ARTICLE

Science in the times of Covid. An alternative hypothesis

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Abstract
Science consists of testing hypothesis. However, this Scientific Method is used ever more scarcely, and is replaced by general research to help making society a better place. In the current work we analyze how the approach of a solution to the sanitary problem caused by the SARS-CoV-2 virus has been done in a non-scientific way leading to erroneous conclusions. Moreover, we form an alternative hypothesis that has withstood our own attempts at debunking. We conclude that the pandemic is caused by misdiagnosis of other respiratory illnesses and a runaway-testing-scenario.

1 | INTRODUCTION

Nobody will deny that the modern scientific world has its problems. There is generally the problem that science cannot be thought of as isolated from society, however much we would like it to be an independent search for the truth. There is the problem of "who pays the piper?" (Ziman 1996), where it is ever more common that scientists must get funding from industry or must show their work is of industrial interest – The European Union actually having a program of Knowledge Based Economy in their Horizons 2020 pluriannual agenda. But also, there is the direct meddling of politics into science, up to the point that political instruments are used in the discovery of truth. So called consensus science that has now been promoted as the cornerstone of research. As shown by us, such consensus science leads to the rapid establishment of a consensus in any subject, which is a good point, however, the consensus does not necessarily represent the truth (Stallinga and Khmelinskii 2015). So modern science fails in its primary objective, namely finding the truth, and only achieves uniformity in thought, which is rather a political objective. Consensus, often used as an argument in the most-polemic subject of them all – The Climate (Cook et al. 2013), – is thus a meaningless concept in science. The same seeming unanimity of thought is found in the Covid-19 narrative, the subject we want to address here, since we are alarmed by it; it is all very well if people decide to think unanimously, but if this unanimity is then used to strip people of all their rights and freedoms, we start getting worried. In his famous book *What is this thing called science?* (Chalmers 1982) Chalmers made a summary of the Scientific Method, summarizing the ideas of Karl Popper (Popper 1963) that was also used by many famous scientists, including the great ones like Richard Feynman (Feynman 2017). We ourselves have also made a summary and pointed out how in recent years this Scientific Method seems to have been abandoned, in an attempt to supersede science with

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politics, while still calling it science. It is what is called a chutzpah.

Having basically eliminated any scientific thinking in the academic world has enabled a tremendous surge in politically-correct research. Slowly it has crept into the research system that if it is good for the agenda, it gets funded.

However, if we want to go back to science, we must basically do these things, which define the Scientific Method in a nutshell:

0. Study the real world. Do not reason within a virtual world. The latter is mathematics and not science.

1. Gather experimental data. Reduction, deduction and induction. Formulate a hypothesis that explains the past, the already existing experimental data.

2. Try to debunk your own hypothesis. Do not try to find evidence for the correctness of your model – which is a bias called 'affirming the consequent' – but try to find evidence against your own hypothesis. There is no such thing as corroborative evidence.

3. Debunk all alternative hypotheses. Come up with predictions for the outcome of future measurements that distinguish your hypothesis from others.

4. If there remain two or more hypotheses that can explain all data, the simplest hypothesis, with least features, is the correct one. This is what is called Occam's Razor. This philosopher stated that from a model everything should be cut away that is unnecessary.

5. Communicate your hypothesis, together with your data and reasoning, to others so that they can replicate your research or have a go at debunking it, thus making the entire research system scientific.

Some observations and corollaries can be made:

While a person should always try to use the full Scientific Method, one can also do only a part of the job. Nobody denies the tremendous contribution of Carl Linnaeus – the cataloging of species in nature – to science. His work consisted merely in gathering experimental data, data that were later used by others to form hypotheses.

Einstein's famous theory of relativity involved a nice testable hypothesis. He actually came up with a way to debunk the alternative Newtonian hypothesis by predicting that rays will be bent by the gravitational force of the Sun, a phenomenon observable in a solar eclipse. And this was then observed, thus beautifully following Rule 3. It only saddens us that questioning Einstein's theory, trying to debunk his hypothesis (following Rule 2) is not allowed in 2021, and alternative explanations for ray bending ignored, i.e., not fully following Rule 3. A hypothesis that does not have within it a way to debunk it, is not science, but religion. If no (possible) data can ever debunk the hypothesis, it is not a hypothesis, and thus not a scientific idea. Moreover, the easier it possibly is to debunk the hypothesis, the more powerful it is. In the limit, when no data can ever possibly debunk the hypothesis, it is a matter of dogma. As such, also Einstein's theory of relativity is dogma, given the fact that his theory is enshrined in concrete by defining the speed of light to be constant in the S.I. system of units. A meter is defined as the length of the path traveled by light in vacuum during a time interval of $1/299,792,458.000....$ second. Einstein's theory of constant speed of light is undebunkably right and thus religion.

Continuing this narrative, saying it in a different way, using the words of Engels in his Dialectics of Nature: a theory that explains everything explains nothing! If everything is always proof of the idea, it means the idea cannot be debunked and is thus religion. Ask religious people and they will say they see God in everything. That is all very well, but it is not science! In the extreme case, even the absence of proof is seen as proof of the hypothesis. Ask any conspiracy thinkers why there is no proof of their theory and their answer will be "They have removed all proof, duh! You see how cunning they are?!"

Adjustments to the hypothesis when new data come in are not allowed. That because this way a hypothesis can never be debunked and thus falls back to being religion. With such Bayesian adjustments we will never leave the first stage of the Scientific Method, hypothesis formulation.

Fast forward to the Covid-19 pandemic. Somehow, we are finding ourselves in a situation of a sanitary crisis from which there seems no escape; each and every signal of the pandemic seen as confirmation of the severity of the virus. While no proof of effi-cacy of anti-Covid measures can be determined —"... we do not find significant benefits on case growth of

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more restrictive NPIs" (Bendavid, Oh, and Ioannidis 2021) – the Covid pandemic was used as an excuse to implement the measures. Yet, we must use the Scientific Method here too, or be condemned to be called religious zealots and wind up in praying to the gods for the pandemic to be over. We must go back to square one.

Let us thus first introduce the ingredients we need to come up with a hypothesis, which we will then compare to the common opinion of the man in the street and our lawmakers (and thus the academic community alike). We will use Occam's Razor to start with. Some items:

• Covid-19 is a virus from the corona family of viruses, and – Occam's Razor – we can thus expect it to have corona properties. Unless there are things that cannot be explained by these standard corona properties, it is a standard corona virus. If it walks like a duck and talks like a duck, it is a duck! Unless or until it shows signs of being an elephant.

• Corona is a member of the viruses causing flu-like symptoms, mainly infections in the airways.

• Other main members of this family are rhino and influenza.

• The flu season, starting officially at week 40 of every year (we discuss the northern hemisphere here), begins with rhino (October-December), then influenza (December-February) and ends with corona (March-May). By week 17 the flu season is over as infections dwindle rapidly.

• These flus have a mortality rate of some 0.13%. Yearly some 2 million people die of flu-like diseases in the world.

With this we can analyze the current pandemic. We will first describe the consensus hypothesis (CH) and discuss why it is problematic in the framework of science. In the consensus hypothesis we are led to believe that a new coronavirus emerged. It somehow jumped from animal to human – fair enough; a quite common event – but this time what evolved was not a common corona virus of the type that has been going around the world for millions of years. No, this time we had a super deadly virus, with properties yet unknown (apart from it being tremendously threatening to the world). It quickly came with predictions of astronomical deaths if no

precautions were taken. Specifically, the models of Fergusson. Model – i.e., not a hypothesis – simulations with the built-in property of the virus of its deadliness then showing its deadliness in the simulations; a classic case of circular reasoning. This virtual threat was then used to unfold a political agenda which included propaganda and monopolizing the narrative, i.e., no alternative hypotheses could circulate and be discussed. All for the good cause.

Nobody knew what was going to happen, but it was deemed needed to monitor the situation constantly. As Tedros Adhanom of the WHO said on 16 March 2020, "Our key message is: test, test, test". For this testing PCR tests were developed, and Houston, we've got a problem. The inventor of the PCR test, Nobel laureate Kary Mullis, said that PCR is only useful for reproducing genetic material for lab experiments, not for testing the presence of said material. "Anyone can test positive for practically anything with a PCR test, if you run it long enough ... with PCR if you do it well, you can find almost anything in anybody ... it doesn't tell you that you're sick". In spite of this warning, testing was used as the sole diagnostic tool in the fight against Covid-19, fully bypassing doctors' diagnoses. A disaster was thus waiting to happen. The problem with this PCR testing as a diagnostic tool is that it has many false positives. The WHO even admits it in their statement:

"WHO reminds ... that disease prevalence alters the predictive value of test results; as disease prevalence decreases, the risk of false positiveincreases .... This means that the probability that a person who has a positive result (SARS-CoV-2 detected) is truly infected with SARS-CoV-2 decreases as prevalence decreases, irrespective of the claimed specificity"

This is also known as the Bayesian Trap. If a test has x% correct result and you are tested positive, it does not mean you have x% chance of being infected. In fact, the probability of you being infected depends on the prevalence of the virus in society. In the extreme case, when the virus is absent in society, all positive test cases are false positives. In other words, the rate of false positive tests as a fraction of all positive tests increases with decreasing infection rate in the population, and can

be any number, irrespective of the claims about the accuracy made by the producers of the test.

This is highly relevant in the current situation. In fact, an 'epidemic' can thus be created without a single person in society being infected. That is caused by the regime that sees an urgency in that every 'infected person' – that is a person with a positive test (henceforth called a 'case') – need to have all contacts tested. Now, you can see where this will lead to, if the false-positive test fraction of total tests is α (up to 1-*x*, with *x* the testing accuracy, in case of zero prevalence of the virus in society) and on average a person had contact with *N* other people the last two weeks that have to be tested too, the reproduction number of the propagation of the 'viral entity' (not necessarily a biological virus, it can also be the testing that is going viral) is

$$R_0 = \alpha N$$

This way, it is possible to have a runaway testing scenario (RTS) without any biological virus going around in society. Society just goes testing-mad and creates the exact monster it fears. Even without a runaway-test scenario described above, a sickless pseudo-epidemic can also be caused by a simple necessity of testing. In case, for example, of it being a holiday season, people want to travel and if for that a negative test is needed, a (false) positive test wave can be created without anybody being ill. The number of 'cases' simply being proportional to the number of travelers.

However, the consensus hypothesis allows for any phenomenon to be interpreted as 'fingerprint' of the yet-unknown Covid-19 virus. If we get an outbreak outside corona-season (March-May) or even outside flu-season (October-May), shown by an outbreak in positive tests, these positive tests are considered the golden standard and the conclusion is made that this Covid-19 virus is indeed some weird beast. It is a duck that walks like an elephant and therefore we must – by Bayesian adjustment – add features to the virus never seen before. One might start believing that Nobel laureate Luc Montagnier was right when he claimed Covid-19 was developed in a lab (and can thus have strange elephant-duck properties). This then possibly done in the Wuhan lab – of all places – under guidance of Peter Daszak where

indeed so-called 'gain-of-function' corona research was done (Eban 2021).

If you have understood the reasoning until now, you see what goes wrong in this consensus hypothesis reasoning. A hypothesis that cannot be debunked is not science, but religion. In the consensus hypothesis, whatever observational data that comes in, is seen as the proof of the yet-to-be-evolved ever-changing Covid-19 hypothesis. All data is proof of the idea. No data can debunk the idea. Therefore, we need not discuss any further, the consensus hypothesis (Figure 1) is bullshit.
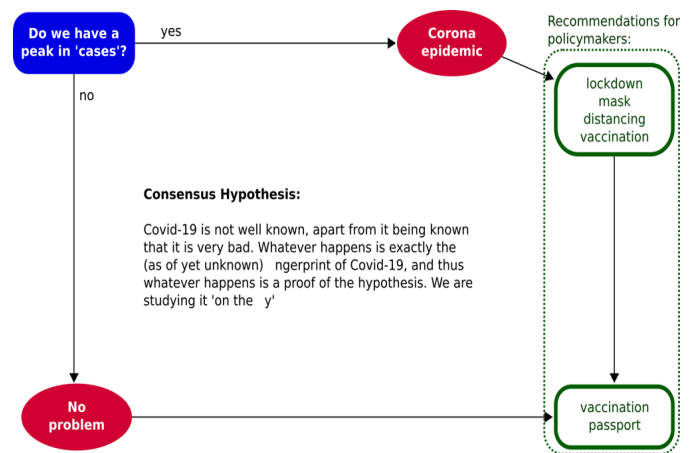
Fig. 1: *Consensus hypothesis (CH). Whatever happens, it is proof of the Covid-19 consensus hypothesis. Note also the inevitable conclusion that a vaccination passport is needed, even without a corona epidemic, as evidenced by the fact that the European Union had it on its agenda, including a roadmap, a year before the start of the Covid-19 pandemic.*
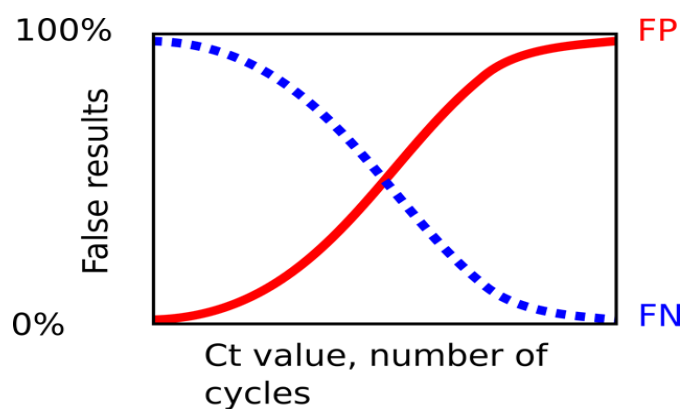
Fig. 2: *False-positive (assuming nobody infected, solid red line) and false-negative (assuming everybody infected, dashed blue line) rates as a function of Ct cycles in PCR tests.*

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Can we formulate an alternative hypothesis? Yes, of course. The alternative hypothesis (AH) presented here includes the concept – that is, experimental *fact* – that PCR tests can have a certain false-positive error rate. Moreover, this rate can be up to 100% of all positive tests. Government, when it wants to make sure to not let a single infected person go undetected – meaning not allow for false-negative results of an infected person testing negative – will mandate an increment of the so-called Ct cycles in the PCR tests, thus tuning the false-positive and false-negative fractions, see Figure 2. Increasing the Ct value used in PCR tests will lower its accuracy x and increase the false-positive fraction α and increase the R_0-value, possibly starting a fake pandemic.

Then, *anything* can trigger a testing pandemic. The real corona-virus infections, other flu-family-virus-infections, negative-test requirement for traveling documents or for entrance at festivals, starting of the academic year with daily testing. Anything.

So, we came up with the following alternative hypothesis, see Figure 3. Note that this hypothesis does have an easy way to be debunked. For instance, if there is a peak in positive tests, and a peak in excess mortality without it being the flu season, our hypothesis is debunked. Likewise, if outside the flu season and tourist season (say September) there is a peak in cases, our hypothesis is debunked. As long as our hypothesis is standing, it comes with recommendations for policymakers. Namely: if there is no lack of capacity in health care for treating the cases in times of the flu-season with excess mortality, government should do nothing. In case there is a lack, government should lock down a maximum of two weeks to get its act together and rapidly increase health care capacity, probably with Nightingale hospitals.

Let us take a look at some curious facts that remain unexplained in the Consensus Hypothesis and are readily explained by our Alternative Hypothesis:
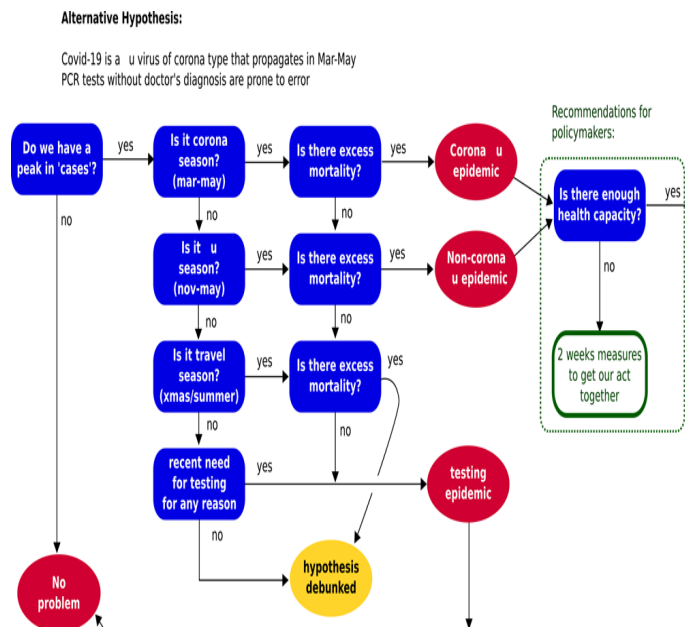
Fig. 3: *Alternative hypothesis. The virus or the testing can go viral, creating a real or seeming epidemic, respectively.*

How can it be that there are outbreaks with and outbreaks without excess mortality (whatsoever)? See Figure 4. CH: Viruses mutate, and then mutate back. Mortality rate can be anything. AH: Mortality rate is 0.15% (Ioannidis 2021). If excess mortality is zero, there is a testing epidemic without a virus epidemic. Note for instance the peak in The Netherlands in July 2021 that was not accompanied by mortality, but the peak in November 2021 again has mortality. That while still dealing with the same (delta) variant of the virus and the same vaccination level. It is thus not even so that the vaccination "does not prevent infection but prevents severe cases", an often-heard on-the-fly Bayesian adjustment that was made to the hypothesis to explain the non-lethal peak of Covid in summer. AH: the peak in summer was caused by holiday-related necessity of testing (all false positive) and the peak in November by misdiagnoses of deadly rhino. In both cases possibly amplified by RTS.
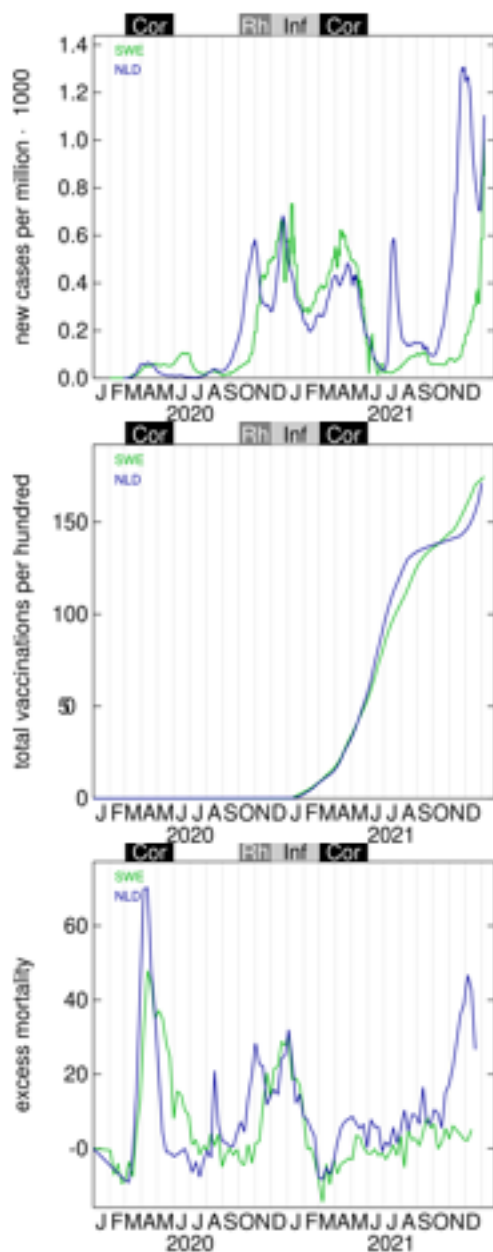
Fig. 4: *Top: Comparison of number of daily cases in Sweden and Netherlands, the former without much measures, the latter with very heavy anti-Covid measures. Apart from the first wave, the dynamics are the same. Middle: Percentage of population vaccinated. Bottom: Excess mortality. On top of the figures the approximate flu seasons are indicated: 'Cor' for corona, 'Rh' for rhino, and 'Inf' for influenza.*

How can excess mortality have dropped to zero in EuroMOMO-member countries (Euromomo 2021; see Figure 5), while there were still several outbreaks of Covid-19 cases in these countries? CH: Low mortality is caused by accurate health care, health care that was never effective in previous outbreaks of the flu, viz. the huge death toll in 2018.

AH: All outbreaks of cases after May 2020 have been fake. Corona has not marked its presence in these countries since May 2020 and the last flu epidemic in these countries ended in February 2021. Only in November 2021 a wave of rhino-flu seems to be back and hits a feeble society, rendered relatively defenseless by the governmental measures.

How can there be an outbreak in summer? CH: The virus is corona without corona properties. (Occam's nightmare). Apparently, it can easily propagate also in summer and this demonstrates how wrecking the virus is, people denying this should be silenced for the sake of health in society. AH: There is no viral outbreak. There is a testing pandemic caused by the need for testing as required for proof-of-negative test for traveling and events.
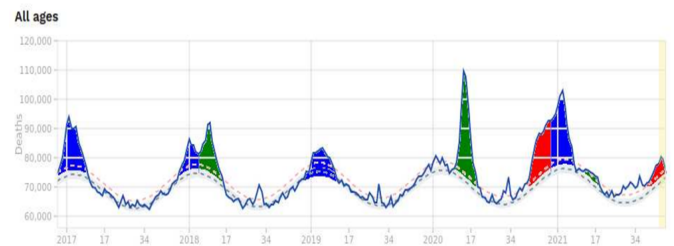
Fig. 5: *Excess mortality in EuroMOMO member countries. As can be seen, peaks can be identified as rhino-flu (Nov-Dec; red), influenza-flu (Dec-Feb; blue) and corona-flu (Mar-May; green). A clear corona peak is observed in 2020, associated to SARS-CoV-2. Yet none is observed in 2021. Peaks of rhino and influenza epidemics are clearly visible in the flu season of 2020-2021. No excess mortality since February 2021, demonstrating that all recent waves of cases in these countries are fake corona pandemics. (Figure adapted from EuroMOMO).*

How can influenza have disappeared from the map in the world, but precisely at the epochs of rhino and influenza corona-outbreaks were observed in many countries with excess mortality? (WHO 2021) CH: The anti-Covid measures worked very well on influenza and rhino infections but did little to lower the speed of corona spreading. AH: Rhino, influenza and corona are spreading nearly business as usual. During rhino-season the rhinocases were (mis) diagnosed as corona, attributing excess deaths caused by the rhino-flu to corona, and during influenza-season influenza cases were (mis) diagnosed as corona. This way all flu-cases and flu-deaths are attributed to corona, further increasing the ill-fame of corona.

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How can two countries (NLD and SWE) with totally different scale and intensity of the anti-Covid measures have very similar behavior in the statistics of number of cases? (See Figure 4). In general, "Stringency of the measures settled to fight pandemia, including lockdown, did not appear to be linked with death rate" (Larochelambert et al. 2020). CH: That is Covid-19 for you. It is such a strange beast that nobody can well describe it. AH: In both Sweden and Netherlands are the peaks in number of cases (except the first wave) caused by the epidemic runaway testing scenario. We would also like to highlight a typical study of a statistical analysis that shows how the pandemic was over in UK before the lockdowns were implemented (Wood 2021). Lockdowns do not have any demonstrable positive effect on the pandemics.

How can SARS-CoV-2 virus have been found in sewer samples of March 2019 from Barcelona, fully nine months before the virus officially arrived in Europe? (Allen and Landauro 2020) CH: Has no explanation. AH: It is a false positive.

We would like to conclude by mentioning here that the dynamics of real corona-epidemic (CE) is remarkably different from the dynamics of the runaway testing scenario (RTS). In CE – uniquely observed in March to May where some countries only had a peak in 2020, others only in 2021, none in both years – the classic behavior is observed of a rapid rise (three weeks to top) and a slower drop, after about ten weeks it is gone. The RTS has a slower rise and drop with equal speed. The effective R values are related to the slopes of the curves on a logarithmic scale, indicated by dashed lines in Figure 6. In this logarithm-base-10 scale, the slopes of the rise of the initial waves are 0.1/day (blue), the drop is with a speed of -0.05/day and -0.015/day for Israel and Great Britain, respectively (green), and the rise and drop for subsequent waves is ±0.03/day (red).
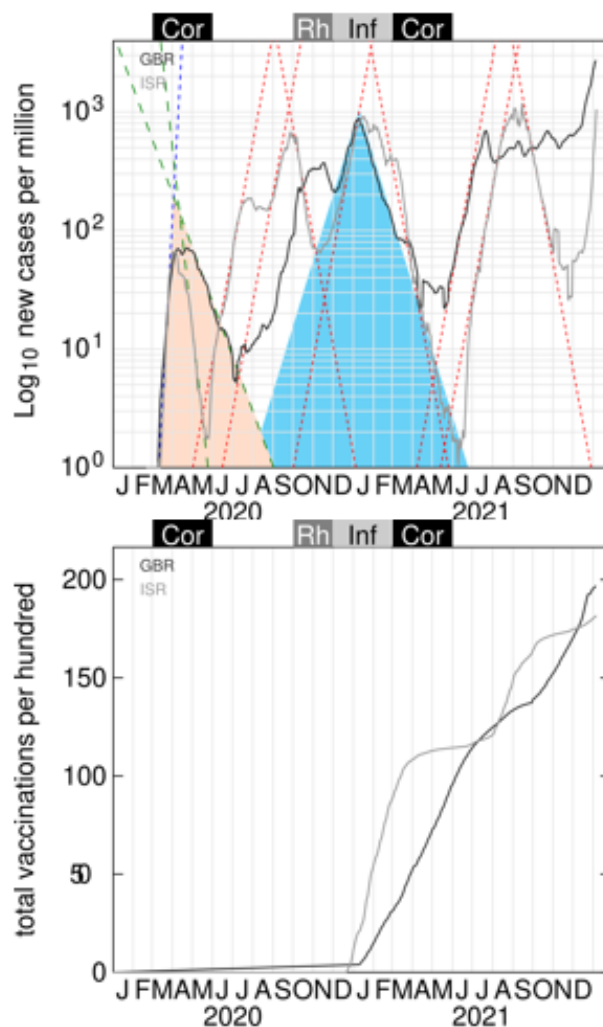
Fig. 6: *Top: Comparison of number of daily cases in Great Britain and Israel (log scale). The slope of a real epidemic is fast up and slower down, somehow depending on the country. A runaway testing scenario is symmetric, as it has a medium speed rise and equal speed drop. The colored triangles highlight the difference for Great Britain, orange for a classical flu wave and blue for a testing epidemic. Bottom: Percentage of population vaccinated; vaccination had no effect whatsoever on the dynamics in these two countries. On top the approximate flu seasons are indicated: 'Cor' for corona, 'Rh' for rhino, and 'Inf' for influenza.*

Moreover, in the bottom figure the degree of vaccination in these two countries is shown. As can be seen, vaccination had no effect whatsoever on the dynamics of the pandemics, where one would expect a significant lowering of the R-value, in first approximation

$$R_0' = R_0 \cdot (1-a\xi),$$

with *a* the fraction of the population vaccinated and ξ the efficiency of the vaccine (often claimed by the producers to be of the order of 95%, but more likely

to be much lower (Olliaro, Torreele, and Vaillant 2021)). No such reduction of the R-value (visible in the slope of the curves on a logarithmic scale) is observed. So, we can add this question: how can vaccination have had no effect on the dynamics of outbreaks? CH: The outbreaks were always caused by a lowering of intensity of measures, motivated by the degree of vaccination, in such a way that they exactly compensate for the vaccination degree; an increase in a is exactly compensated by an increase in R0 such that $R_0' = R_0$. AH: Since the outbreaks of Covid-19 are not associated to an increased propagation of SARS-CoV-2 (which is basically absent in society), the Covid-19 cases are all false positives.

As a final remark, we must strongly remind our readers that the absence of cases cannot scientifically be attributed to the measures taken by the regimes all over the world. It is an often-heard argument in media, but alas, a logic fallacy (and therefore not part of the Scientific Method listed in the beginning). There is no such thing as corroborative evidence (Rule 2). The reduced number of cases is not the merit of the implemented measures. To understand why, take this extreme point: we can also not attribute the absence of any ethnic problems in modern societies to the actions taken by the earlier leaders performing the ethnic cleansing, claiming that "their solution apparently worked!" That is not how science and reason work. Would there have been an ethnic problem without their actions? We would like to propose the hypothesis of it not being the case; a hypothesis that there never *were* ethnic problems in the first place and the actions therefore did not do anything! Just like me just now drinking a cup of tea did not prevent the planet from imminent destruction, it would be a fancy untestable hypothesis and thus not   science.

In the same way the measures did not necessarily ("provenly") reduce the number of cases, whatever your religious convictions may make you believe. In fact, the hyperbolic models of Neil Ferguson are still used in British society and were used as a warning that Great Britain would "inevitably see 100 thousand daily cases" if measures were to be canceled at Freedom Day (Grover 2021). Yet, Freedom Day went ahead, and these predicted cases did not materialize. A failed prediction *can* be used to debunk a hypothesis, in this case the hypothesis proposed by Ferguson.

On basis of all this we can make a prediction that by the time of the flu-season (starting with rhino in October) cases will again rapidly rise. That is, unless the government will mandate that the Ct value – number of cycles in PCR tests – for vaccinated people should be lower (for no good reason other than to show the government successfully fought the pandemic!) than for unvaccinated people.

It seems we are fed a mono-thematic story by the media. And, as Daniel Kahneman mentions in his book, *Thinking, fast and slow* (Kahneman 2011), in such circumstances people suffer from the WYSIATI effect. What you see is all there is. People who only know one side of a story are more convinced they know the truth than people who know all sides of the story. Procuring knowledge is thus very unsatisfactory since it makes you doubt, and that is an unpleasant feeling, alas it is the job of a scientist. Rests to say that it is our governments that are actively maintaining the monolithic narrative (German and English governments actually caught hiring specialists in mind manipulation), there where they show no empathy for their population. In an exemplary case, Dutch government was forced by a *WOB verzoek* (FOIA request) to release the minutes of a meeting (blckbx 2021). In the meeting their own experts warned them that the proposed measures would net cost many lives. Expressed in so-called qalys (1 qaly is 1 full healthy year of life), the measures would save 100 thousand qalys by avoiding Covid-19 cases, but that was offset by a loss of 620 thousand qalys by collateral effects, such as closing of hospitals and health centers, delaying or canceling life-saving surgery or treatment, suicides, job-loss, poverty and associated malnutrition, etc. With an average person still having 40 years of life ahead this would imply effectively sending 13 thousand people to their deaths. Government decided to go ahead with the measures anyway, fully aware of the detrimental effects on society, and thus we must conclude that Andrzej Łobaczewski was right when he wrote that our leaders are psychopaths (Łobaczewski 1998).

Either this, or there is a hidden agenda – that they know, and we don't – in which it all makes sense. In that case, ignoring the Scientific Method may also make sense. The truth will only be found by

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Revelation and we beforehand apologize for having taken the skeptic stance here.

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