000 Model 3s per week, starting from \$35.000. Here you can see how the Model 3 compares to the Model S.



Tesla Today

If we take a quick look at the graph in this article, we can see that car sales of Tesla have been steadily increasing over the years, peaking in the fourth quarter of 2018 with almost 100 000 cars. However, we can also see that sales started to decrease again afterwards. The reason is not entirely clear, but it might be an addition of various factors. Very recently, the U.S. government stopped giving the benefits that they provided before, resulting with a price increase of \$7.500 dollars per car. Additionally, with the Model 3 finally being able to deliver, the company is experiencing product cannibalization of the sales of their previous, more expensive models.

Lastly, the company also started to ship its cars globally, which implies many unforeseen issues as it is the first time the company has been doing this. Adding up these three factors, the company is expected to experience sales increase again for the next quarters. One other reason why a future increase in sales is predicted by many is because the company is recently constructing a huge manufacturing ground in Shanghai, which is supposed to dramatically increase sales by opening the cars to the Chinese market.



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To sum up, the history of Tesla, together with its CEO Elon Musk, is remarkable. Not only did the company achieve to completely disrupt an industry that hasn't been experienced any new competitors over decades, but it has also been fostering entire societies to change to a new, sustainable way of living. Despite the many issues the company currently faces, I strongly believe in the future of Tesla, and wish they will achieve their mission;

"To accelerate the world's transition to sustainable transport."

Christoph Meier

Hello, I am Christoph Meier from Austria. I am a 2nd year Business Administration student and I like to write about technological innovations and change.



Housing crisis, time for squatting

he housing market is like a nightmare. Anyone who tried to settle in a city like Amsterdam would agree on that. The housing shortage and skyrocketing prices weigh on home seekers. In over half of the world's countries, house prices have grown faster than incomes, making housing more unaffordable now than ever. Unfortunately, everyone needs a home.

The squatting movement was born in response to this situation. We define squatting as making use of an empty space without the permission of the owner. Squatted houses or simply squats exist throughout the world, from Berlin to Mumbai, from Sydney to New York. These are the so-called *kraken* in the Netherlands, Hausbesetzung in Germany, okupas in Spain, student *repúblicas* in Portugal and so on.

The core motive for squatting lies in the alarming state of the access to housing. The unfair housing market has eroded the fundamental right to housing. As a result, homelessness is on the rise, while many houses remain empty. Up to 1.6 billion people are homeless or live in inadequate houses, yet there are no official data. In Europe, empty houses account for 11 million homes according to the Guardian, enough to host all continent's homeless twice over. The construction boom previous to the 2008 crisis and the wild speculation, boosted with the rise of tourist apartments, have caused this increase in emptiness.

Squats provide with housing those who cannot afford abusive prices, but also counter the unreasonable situation of empty houses. The act of squatting transforms vacant spaces into *free spaces*, that is, dedicated to life and away from speculation. Although every squat differs from one another, they generally promote certain values such as communitarian life, self-management or activism. Given the authorities' lack of commitment to penalise empty property, squatting can be viewed as a form of direct action.

Additional motives for squatting are the elimination of poverty, the repopulation of rural areas or abandoned villages, the fight against climate change with urban farms and the protection of migrants, refugees or political activists. In general, squatting implies the restoration of old buildings, thus adding value to properties and contributing, in certain cases, to the rehabilitation of historical or depressed neighbourhoods.

The city of Amsterdam owns a rich tradition of squatting. In the 1960s, the housing shortage and a large number of empty buildings motivated some Amsterdammers, specially young people unable to afford increasing house prices, to break into abandoned buildings and squat. Even though occupation was not legal, if the property had been empty for at least one year, occupants were protected under the principle of *huisvrede*. This granted the inviolability of home dwellers, including squatters. This way evictions and arrests required a court case and could take a long time.



In 1980, squatting had become quite popular and was supported by many citizens; however, many squats faced processes of eviction. On 30 April, queen Beatrix's coronation took place. Squatters rallied under the slogan "Geen woning, geen kroning" (No house, no coronation). The protests turned into riots against the force of 10.000 policemen and the military. After 600 wounded, the days of violence damaged the entire squatting movement.

In the following decades, squatting lost much of its public support. Citizens, influenced by campaigns of demonisation, started to associate squats with violence, drugs and sordidness. In 2010, squatting was banned and criminalised with penalties of one to two years of imprisonment. The repression has increased the level of emptiness all over the Netherlands. Moreover, the polarisation between legalised (permitted by the owner) and illegal squats has conditioned their same nature. Many squats have shifted from living spaces towards community centers, often to receive better allowances or subsidies from public institutions.

Nowadays, the stigma keeps hanging over squatting. Opponents argue that squatters exert violence towards owners by transgressing the right to property. In contrast, supporters interpret the unfair housing market as a violence itself, which denies the human right to housing. Indeed, vacant properties for profitability reasons and unaffordable prices respond to the logic of accumulation. According to this, a house is not a place to live in, but a good to speculate with. As long as the housing is considered a commodity and not a right, the housing problem will go on. In the meantime, squatting might be part of the solution.

Alejandro Mizrahi

I am student of economics, passionate about history and poli-



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Survival Entrepreneurship in the 21st Century

sther Perel's bluntness astounded the interviewer as she made the following statement:

"If you have been able to survive 4 or 5 years in a concentration camp, you're an entrepreneur."

She explained that it is "a different way of looking at it" but the ability to manage "the most unconventional situations" is what links the two together. With the help of the Internet, the number of start-ups, and consequently, entrepreneurs in the 21st century have soared. Successes of companies like Amazon, Uber and Facebook give substance to motivational quotes like

"Mistakes will not end your business."

"As an entrepreneur, you have to be OK with failure.",

that rookie entrepreneurs keep in mind when starting one of their own ventures. With these quotes and companies in mind, the kind of entrepreneurship that many imagine is the *"disruptive entrepreneurship"*-the kind which aims to introduce an application which would significantly affect the way an industry or market functions.

But a further contemplation of Perel's statement is tempting. Who are, if there are any, the entrepreneurs that exemplify the relationship between survival and entrepreneurship in today's age? What is, really, the relationship between the two?

On a Global Peter Drucker Forum's (GPDF) blog, writer, Efosa Ojomo raises an interesting question: "If entrepreneurship is truly the pathway to prosperity, and if Africa is bustling with entrepreneurs, then why is the continent still devastatingly poor?" The reason, as Ojomo discusses, is that many of these entrepreneurs are involved in *survival entrepreneurship* which essentially, as he puts it, is "The art of buying something at a fixed or established price and selling it at an uncertain, but hopefully higher, price".

Distinctions between survivalist entrepreneurs and growth-oriented entrepreneurs are not hard to draw. Erhard Berner says that where the latter takes risks, specializes, accumulates and does everything necessary to maximise profits, the former often focuses on diversifying their economic activities to gain as much income as possible, as well as to "cushion income loss from any one source".

As Christian Rogerson finds through his research in South Africa, survivalist entrepreneurs are often people who are unable to find regular wage employment or those who could not access economic sectors of their choice. Of these entrepreneurs, the defining feature is often poverty and their critical attempts to survive. Their businesses represents a more stable source of income rather than a profit-making mechanism. Though mundane and banal may sound the concept of survival entrepreneurship as it has existed throughout ages (for

example the merchants of ancient Egypt), something notable is happening within a certain group of people in relationship to it today; the refugees.

"Natural entrepreneurs" is what Alexander Betts thinks these refugees are. These are the people who have been struggling and adapting constantly to survive. Most of them have had to travel to foreign countries and use their skills in completely new environments.

Entrepreneurial drive can be seen in refugee camps themselves, an example of which is the Dadaab camp in Kenya where refugees are seen trading household items, food and various services. Unlike traditional survivalist entrepreneurs, some of these refugees are even doing exceptionally well. In the Zaatari campsite of Jordan, Hasan is running a confectionery business which not only runs four business outlets within the Zaatari but also serves Jordanian customers outside of the camp, including some from the capital, Amman.

In 2019, these refugees embody Perel's statement while depicting the disruption of the common perception towards "survivalist entrepreneurs". A simple search on the Internet would tell readers that traits like innovation, risk-taking, self-efficiency, and opportunity recognition are necessary to become an entrepreneur and the stories of these refugees seem add an interesting perspective to it: the co-existence of fear and fearlessness leading the success of survivalist entrepreneurship.

That when they have nothing much left to lose, but when business becomes essential to survival, these refugees have shown that a greater embodiment of entrepreneurial traits and mind-sets takes place. Risks are more often taken and innovation becomes a bit more rigorous (new style of tasty halloumi created by a syrian refugee and customised bicycles that would "impress any management consultant" as The Economist puts it, are just two examples). These refugees may fear failure as their livelihood depend critically on their start-ups but many have also shown more risk-taking tendencies.

In light of the business success of various refugee entrepreneurs, those who are doing not only exceptionally well but are also bringing changes in some markets with their skills and innovative ideas, the relationship between survival and disruptive entrepreneurship is, perhaps, more complicated and interconnected than is often perceived. Although survival may be the key motivation for many of the refugees in opening their businesses, some of them are showing that progress from survival entrepreneurship to that of a disruptive one is completely possible. Moreover, it could also be questioned, especially focusing on the refugee stories, whether survivalist entrepreneurs could have higher potential in leading disruptive entrepreneurship? Because, afterall, the need to succeed is directly linked to their survival.

Kaur Ramanpreet

Hello I am Raman, a third year student from the University of Hong Kong. If you ever find me in my spare time, you would probably see me writing a poem, reading a literature book, or watching some documentary or comedy skit. But mostly probably, you would find me sleeping.



The New Era of Healthcare

rtificial Intelligence (AI) is a central discussion topic when talking about future developments, the reconstruction of industries being one of its most important abilities. However, especially for healthcare, the changes could be truly revolutionary. In theory, the options seem endless. Al could improve diagnostics, bring healthcare closer to people and of course, save money and physicians' working hours.

What is AI?

Artificial intelligence refers to machine intelligence, which in general can be defined as the computers or machines capacity to simulate intelligent behavior. Examples of recent use in commercial products for the broad audience include Tesla's self-driving cars and the popular digital assistants Siri and Alexa by Apple and Amazon, respectively. The field of artificial intelligence is thriving and continuously attracting new investments and research. On the other hand, machine learning is an application of Al. It is based on the idea of giving machines access to raw data. As such, it allows them to make predictions and learn themselves from the provided information. Anyhow, what has attracted the medical community the most is deep learning. Deep learning is a subset of machine learning, which uses algorithms inspired by the structure and functions of the brain.

What are the Benefits?

Kaveh Safavi, Accenture's head of global health practice, a global management consulting firm, says that applications of Al have the potential to solve the trilemma of healthcare. The "iron triangle" consists of access, affordability, and effectiveness. All these factors are interconnected and usually attempts to improve one harms the other. Regardless, Safavi believes that Al may offer a chance to skip traditional cost cut methods and improve treatment, accessibility, and costs altogether. If time-consuming tasks are transferred from humans to machines and patients can use self-service programs for disease prevention, the amount of human labor required will certainly decrease.

Transforming Healthcare in Developing Countries

Al is not only an addition to the healthcare systems of wealthy developed countries, yet may also be completely life-changing for the less privileged in the world. In Nigeria, a country of 180 million people, 80 percent of doctors seek jobs abroad, as reported by the Nigerian Polling organization, NOIPolls. Unfortunately, the same applies to other sub-Saharan African countries. Almost one in two Africans lack access to proper health services, and the numbers are to rise due to the expected doubling of the population by 2050. On top off all, according to the World Economic Forum the continent has only approximately three percent of the doctors in the world, but 25 percent of global disease cases.

In India, similar problems arise. Nearly 70 million Indians are diabetic and, therefore, at risk of blindness. The Aravind



Eye Hospital in Madurai, India has been working together with Google researchers from California on a project to detect early signs of diabetic retinopathy, a condition that may cause blindness if not treated. The project aims to help physicians screen more patients, for free. The hospital offers its services for free, and Google does not charge for technology that is still in testing. There is an urgent need for these kinds of eye screenings since the International Council of Ophthalmology reports that there are only 11 eye doctors for every one million people in India.

What is Stopping us?

Without a doubt, using Al in healthcare does not come without problems. The technology is not perfect yet. Deep learning algorithms require high-quality data and medical image datasets. Moreover, from a clinical perspective, the performance of Al against a physician analyzing the same results need to be tested further. The human physiology is complex and therefore poses challenges for machine learning techniques.

Who owns the health data and how is this intimate information handled? How do the algorithms work and what are the decisions taken based on? How to prevent the programs from being hacked? These are all aspects that policymakers, physicians, machine learning scientists, and businesspeople need to collaborate on to ensure patient's privacy and ethical use of the data.

The world of healthcare is undoubtedly complex, and no quick fixes are possible. After all, Al tools may truly revolutionize the lives of millions, even billions of people. Diseases, such as polio and smallpox have been almost eliminated in many parts of the world. Why stop there? If enough willpower is put into good use, maybe in the future other diseases could be got under control, thanks to Al.

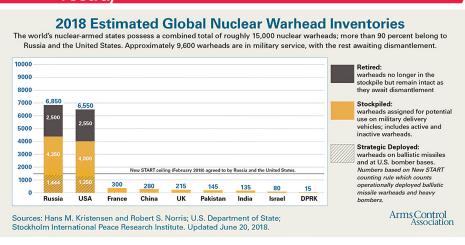
Roosa Näveri

I am a Finnish Business Administration student from Helsinki. My passions are anything and everything between economics, politics, and sports. Besides, I enjoy traveling and eating out.



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The Country That's Been Crossed Out From the World Map: Are These Sanctions Really Iran's Fault?



n April 22nd, the Trump Administration announced that the US will end exemptions from sanctions for 8 countries (China, Japan, India, Turkey, Taiwan, Italy and Greece) still buying oil from Iran. It was the end of 8 extra months given to those countries after Donald Trump withdrew from the 2015 Nuclear Treaty with Iran last May and restored wide-ranging sanctions on the Iranian economy in November. Secretary of State Mike Pompeo said "the goal remains simple: to deprive the outlaw regime of the funds it had used to destabilize the Middle East for four decades and incentivize Iran to behave like a normal country". The White House statement; however, spoke for the devil "This decision is intended to bring Iran's oil exports to zero", denying the regime its principal source of revenue.

What does it mean to behave like a "normal country"? And is Iran really the naughty child? What did they do to deserve such sanctions?

Let's take a look at the history of Iran sanctions. In 1979, activists seized hostages in US embassy in Tehran, resulting in a freeze of Iranian assets by US banks. During 1995 and 1996, a US economic embargo aimed mainly at businesses focusing on oil & gas, was put into place. By 2006, first UN sanction was imposed after Iranian Nuclear/Ballistic Missile Program was developed, resulting in the freeze of assets of certain individuals and restricting the arms trade to Iran. By 2010, the list contained heavy weapons. During the same year, the European Union introduced its first economic sanctions to Iran: These included an oil embargo, a central bank assets freeze and any bank-bank transaction. In 2016, after realizing the seriousness of the sanctions imposed by those 3 parties, Iran agreed to collude on a treaty; reducing the extraction of Iran's uranium stockpile by 98% during 15 years. In return, other sanctions on Iran would be lifted. In contrary to the expectations, the process came to a point where Iran was banned from the SWIFT banking program in 2019, a program that allows financial institutions to send and receive financial information in a reliable manner.

The main reasoning on sanctions has been keeping the Nuclear Program of Iran under control in case of potential danger. The country was pictured as a "threat", a dangerous animal assaulting other countries if it is unleashed. The graph below reminds us countries we actually need to keep a close eye on when it comes to nuclear armament.

Let's come to the real reasons. The US always had an eye on the Middle East stemming from their interest in oil reserves. In 1945, they signed a treaty with King Abdullaziz Al Saud from Saudi Arabia for flow of oil and strategic protection in exchange. That agreement was followed by various other agreements with the countries in the region, granting US influence in most of the oil-rich countries. One of the biggest allies of the US in the region was Iran. Then the Arab-Israe-li war broke out in 1948, polarizing Middle East into oil-rich Arab countries and lifelong US ally, Israel. The US decided to sell fighter jets to Israel, frustrating Saudi Arabia and other allies. As retaliation, the Organization of the Petroleum Exporting Countries (OPEC) enforced an oil embargo to the US and other supporters of Israel, resulting in a quadruple increase in oil world-prices, and yielding as a consequence, the 1973 Oil Crisis.

In order to mend the relationship, the US settled with minor Middle East players. But to settle with Saudi Arabia and Iran, the so-called "twin pillars", the US needed more weapons. This intention of recovery triggered the era of arms sale in the Middle East as a form of political influence. Iran was well supported by the US both economically and militarily due to its shared border with the USSR.

However, the friendship was obstructed. In 1979, an Islamic Revolution took place in Iran, overthrowing Iran monarch Mohammad Reza Shah Pahlavi and paving the way to facilitate an Islamic Republic under Grand Ayatollah Ruhollah Khomeini. The new Iran Islamic Republic was largely anti-American and was equipped with US arms worth of \$9.1 Billion. Remember the date of first US sanction on Iran? 1979. Since then, Islamic governments of Iran drew an anti-American view, resulting with even more worldwide sanctions. Apart from that. Iran was rich in uranium and other natural resources such as oil. Not to mention the geographical advantage. Since then, the US convinced the world to mark Iran as the "devil". The question here is, if a country happens to be anti-American, does that mean they cannot take a place in the world order? Are the United Nations and the European Union willing to explain what makes Iran an "abnormal country", apart from the dictation done by the US?

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Hi! I am Berke, 2nd year Business Administration Student. Interested in ideas and knowledge because I believe that ideas get the world spinning while altering every bit of it.





Are You What You Eat?

he world, nowadays, may feel like a disorienting place. For some, drinking coffee with a friend is not about drinking coffee with a friend anymore, but upholding a social aura full of expensive soy lattes, giggling friends and bearded baristas. In this world of post-truth, seemingly doing good could very well have bad consequences.

Ethical consumption (food which is regarded as better for the environment in any kind of way) is one such example. The aforementioned popularity of soy as an alternative to dairy products, for instance, is one of the main drivers of deforestation in South America, along with cattle ranching. Vast areas have been cleared to make way for huge plantations.

Instead of exploring this subject which requires further inquiry, I want to set out the economic dynamics of another yuppie's favourite. Specifically, that of quinoa. A tale which I find equally astonishing.

In the Netherlands quinoa was mainly known as birdfeed and only sold at a few wholefood shops before dieticians suddenly embraced it as a superfood. It was praised because of its low-fat content and essential amino-acids needed for good health. This made it especially attractive to vegetarians who preferred not to take food supplements. It also contains more protein and less starch compared to other grains such as pasta and rice. The UN even declared 2013 the International Year of Quinoa. Demand rose, production could hardly keep up, so prices soared.

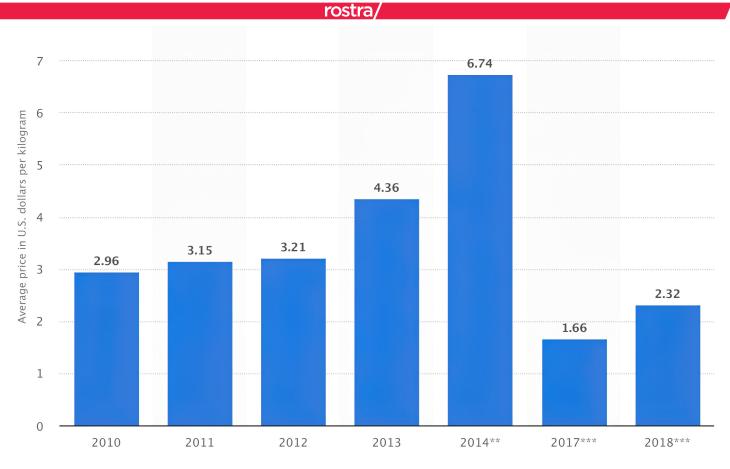
In 2013, The Guardian published the article "Can Vegans Stomach the Unpalatable Truth About Quinoa?" which blamed Western hipsters for pricing poor Andeans out of

their staple grain. This is a severe accusation when you consider that 16% of Bolivians and 7.5% of Peruvians have insufficient food to maintain a good health. The New York Times, in "Quinoa's Global Success Creates Local Quandary", an article published in 2011, even claimed that the Andeans were switching to less healthy carbs like noodles and rice.

However, in a 2016 article named "Against the Grain" The Economist responded that the decreased quinoa consumption in Peru had more to do with a shift in preferences than with pricing-out forces by indicating that the fall in consumption was steady compared to an abrupt increase in price. The young Peruvians were attracted to food trends of their own — for more Western food — likely bored with their grandparents' staple.

The Economist also claimed that the higher prices of the so-called 'quinoa boom' meant higher incomes for the farmers. This resulted in a boost of their consumption and even a more broadly benefit for the local economy. Households that did not produce quinoa were able to increase their consumption. Another article published by a PhD student who conducted ethnographic fieldwork among quinoa farmers even suggests that highland farmers in both Peru and Bolivia used their profits very wisely. She writes to have spoken to farmers who had sent their children to university, bought new motorcycles and cars, built new houses and invested in farming technology to increase their harvests.

However, she explains that the excitement for these small-scale farmers was temporary. In late 2014 the prices plummeted back. Larger-scale farmers began to replace rice, asparagus and other commodity crops with quinoa, because of its attractive price. This gradually transformed the Andean farms into a quinoa monoculture. The production also moved to many other countries with often more preferable circumstances and superior technologies, such as Italy, China and India. Despite quinoa's risen global popularity, production overshot demand.



Average price of quinoa worldwide from 2010 to 2018 (in U.S. dollars per kilogram) Source: Statista.com

While the poor Andean farmers were the first to recognize quinoa's benefits, they were also the first to fall victim to the producers with a technological, capital, credit and geographical advantage in the crowded market. An ox is simply less productive than a tractor. The economic dynamics of the quinoa boom provide yet another example of the ruthless capitalist markets. It points out the particular vulnerabilities of small farmers.

An optimal solution is proving hard to find. Further investigation into home-grown alternatives should be undertaken. Well-intentioned health and ethical-led consumers should become more aware that their seemingly ethical food often has to be imported from far away and that this has numerous negative environmental and economic effects as the soy and quinoa examples suggest. The meat and dairy industry in Europe provides plenty of alternatives, but their operating principles remain vague and questionable. For health-conscious vegans and vegetarians there are fewer options. The Guardian reported promising initiatives such as the Norfolk company which started marketing UK-grown fava beans (used to make falafel). This is one protein-rich alternative to meat; however, further experimenting is necessary.

Also, incredible care should be taken with commercializing traditional crops as superfoods. A way to shield the small-scale quinoa farmers from larger farmers is the acknowledgement of their traditional crop as a Geographical Indication from the Global South. This signifies that the product corresponds to a specific geographical origin and possesses qualities and a reputation that are due to that origin. It has worked well to protect products such as Champagne, Tequila, Darjeeling and many more traditional commodities from external interest to dominate the market. However, even with regulations focusing on traditional production in place, large-

scale operations are still able to move to the designated area and force out the smaller parties.

The described reality is hard to foresee and this example shows the dynamic complexity of consequences. It seems like every action leaves some people hurt while others profit. It seems a solution will create a new problem of its own which will require a solution again. We are often unable to grasp this complexity and it can feel like we make little progress because every solution creates a problem of its own. The quinoa boom story serves as an illustration of the unanticipated barbarities of capitalism, western hypocrisy and complex dynamics.

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My name is Timothy Mulder. I am a Dutch Economics and Philosophy student who is inclined to explore the meaning of facts, but mostly to practice poolside politics.





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