



# Pandemic tools for Minds v22

Dr Andreas Kruger 2020 April 20

# Pandemic Tools for Minds PTfM v23

\* This text: | WWW → [tiny.cc/pTools](https://tiny.cc/pTools) | PDF → [tiny.cc/pTpdf](https://tiny.cc/pTpdf) | swag → [tiny.cc/maskunity](https://tiny.cc/maskunity)

\* Skip introduction? → scroll down to “(1.1) meta tool: emergence ladder”

## (0) Introduction

Pandemic Times are fundamentally different from the society we still remember—even though that feels like ages ago. ExponentialGrowth of Covid19 illness **made us change faster** than anyone could have predicted, before it happened. We live in a distinctly different world now. And not all is worse than before.

This text collects *thought patterns* that are helpful for the now.

Let’s call them tools (1). One meta tool (1.1) that can help to eradicate this and future pandemics, and a collection of principles (1.2 + 1.3) that have helped much to navigate the months since January, and some ‘conceptual traps’ (2) that are suspected to be troublemaker concepts.

Finally myself, I have a colossal blind spot, impossible for me to solve alone, so I am asking you to (3) please help me with this riddle about a marginalised, but important group of humans.

**May this help you** to build more & better tools for the conceptual, political, philosophical, psychological (and and and) ... **quantum leap** ... that all of humanity is experiencing right now.

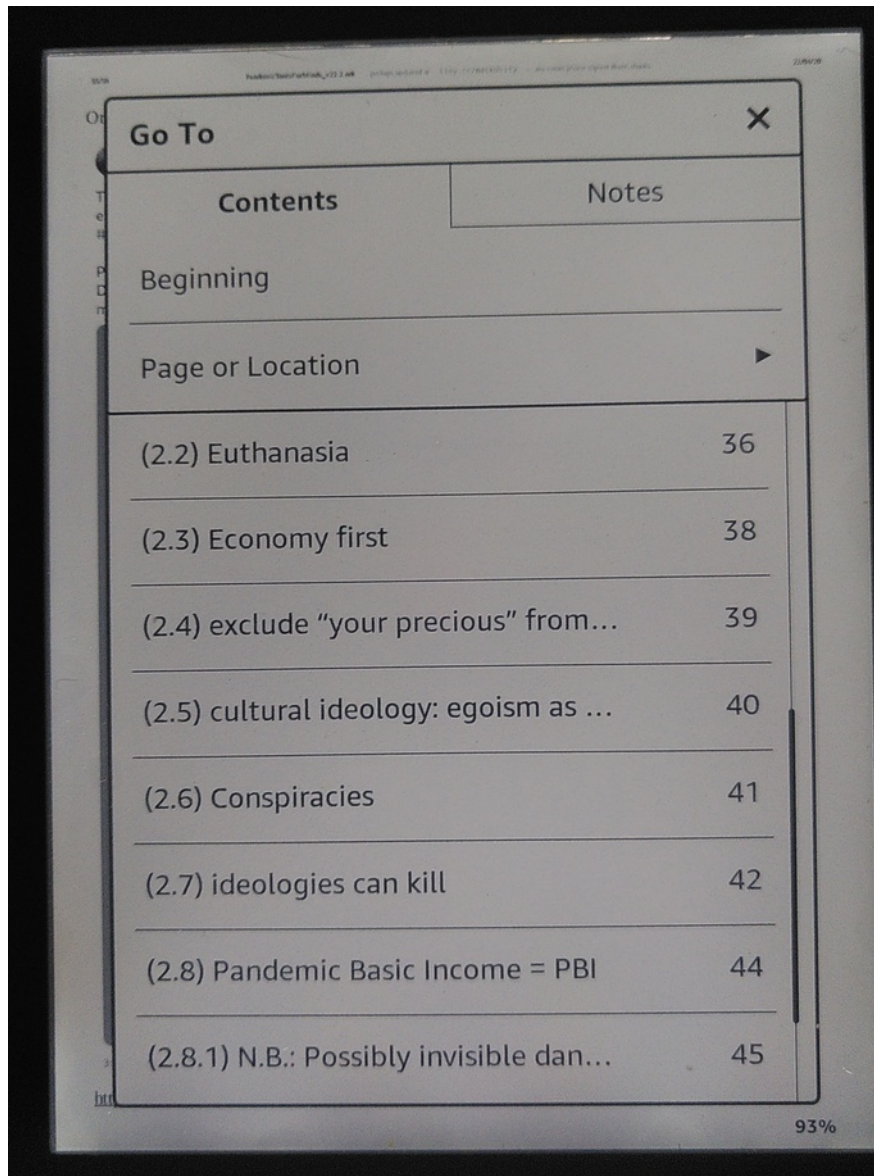
*Sometimes without taste nor smell but definitely: Live and in colour.*

**Read the text, wear the T-shirt.** Or just read the text. The T-shirts are there only to catch the attention of *consumerist minds*. **Please share the TEXT.**



“My mask protects you, your mask protects me” = spread the word about wearing masks and about this text. More info on the site <https://covh.github.io/maskunity/> = shortcut = [tiny.cc/maskunity](https://tiny.cc/maskunity) Thanks, you’re good.

Hint: This PDF ( [tiny.cc/pTpdf](https://tiny.cc/pTpdf) )  
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→ Use a USB cable, send it by email, etc. Many ways ...

## TOC:

- (1) tools for the mind
  - (1.1) meta tool: The “**emergence ladder**”, and the *unknown unknowns*.
  - (1.2) specific tools: **Mindsets#1**, almost sure true (10 tools)
  - (1.3) specific tools: **Mindsets#2**, probably true (6 tools)
- (2) conceptual traps: 7 traps—plus yet untried: **PandemicBasicIncome PBI**
- (3) **CoronaDeniers**—a plea to help me/usNotMe
- (4) + (5) unwritten = you can make me write them
- (6) two working weeks (7) disclaimer

You are most important now. Reading and sharing *will make a difference*: [tiny.cc/pTools](https://tiny.cc/pTools) and [tiny.cc/maskUnity](https://tiny.cc/maskUnity) - May this be useful for you. Enjoy:

### (1) tools

*Outcome* is caused by *actions* are caused by *thinking* is caused by *concepts*.

#### ! New times need new thinking !

The second part (1.2) here is a bunch of unrelated *thought tools* that have already been tried out and applied to many different situations in the past weeks. I’d be grateful if you share your thought tools that worked for you. Let’s identify, develop, try out & document *more such tools*.

The first part (1.1) however, fell from the sky when I was thinking hard how to invite a community of climate scientists to help us with the Covid19 challenge. The only useful outcome was this powerful concept: Suddenly I saw clearly how to structure a whole meta project that organises countless research projects , which then fill in all the gaps of knowledge that we need.

To dethrone the virus.



Thx to K for this meme (taken from ‘KnowYourMeme’ site).

## (1.1) meta tool: The “emergence ladder”

Let's simply look “everywhere” to find the gaps in our knowledge.

What is emergence? “In philosophy, systems theory, science, and art, *emergence* occurs when an entity is observed to have properties its parts do not have on their own. These properties or behaviours emerge only when the parts interact in a wider whole. ... For instance, the phenomenon of life as studied in biology is an emergent property of chemistry, and psychological phenomena emerge from the neurobiological phenomena of living things.” <https://en.wikipedia.org/wiki/Emergence>

A proxy for this “ladder” is the **length scale** from virus to continent:

**nm / μm / mm / cm / dm / m / dam / hm / km / Mm**

Some examples for “emergence” : ice surface on a cooling lake in November, and suddenly you can walk over it; a child brain uttering its very *first word*; a sudden highway *traffic jam* coagulating out of nothing; the first ancient *city* appearing on Earth when humanity was already >>100k years old.

Abstractly speaking: Self-ordering of complex systems. Such leaps have happened on yet uncounted levels, and (at least) since the big bang.

One way to order anything onto that “ladder” is going by its characteristic length scale, i.e. humans appeared on length scale approx 1.50 m; traffic jams on 1–10 hm (hektometre); the baby words at 5 dm (decimetre, child size), and early cities at up to 1 km; and the walkable ice at 5cm?

### Why now is this important?

Lining up all our Covid19 knowledge -and **questions**- along the *emergence ladder* of self-organised reality ... will help us to ‘tick the boxes’, and thus finally even identify the “**unknown unknowns**” (UU).

You might have realized already that there are 4 types of “knowns” and “unknowns”; perhaps in your mind give them 4 colours now, so that whatever is aligned along the length scale shines in its characteristic way:

- (KK) what have we understood already: The “**known knowns**” (KK) are allowing us to establish *consensus about reality* in all of humanity!
- (KU) there are understood questions that we still don't know much about. Perhaps apart from at which length scale they probably influence Covid19 to spread or die out. Let's put (money: private and public) + (open source obligation laws) into exploring those “**known unknowns**” (KU).
- (UK) the “**unknown knowns**” sound paradox, but they do exist. Using AI search, they can even be found by a machine? It would be programmed to systematically analyse all publications of the past 5000 years, whether they relate to anything that can help us to win against the pandemic. Worst case if we ignore those (UK): We would have to *rediscover* the invention of the wheel. Which in linear times is fine, but in exponential times not good: Saving TIME saves LIVES right now.

- (UU) where haven't we looked yet AND didn't even know that we haven't? The “**unknown unknowns**” might even *hide in plain sight*, just hidden by our collective blind spots (see e.g. chapter 1.3.5 on “masks”).

So to discover them, this systematic search mechanism is suggested, which *checks all relevant length scales*. Of course, the goal is to realise the existence of each (UU). And then make them (KU) too.

Definition: **(CIP) How long does our planet need for 95% of people to agree with the truth of the Kks that 68% have already agreed on?** (And if recycled in linear times later, this method might be changed to a much *more consensual* “1 CIP equals the time from 95% to 99.7%”. Less minority is good).

**Goal:** When all UUs are turned into Kks, plus 1 “consensus incubation period” (CIP) a “world pandemic celebration day” is marked on the calendar (until a later date overwrites it, lol). **Let's celebrate our consensus—not the virus!**



**Andreas Krüger** @drandreaskruger · Apr 7

Covid19 Corona SarsCov2 Sars2 THREAD #2

thread 1 from Jan28 to Apr06  
thread 2 from Apr07

#Covid19 #Corona #SarsCov2 #Sars2



1



1



1



Show this thread

<https://twitter.com/drandreaskruger/status/1247514383938236418>

Jan 28th, I began analysing this ExponentialGrowth. 2 threads ^ with >377 tweets.



## (1.2) specific tools: Mindsets#1, almost sure true

The following bits and pieces are almost sure true for me, so let's assume a "best before" date of ~10 million infected humans. Afterwards they might not work anymore, or be replaced, and obsolete.

### (1.2.1) causal times demand sequentiality—we live in a much simpler world now!

Explained by example—this mode of thinking *would have worked well*:

**(1) identify & close the infection channel (e.g. schools) immediately**

**(2) solve the created problems (e.g. kids of doctors) then, one by one**

Why? Pondering about that problem took *much* too long because the old thinking of "balancing the interests" was applied. **But then finally schools were closed anyways.** What had to be done, was clear right from the start—so fricking just do it, and quickly. Every single day longer that schools were open back then ... are *still causing cascaded deaths* until today!



Andreas Krüger  
@drandreaskruger



Paradigm Change: Balancing interests is WRONG.  
Problem is too simple.

BEFORE: balancing helped in complexity.  
NOW: simply identify the causality.

So: Act however is necessary.  
THEN solve most resulting problems.

Reactionary resistance MUST NOT prevent needed collective action.

12:27 AM · Mar 18, 2020 · [Twitter for Android](#)

<https://twitter.com/drandreaskruger/status/1240057115286351872>

2 tweets about this insight, March 18

The old system had needed very different "balancing of interests" concepts. Life before had conflicting paradigms and interest groups, so politics needed to find a balance between the rich and the poor, the corrupt and the honest, the tax payers and the tax receivers, the young and the old, etc. And politics failed in that often (esp. the last dichotomy), and politics succeeded in it often (e.g. the second last).

Pandemic Times are not complicated. Anything that needs to be done for containment ... has to be done anyways. That might cause 7 new problems, of which you solve half of them (and say sorry about the remainder - and pour money over it possibly). Then you can already move on. Allows to act much quicker, and not lose so much time. Especially not on the precious early days.

*And not to lose so much time! Especially not on the precious early days!*

## (1.2.2) reduce each & every risk, as much as possible

There is a 1986 concept called “Risikogesellschaft” (“risk society”) which was probably intended to allow the now past civilisation to generate monetary profits (and societal benefits) from areas which causal & cautionary thinking would rather avoid to have anything to do with - because risks for humans, ecology, and life are real; and the probabilities for total collapse or irreversible damage are non-zero. But still - profits wanted to be made. Right?

Of course, if economic profits are the highest goal of a society, you need philosophical tools to calm down the warners. Essentially, on the one side of the scale are *the risks that need to be taken*, and the other side of the scale are *the possible profits for the few (and benefits for the many)* IF that risk is taken. And then you decide: **Is it worth it?** And often you take the risk. And sometimes a nuclear power station blows up then. Same year, by the way.

So much about the past. Long gone. We are in a different time now.

There is *hardly any gain that is worth risking an infection with Sars-Cov-2* (especially during this early phase where medicine is still a bit clueless too); even more if you are not a complete egoist—so you are also aware to not infect other people, possibly taking their lives.

Again, our current times are *much simpler than the world before*:

***Find all risks - and reduce them even more !***

If you want to, take a short break now: Scribble a list of Covid19 risks in your personal life, then put the list away. Some of the issues will improve at once—just by shining attention onto them. Others will need tough cognitive efforts; and some risks you can reduce by simply talking about them. Don’t do all of that now, I need you as a reader—but do make that list already. See you in 5 minutes :-)

Just to be clear—the old model worked well, in the *old* system. What we must for now replace is the this age old mantra:

*“Which risks X am I willing to take (for others to suffer from),  
in order to gain that benefit Y (for myself).”*

Delete that ^ sentence. Gone. It had very unfair gains and losses anyways.



<https://twitter.com/drandreaskruger/status/1239948197717577728>



### (1.2.3) TeamHuman vs TeamVirus

The goal is to have *all humans* in TeamHuman. Then there will be zero need to balance any interests between two opposing groups. Right now we are not there yet, and some are worse than the virus itself. Let's call them TeamVirus.

Those few who still sabotage the fight against the pandemic ... are (1) anti-human, and (2) very few fortunately, but sadly (3) dangerous nonetheless.

We could call them #CoronaDeniers for now. They use trigger words like “herd-immunity” (without vaccine)—which means: minimum 19 million deaths, under “ideal conditions”:  $R_0=3$  and if the CFR lethality is only  $\sim 0.37\%$  (when using the “grey area total infected” in the denominator, not the “known infected”); thus global health care must be as good as in Germany, at least. In short: Seriously under-estimated.

See this brand new  $N=1010$  study for that  $0.37\%$  lethality assumption:



Andreas Krüger  
@drandreaskruger



19,278,482 #COVID19 deaths MINIMUM  
if YOU let #Euthanasia win = #TeamVirus.

$0.37\% * 67\% * 7,776,717,381$  humans

Assumptions:

- \*  $R_0=3.0$  (?)
- \* globally PERFECT health care
- \*  $0.37\%$  lethality (\*)

(\*)  $N=1010$  representative study. Follow  
#HeinsbergProtokoll @hbergprotokoll for infos.

3:23 AM · Apr 10, 2020 · Twitter for Android

<https://twitter.com/drandreaskruger/status/1248421408230670336>

*How shall I think about someone who seriously considers > 19 million deaths?*

CoronaDeniers also say things like “they would die anyways”, or “only the risk groups”; and conceptually they are often anti-scientific, perhaps conspiracists, assume that we cannot know that Earth is really a sphere, doubt decades of climate science, etc.. And: Reason just cannot get through to them. And if they had decided that washing hands is bad for them and the world, you would not be able to convince them of the opposite. Ever.

Anyone who keeps on objecting & disbelieving the widely accepted consensus of “known knowns” (see “emergence ladder” chapter 1.1 above) is likely to *sabotage all the solutions* which can lead to a healthy planet again.

Don’t get me wrong, scepticism is of paramount importance, and a driving engine of the scientific method (see below 1.3.1). But aren’t there enough opinions to be had about the “known unknowns”?

### **How to treat TeamVirus members?**

Difficult. Anyone deserves *one* warning. And a thorough teaching, right? Implicit is a simple invitation ... for all those in TeamVirus to join TeamHuman. But super-spreaders and their cascades of exponentially growing case numbers ... are dangerous for human life. Those who choose to stay outside TeamHuman must eventually be thought of as lethal (!) virus helpers—(“first of all, do no harm” but probably simply) with *forced quarantine*. See below 1.3.3. That doesn’t harm much, but protects others.

### (1.2.4) Are epidemiologists your friend?

Think about this simple relation of an equality and an inequality:

$R_0=0$  includes  $R_0<1$ , but not vice versa!

Mathematically the *critical* basic reproduction number  $R_0$  below which it becomes likely that “the epidemics is dying out” is ...  $R_0=1$ . You have heard this many times now, but just to make sure we have a *consensus* about this:

$R_0=3$  means: on average 1 infected infects 3 new people. And then in a second “infection generation”, 9 people. After another step 27, then 81. In generation five, 243 people are infected, etc. So in only *twenty* such steps, it would be ~half the world population (just illustrative, over-simplified because of all the *triangles* and *cliques* in our contact networks, and distances between cities and continents, etc.). Initially all were (probably) susceptible to the illness, and some say it was  $R_0=3$  then. Now if 1/3 of the population gets vaccinated, then 1 out of those 3 infections can not happen anymore, and thus causes no further cascades. So then we reach  $R_0=2$ . We still have exponential growth—but much slower.

**$R_0$  is unclear and it varies.** Remark: A recent paper found  $R_0\sim 5.7$  (i.e. all humans reached already in ~13 infection generations) and another one assumed  $R_0=2.0$  (i.e. all humans in 33 infection generations), so there is no final consensus yet about the initial “true” value of  $R_0$ .

And of course,  $R_0$  is an average, and the occurring values widely vary—it depends on society specifics (no/masks, egoist versus collectivist, handshake or bow, population density, age dependent habits e.g. hugging, water tap availability, etc.). So called “super spreaders” (e.g. infected, mask-less supermarket employees, policemen, receptionists, nurses, politicians, etc.) can literally infect *hundreds of people*, single-handedly. In one “infection generation”!

Many epidemiologists only care about a whole population, however their advice might not directly protect *you* against **every vector to catch the illness**. (Whatever they suggest might not be “enough” to keep *you* single individual from getting infected). All they want is that the epidemics dies out.

In other words: Many of them strive for  $R<1$  and not for  $R\sim 0$ .



Andreas Krüger  
@drandreaskruger

Replying to @R34IB0rg @geraldkainz and 2 others

Kommt auch drauf an, was man will, oder?

Ich will für mich  $R_0 \sim 0$  also gesundbleiben.  
Epidemiologen reicht aber  $R_0 < 1$ .

Ein Riesenunterschied im Anspruch.

[Translate Tweet](#)

11:54 PM · Mar 24, 2020 · [Twitter for Android](#)

<https://twitter.com/drandreaskruger/status/1242585544124706816>

### (1.2.5) Humans are endangered, not entities

Humans are attacked by Covid19, not entities (stock markets, firms, factories). Let's recapitulate the facts here:

The virus attacks throat and lung and possibly nerves in a human. It invades body cells, reprograms them to multiply the virus RNA information, and a strong immune reaction lets people "drown" due to their lungs filled with water. Worst case they are dead.

Passing on the virus happens already during an "incubation period" = when no one knows this human is spreading the virus already. Likely humans in the vicinity (for more than a few seconds) will get infected too. Repeat.

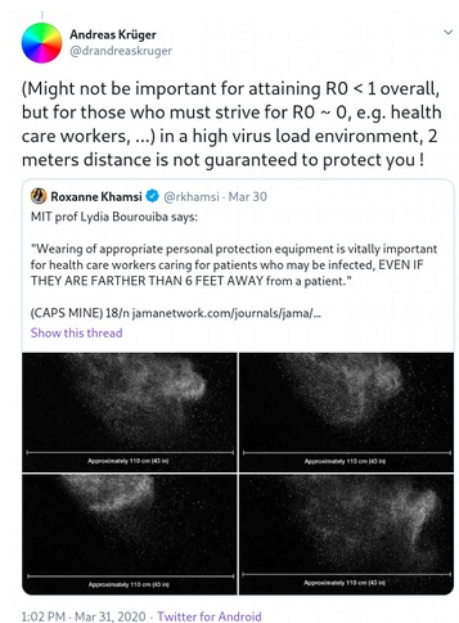
*Companies however do not exist for the virus*, in a first approximation. The novel coronavirus cannot infect their computer systems, the capital, the building - or hurt and harm all the shareholders remotely. I cannot.

However companies do exist for the virus—as "corona party events":

If a single employee is infected, and the workplace had not been shut down, then there's a nonzero probability that many in that company will get infected, and spread the virus. And thus *they harm the whole economy*, because the lockdown must be extended even longer.

Of course, **there are jobs which are survival essential**. They could also become spreading places, but those employees can be protected with the good but rare PPE (Personal Protective Equipment). And *there it must be risked*—for the survival of the population, and those who have already fallen ill.

(Thinking back to the previous chapter: For those latter jobs,  $R \sim 0$  must be the goal. The probability to *get* infected, and to *spread* infections must be lowered as much as possible. So here, not  $R < 1$  is the goal, but  $R \sim 0$ . Right?)



<https://twitter.com/drandreaskruger/status/1244943085215404032>

*But then there are other jobs whose sole purpose are the **profits** of the owners, and the dividends for the shareholders of the company. All countries which are decidedly in TeamHuman will probably not allow *any* such jobs?*

E.g. the Wuhan-style shutdown *closed all factories on February 13th.*

**Hypothesis:** The same effects that Hubei succeeded to show, and after only 38 days (travelling & commerce is now allowed again, shutdown ended, etc.—*because the number of new infections is near ZERO now*) can *not* just be achieved while non-remote, non-essential, for-profit jobs *are still legal.*

Happy to be proven wrong, but e.g. Germany has been showing near linear growth for a full ~2 weeks now. Yes, the curve has bent away from “ExponentialGrowth” (so the average  $R_0$  is not much larger than 1 anymore; which had previously caused the relative %-increase per day to stay high) but the number-of-infected-curve is simply refusing to bend away from “LinearGrowth”—the latter you can detect if the absolute numbers of newly infected of yesterday ... are approximately as high as today’s.

And Germany has some nonessential nonremote forprofit jobs still running; air-planes & weapons are still produced, no? Does the government even give CoronaHelpMoney now to such companies who still generate profits from putting people together close enough that they might get & spread the virus?

Simple for *cleverer countries* who want a *short shutdown*:

- (1) gov pays humans PBI only IF they stayAtHome, strictly.
- (2) Gov pays companies only IF all human contact jobs are shut down, or made into remote jobs.

Both payments have a simple goal: To pay for a reduction of the number of human contacts. As a “side effect” they allow people to survive more easily. Which in turn makes them stay at home. Again.

**PBI = Pandemic Basic Income.** See *chapter (2.8)* below, or 6+1 tweets  
<https://twitter.com/drandreaskruger/status/1244950087467491328>



An even simpler concept levels difference between city & countryside by forbidding all rent payments for 10 weeks.

The landlord gets 1x00 Euros too, so he doesn't need the rent to survive.



1:30 PM · Mar 31, 2020 · Twitter for Android



### (1.2.6) all human lives are equal before the virus

To respond to a virus illness with class differences ... is a *mental illness*, no?

Most old society concepts, for controlling the population to follow their often extractive & exploitative ideology, rewarded certain people more than others—thus the huge wealth gap in the West (and not even totally dissimilar to the luxuries exclusively given to obedient collaborators in oppressive regimes).

However, our current society must be thought differently. Rich or poor—everyone will benefit, *if the shutdown can end one day earlier*, because the newly infected numbers are near zero = So IF new cases happen they can then **simply all be traced again**. And conversely everyone will suffer more, if an early success is hindered by idiocy, or egoism of the few, or profit motives.

In PandemicTimes it *must* be the interest of every rich person, to have all poor people as protected as well as themselves. Right? For the virus, a human is not rich or poor. Anybody is just a multiplier for the virus RNA. Or takes care to NOT become a virus factory. The ONLY difference between humans now.

Seeing Germany paying *different amounts of #CoronaHelpMoney to different classes of people* (“Kurzarbeitergeld is proportional to previous income”), there are numerous clear consequences. Inadequacy to the situation is the worst.

(Apart from *immense waste of time*: The class-based CoronaHelp system they created in March took probably >80% of their (and our) attention - so **they could then only spend <20% of their parliament & government & media time ... on actually fighting the virus !!!** Please improve that guesstimate, analysing parliament log books. Spoiler alert, better solution: See **(2.8) PBI**).

The recipients of very different amounts of #CoronaHelpMoney are like this:

**Some get much too much;** *and when you must StayAtHome, you do not need overly much money to spend*. And the collective would have to suffer for that afterwards: inflation financed wasting of resources (then bread costs >7 Euros); interest payments for years to come; and used up savings:

This is *problematic* because the wasted money would instead be needed for the *global energy transition*, and the *complete system change* away from the apocalyptic #SixthExtinction and #ClimateEmergency *large* problem. Real problem. Massive problem. The Pandemic is pony farm compared to that.

Remember—we just experience a Pandemic = a defined, simple, rather small problem. The attacker has only 30k base pairs, you cannot even call that thing intelligent. In contrast, ClimateChange is incomparably more difficult, and needs much of those resources which are now handed to the already rich & powerful—who had largely been proving for the past 40 years that they don’t give a f\*\*k about humanity’s future. Exceptions given yes, but 95% not.

**Some of the most despicable companies** have zero scruples: they apply for state money (Kurzarbeitergeld) and *at the same time* these companies are paying “*profit*” *dividends to their shareholders*. (Tagesspiegel 6/4/2020). Very probably even without being jailed for that then. The dark forces can be incredibly sinister, even in these solidaric times. Billionaires asking for money.

**Some get exactly the amount that is needed** for them to survive, and to #StayAtHome. Can we please find out (a) how much money that is per month (if you ignore any rent payments for the home; that is an unnecessary complication, and all landlords will get PBI too, anyways), and (b) which percentage is in that group right now, during the wasteful “concept”.

**Some get too little.** They have existential fear (which harms their immune system). They might lose their home, which causes huge infection vectors. They might illegally work, and spread the virus. They might go out and steal food, money, objects. When the morale sinks, and violence breaks out, then #TeamVirus wins, again. They might even cease to cooperate in all our collective containment efforts. Give too little - and you’ll extend the lockdown. For everyone.

**Some get nothing.** How is it even possible that *homeless are not temporarily given a room*, where they have an address for contact tracing, and money to survive - now that there can’t be begging? How much human pain did we allow to happen in the past, to afford that antihuman “competitive society” before? And when do we stop doing obviously wrong things? **Wake up.** All of the “too little” above applies here too, but exponentiated.



<https://twitter.com/drandreaskruger/status/1242200901458243588>

More on the dangers of class differences in (2.7) much further down.

### (1.2.7) egoism has a changed face: altruism

As infected neighbours are dangerous now, even the biggest egoist begins to think differently about others? It might even begin to look like *altruism* (a rarely used word, look it up).

I believe there cannot be intelligent altruism without egoism. Be sceptic with those who say others are more important to them than their own interests; most of them are seriously out of balance. (with an exception: an enlightened soul. Already quite a few, but such a small number still that the above rule of thumb seems reasonable? And when you encounter one of them with that mindset, they might smile at you understanding anyways :-)

However - better also distance yourself from those who still show no trace of altruism. Egoism can kill, in PandemicTimes.

Improving your local world around you does make a big difference right now. Think about the local ICU beds in your town (ICU intensive care unit), it is not really important that your whole country might have 100 ICU beds per 1 million population, if those beds in all the hospitals around you are taken already, when you or your loved ones might sadly need one of them.

Acting locally when thinking globally ... is again a good idea, right? So do protect yourself *and your neighbourhood*, when you find the time for that.

The main focus must be on the self and the home. But then on all these:

me > home > local > city > region > country > continent > planet

Yes, planet. Let us collectively find ways to help the very confused countries. The pandemic will be over only when even the worst regimes are healed (hypothesis: their culture has the highest “egoist quotient”).

Once you found your new balance of quarantine life, look out on which level you could perhaps contribute to lowering the number of infections. Your local region might need help, intervention, teaching, insights. There are countless ways (just examples; ideal are those where you do not leave your home!):

- make disinfectant, following the WHO recipe (only for the careful!)
- create simple mouth-nose-covering “masks”, for gifting them to others
- spread the news: “my mask protects you. your mask protects me.”
- go shopping for the elderly; better: show them how to order online.
- select the *wisest* information you can find, and spread it to your contacts
- volunteer in local organisations; donate objects, money, time
- for those who are immune, e.g.: donate blood

And please you stay healthy yourself. More important than anything else.

### (1.2.8) stochastic processes, probability theory

You ~50% maths haters, please skip this chapter. You lack the very basics to understand it. (Probably not your fault, most school systems failed in this). Instead I suggest you reserve one hour per day to fix that mental incapacity; with one week per school-year ... in high summer you can graduate in maths :-). So please, you continue reading at “**Conclusions**” below. Thanks.

*For maths-able people*, this is an interesting example, and you will deepen your probability methods a bit; or can better explain them to others.

Please read that text now, *then come back here*:

#### Stochastics—and Quarantine Buddies

Not for everybody [medium.com](https://medium.com)

medi... /@ andreaskruger/ stochastics-and-quarantine-buddies-2ced2c20da78

#### Conclusions from there

- **multiply** probabilities when you want both conditions to be fulfilled
- **add** the probabilities for “any of the outcomes”
- When a group grows, the “no tragedies outcome” becomes rather unlikely quickly. An improbable 83:17 case turns into a probable 48:52 case at only 4 repetitions.
- The larger the group, the better *group consensus* needed about personal levels of hygiene; and harder to “bridge” over different levels of hygiene
- Maths is useful, *especially* when you know only probabilities, not more.

#### Practical workaround:

Hint: It can sometimes help to round probabilities to 0% or 100%. A harsh method which distorts reality - but often better than not thinking at all.

**extreme case (Z) “zero probability”**: e.g. doctor, nurse, supermarket employee = a survival relevant, non-remote job that should really not become a spreader. *No infection is the goal.*

*All people in their home group have to be equally super careful.*

*Recommendation Z1*: probably it is better to simply leave the family for a few weeks, and live together with other “zero probability” people?

*Recommendation Z2*: split the house / apartment. See chapter (1.2.9) below.

**extreme case (R) “ruthless don’t care”**: e.g. CoronaDeniers, very young people; very healthy people; risk takers; suicidal people; etc.

Any probability will multiply, endangering the whole group, and with severely increasing the danger, when the group size gets larger.

*Recommendation R1*: suicidal people should perhaps leave their families, and live together with other suicidal people?

*Recommendation R2*: split the house / apartment. See chapter (1.2.9) below.

### (1.2.9) quarantine buddies need consensus

What before had been just a shared living space, now turns into cohabitation with "*quarantine buddies*" = all must have identical hygiene philosophy. OR: separate living areas. Here are the four quadrants of the (non)conflicts:

- **(PP)** I protect you and you protect me = works well.  
Congrats. Have you thought about marriage already?
- **(NN)** I do NOT protect me; you do NOT protect yourself = works well too (at least until illness hits, then grief, guilt, shame, hatred, sorrow, etc. ?)
- **(PN)** I protect me, but you don't protect yourself  
a catastrophe, psychologically & socially; the struggle is immense.
- **(NP)** I don't protect me, but you protect yourself = an egoistic paradise for someone who loves to create emotional trouble

Let's look closer at (\_N) and (N\_) in chapter 3 = my question to the planet. If you can, please help solving that conundrum; wait for chapter 3.

Can we agree that (PP) are fine (and (NN) cannot be helped now anyways), but (NP) and (PN) need attention - because *we see a clear victim situation*?

Recommendations PN: Split the apartment, move into different rooms; put up space dividers in shared rooms; have disinfectant everywhere; communicate only when outside, use telephone to speak; do not stay together in the same closed room for too much time (aerosols); separate the food & cooking, etc. - yes, in too small houses, this can become similar to "living outside, in the streets" - and unfairly only for one person, the more hygienic. (And the dirtier one is a "I just don't care about others"- egoist; so less troubled anyways).

Splitting the apartment might sound tedious and like a lot of work initially. But eventually it re-creates paradise. Much better, believe you me. Not the *person themselves* is disliked, only their hygiene level is frightening. Right?

One last remark about the

- **(NP)** "I don't protect myself, but you protect yourself" = An egoistic paradise for someone who likes to cause emotional trouble in people. Let's not even go there ... You are a horrible person. Change perspective. Now.

Back to *constructive* ideas. (How do you like this whole text by the way? Have you **shared or retweeted it already**? → [tiny.cc/pTtools](https://tiny.cc/pTtools) ← Thanks, much appreciated.) → Let's build a better world, project by project:

**Product / Project idea: An app & database.**

The above is Covid19-insufficient and unfair between the participants, even though better than doing nothing. *But* we need long term solutions for these cases, and pretty urgently. I suspect they cause a lot of pain, around the world. (The *same* day the shutdown ended in China, 88 marriages were divorced).

**PandemicRelief App-idea for a useful service (\*)**

**Commercial / StateSponsored / Idealistic = all possible:**

***The world needs a "swap my flatmate" database***

For “why” also read chapter 3 as we still have no idea how to *help deniers*.

Money-side-of-things: Successful matches earn money for

(a) the recommender / matchmaker, and

(b) the website owner.

Or: OpenSource, free for all; financed through government hackathon02.

N.B.: (\*) this idea is *not* given away freely, instead: If *you* implement it, please give 3% of your profits to me. You & your partners or government can keep 88% because: You share 4% to a pandemic charity in *your* country, and 5% to a *poorer-countries-of-the-world* pandemic charity.

Thanks. You're welcome.



## (1.2.10) maths is dangerously indispensable

They who do not grasp the exponential growth function but get into influential positions ... are murderously dangerous for everyone else. A scandal that our naive “democracy” even allowed such brains to be elected; and that they still rule over others now. *How did we even allow such stupidity to take hold?* Additional to not being a functional complexity worker without mathematics as a tool ... in many suspects we see ‘comorbidity’: Lack of maths often leads to a serious lack of *conceptual & philosophical hygiene*. Elections resulted in too many dangerously incompetent & clueless leaders. Literally a *yucky system*.

### ExponentialGrowth is easy—just no everyday life experience.

This text was planned to have a chapter on  $\exp()$  and  $\log()$ ; perhaps also on compound interest, polynoms, and the  $n$ -th root of a number (e.g. square or cubic root)—but my time is running out, sorry. Instead you can contribute:

→ <https://imgtfy.com/?q=let+me+google+that+for+you&s=d>

Please then recommend the best introductions & summaries (plus advanced courses) that you find. And I might perhaps later link to them from here, IF you write 3 good sentences about each of those links - otherwise I have no chance nor time to even mention them here. Thank you very much.

Look how angry, desperate, and in complete disbelief I was in early March:



Politicians unable to grasp #ExponentialGrowth should NOT BE ALLOWED to do that responsible job; but "real existing representative democracy" is sadly the wrong system seemingly, in our dangerous times, to put the cleverest people in power?

Andreas Krüger @drandreaskruger · Mar 5

Replying to @HansHucke7 and @jensspahn

Wer exponentielles Wachstum NICHT versteht, sollte kein Politiker sein DÜRFEN!

(Ja genau. Da bleiben nicht viele. In ReExReprDemokratie regieren eben nicht die Begabtesten, sondern wohl hauptsächlich solche, die die meisten Wähler beeindrucken. Mich wundert nicht mehr viel ...)

2:27 PM · Mar 6, 2020 · Twitter Web App

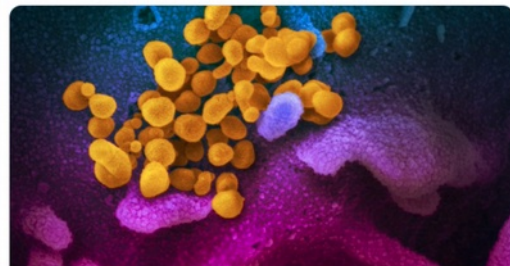
<https://twitter.com/drandreaskruger/status/1235919866512707584>



Can we PLEASE kick out ALL POLITICIANS & PARTIES of that utterly clueless corrupt OLD system, once everyone sees how dangerous they are?

We have MUCH more complex problems to solve - but they cannot even handle a simple virus.

Coronavirus: Europa planlos



Coronavirus: Europa planlos  
Konventionelles Risikomanagement versagt bei einem Schwarzen Schwan  
heise.de

10:45 PM · Mar 9, 2020 · Twitter for Android

<https://twitter.com/drandreaskruger/status/1237132306982277123>

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*1st half of March was easily the worst politics disappointment in my whole life.*

---

### (1.3) specific tools: Mindsets #2, probably true

In contrast to the above 10 concepts, which I assume to be almost sure true, following bits&pieces are only “probably true” for me. So let’s assume a much sooner “best before” date, of ~5 million infected humans. Afterwards these tools might not work anymore, or are perhaps outdated by newer insights.



“Every disaster movie starts with the government ignoring a scientist”

#### (1.3.1) society must be humble towards science

For once. Please.

*Disaster movies begin with a scientist being ignored.*

Pluralist politics was all about the discourse between conflicting world views. The old control system was much dominated by humanities and law. And very little by maths & science (just look at the decades long complete & utter failure of most countries’ politics, in regards to climate science & the mass extinction of life on Earth that this murderous civilisation is causing).

It’s really not just a *joke*, but survival-important to understand here, that “disaster movies begin with a scientist being ignored”. In that joke *our collective decisions systems are described to be lethally inadequate*—right?

Many reasons: *Majority vote* is indeed a working approximator but only for the very very old truths. Anything new needs about 3–4 generations to die and be born, before a 51% scheme can even begin to grasp it. Plus: Many of our collective systems are really not used to *Positivism* anymore—since *Constructivism* grew outside of its domain, where it is a very reasonable perspective.

It would be worthwhile to dive deeper into the (in)adequacy of our previous collective systems. But again—time is running out, sorry—next time perhaps? Are you interested in that?

In contrast, *PandemicTimes* force *exactly one best view onto everyone*, which must and can only be based on a positivist understanding of ... **truth**.

Example: Either a virus can be transmitted in an airborne fashion, or it cannot. The virus will not change depending on how we think about it. Our concepts of the virus can be better or worse, i.e. closer to or further from truth, but the truth will be unaffected by whatever we think about it.

Then once a level of certainty about that truth has been reached, it makes little sense to keep on doubting it. “Airborne” is a good example, because the assessment of the WHO has *changed* on this a month ago.

But it will now very probably *not flip back and forth* between two worldviews. It’s not that *both views are equally “true”* (very unlike many of the idiotic war games that much of the politics in the 20th century had been playing, where both views were equally wrong, most of the time).

In early 2020 the best possible science said “probably not airborne”, and now it says “can be airborne”. And the latter assessment is very probably *better than the earlier*, and if only just because much more research went into it. Simple, right?



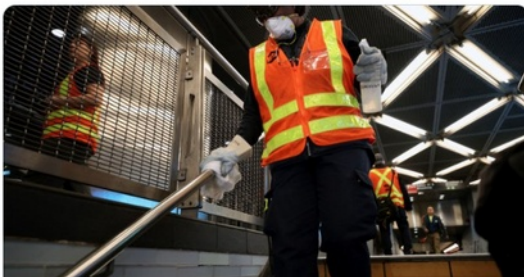
Andreas Krüger  
@drandreaskruger

AEROSOLS WIND AIR ?

WHO considers '#AirbornePrecautions' for medical staff after study shows #coronavirus can survive in air, March 16

[cnbc.com/2020/03/16/who...](https://www.cnbc.com/2020/03/16/who...)

#Coronavirus lives for hours in air particles & days on surfaces, new US study shows, March 18



Coronavirus lives for hours in air particles and days on surfaces, new US stu...  
Researchers found the virus was detectable in aerosols for up to three hours, up to four hours on copper and up to 24 hours on cardboard.  
[cnbc.com](https://www.cnbc.com)

2:19 PM · Mar 22, 2020 · Twitter Web App

<https://twitter.com/drandreaskruger/status/1241716180639002624>

There can be *paradigm shifts* of course, and *revolutionary new insights*. That is always possible, but at some stage of proven facts ... not very likely any more. Example: I assume Earth to be roughly spherical. A few millennia ago many people, in their concept of Earth, were still far away from that UNDERLYING TRUTH that we nowadays approximate ... just better than our ancestors.

(And I do not expect valid breakthroughs from FlatEarth people. I think, hello friends, you should just admit your defeat in this, to yourself. Why? Because your issue does *not matter anymore*. And: We have real problems to solve. Please join the consensus. We have open questions too. And cookies.)

There are *several* really useful procedures to gain knowledge about the world (majority vote, mysticism, religious dogma, deductive insights from assumed premises, language analysis, watching the news, wikipedia lol, etc.).

Here's a centuries wise pattern; very helpful with climate or pandemics:

“The **scientific method** is an empirical method of acquiring knowledge that has characterized the development of science since at least the 17th century. It involves careful observation, applying rigorous skepticism about what is observed, given that cognitive assumptions can distort how one interprets the observation. It involves formulating hypotheses, via induction, based on such observations; experimental and measurement-based testing of deductions drawn from the hypotheses; and refinement (or elimination) of the hypotheses based on the experimental findings.”

[https://en.wikipedia.org/wiki/Scientific\\_method](https://en.wikipedia.org/wiki/Scientific_method)

Note that funnily enough ... general society, influential power structures, most “Western” politics, large portions of law, the Greek and the French and the American concept of ‘democracy’, many religions, the concept of pop-popularity, a majority of mass media, almost all economic theories, much of world literature, etc—**are ALL NOT based on the scientific method**.

BUT (or rather ... so:) they are also not very helpful to understand and fight something we cannot even see with our own eyes. Right?

Science has serious drawbacks too, about that another time. A few rules of thumb though: (1) Someone calling themselves a *scientist* or carrying a scientific degree ... does not change at all the validity of what they are saying. (2) When many scientists agree with them (i.e. they got a lot of *citations* of their published work), we tend to be a little bit *more trusting*. (However with that they have mainly proven to be good at “normal science”; very few have trained minds for “paradigm change” phases, simply because those happen seldom). And (3) *your own ability to distinguish truth* had been manipulated and neglected. Work on that. Read some science. You will get better quickly.

During this pandemic (and in contrast to those of you who experienced the Black Plague in 1347–1353 AD) we can call ourselves *lucky* to live in times and places which are already used to sometimes listening to what scientists have been alert and warning about, and what they are explaining to us.

Compare that with democracy (as another valid tool to approximate reality, collectively): the exponential growth in the speed of a pandemic ... just cannot wait until a parliament has voted again after 4 or 8 or 12 years - to hear what the other half of society might be thinking about the challenge. Right now, we need systems with a faster response time. Much faster.

Thank you, science!

### (1.3.2) science needs humility: successful solutions

However, also science needs its time to process new realities - right?

Just take the shifting of scientific assessment of Covid19 from “not airborne” (until mid-March) to “airborne” (since March 16th, see WHO), as example. No, I am not criticising the scientific method. It’s great that it can change its understanding in a split second, as soon as new data or theory demands it.

What I am criticising however, is scientific arrogance when (a) an issue is poorly understood, but (b) *practical people are already solving it* anyways. Until the understanding is sufficient - science must also be *humble*!

**Example: In China masks were used, AND the outbreak was contained.**

But **Europe** wasted a full month while masks & cloth-for-nose-and-mouth were *publicly discouraged*, via (egoistic barbaric) simplifications like **“a simple mask does not protect ME”**. As if the other life is irrelevant??? SIMPLE MASKS WERE NEVER INTENDED TO MAINLY PROTECT THE WEARER.

*Several* things went wrong (see the chapter about ‘barbaric egoism’ of capitalist cultures). We could clearly see that whole societies had been successfully applying masks, to fight deadly virus epidemics (such societies are *advanced*? Even *superior*?). But still, many “Western” scientists arrogantly ignored that *fact*—just because they did not understand it. Such arrogant views make critical people call *some* scientists to be in the ‘church of science’ which says: “*I declare non-existent what my theory cannot explain*”.

Here is the (ir)responsibility: They could have already recommended to implement masks everywhere, even if they did not yet understand why it might actually help (“Err on the side of caution”, “Prevention Principle”)

Opposite happened: I heard stupid discussions on TV where experts and mass media influencers publicly doubted efficacy intelligence appropriateness, of masks. Unnecessary result: death, suffering; economically: longer shutdown.

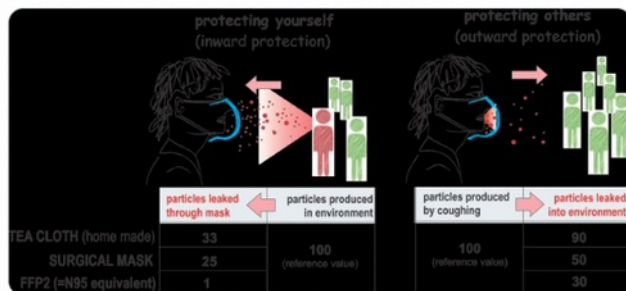




Andreas Krüger  
@drandreaskruger

"It would be tragic if the wrong logics and mechanics and biology, which has led Western governments to not encourage, if not stigmatize the wearing of masks

may have contributed to the steep rise of COVID-19"  
[medium.com/@Cancerwarrior...](https://medium.com/@Cancerwarrior...)



5:56 PM · Mar 30, 2020 · Twitter for Android

<https://twitter.com/drandreaskruger/status/1244654865667809280>

Note that *this applies probably to all methods of containment* that were applied in Asia successfully, from which we *could have learned* (if “arrogance illness” was not a *selection advantage* in competitive systems like ours. Humility is branded as a “loser feature” - in societies dominated by the “dark side”?).

**Instead, so much easier: Copy all Asian methods immediately, and THEN find out which ones work - only THEN disable those which do NOT work.**

And yes—that can even include welding of the front doors of dangerous, renitent, ruthless superspreading egomaniacs. Until you come up with a similarly effective way to stop them murdering humans via spreading the virus, JUST COPY WHAT ASIANS DID. Simple as that. Why didn’t you?

**Summarizing (1.3.1) and (1.3.2):**

SOCIETY must be HUMBLE towards SCIENCE; it is one of the best tools we have against the pandemic - apart from unity solidarity altruism of course.

Science, be humble towards the REAL WORLD EXPERIENCE of more advanced, more experienced societies in “the East”. Practical Experts.



### (1.3.3) forced quarantine

Every collective has some unteachable idiots who endanger others. Do them no unnecessary harm! The only goal is to make them STOP spreading the virus. But imprisoning them can be dangerous for the other inmates, and the officers there. Unless there are specific CoronaDenier prisons created?

This chapter is *intended* to be provocative, so if it does trigger you, and you start shouting stuff like “democracy” or “citizen rights” ... then please calm down again, and follow the pointed finger back the other way, along your arm, into your spine and your brain—and analyse WHY it triggers you so much. (If instead you were trying to *make me* change my mind, that would do only one thing: Turn you powerless. Instead) let’s *empower* you . That anger trigger problem is *in your head*, and once you identify and transform that unconscious trigger ... you can actually help much better to solve anything related to all those critical issues—that previously just made you angry.

Actually, I have begun to understand *why there are Chinese videos showing entrance doors to be welded*. Back then I thought “oops that’s a bit much”; now with having seen the real world population here, and their many clueless idiocies ... instead I am thinking ”oh, that is a reasonable last resort, to protect thousands of people, from one maniac”.

Please do no harm to those maniacs—but quickly lock them into their apartment for ~2–3 weeks. After a max incubation period they are just not infectious anymore. Simple as that.

*TODO: Find video tweets with doors being welded.*

First copy, only THEN quickly find *equally effective* “European” ways that help to solve the same problem. Again, same pattern as in 1.3.5. and 1.2.1:

***Copy first, refine later.***

---

Humanism:

Never forget (even if you were trained by propaganda against China & other Asian countries; or are following the party of the maximal dumbest who even says “*all* other countries but ours are *inferior*” lol) ... all those strange looking interventions might actually originate from *deeply humane thinking*, and *you* might be the real problem, because you do not understand all that yet.

(And collectivism is also not an “enemy” like evil Washington propaganda is trying to hammer into increasingly barbaric minds for a century now. Instead it’s another valid approach to maximise utility of society for many people.)

This “deeply humane thinking” would not want to harm those ill-brained (or brain-unusing) maniacs—unless absolutely necessary. Right?

*Lock them in—not lock them up ?*

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### (1.3.4) “quarantine regions” = regions which want to stay together, i.e. allow travel etc

Classically most of Earth’s population is clustered into semi-functional 18th-19th century concepts called “country” or “nation”. Note that the virus cannot distinguish this concept (A 30k base pairs program is too dumb to grasp even such primitive concepts like “country” lol).

If regions are small enough *and* have sufficient autarky, then such population clustering structures can be useful, to contain & interrupt infection processes—by closing borders. Especially islands can use this for their advantage, no?

Now we encounter a challenge not unlike the “quarantine buddies” problem up there in (1.2.9) after the “stochastic processes” chapter (1.2.8): If areas want to *stay together* during the pandemic, they must all do what the *numbers in the worst area’s situation* demand to be rules, prohibitions, punishments, etc.. In other words: The region with the less worse numbers has absolutely no say in this. It can “divorce”- but as long as it stays in the shared situation, it must comply with whatever the region needs ... that was hit hardest.

OR: Introduce border checking, i.e. separate those regions. “Divorce”.

Note there’s a HUNDREDFOLD difference in infection & fatality numbers in Germany.

On (9/4/2020) on districts (“Kreis”) level it looked like this:

#### **Cases/1mioPeople:**

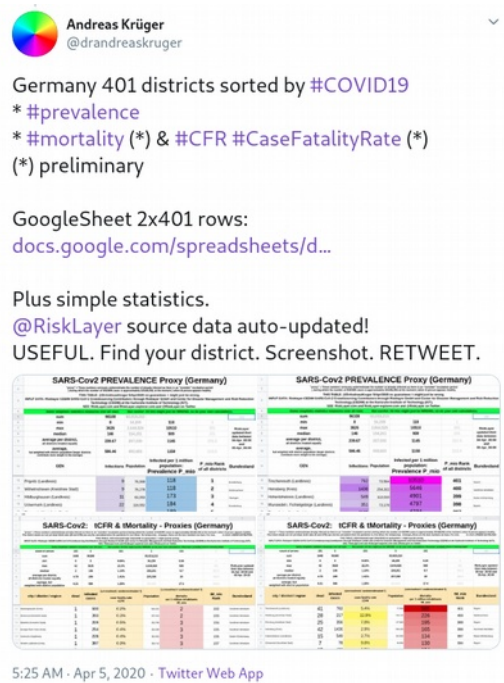
12344 worst (Tirschenreuth), 170 best (Wilhelmshaven), **i.e. factor 73.**

#### **Dead/1mioPeople:**

717 worst (Tirschenreuth), 3.0 best (Bielefeld) = **i.e. factor 239.**

Plus factor “infinite” = as 73 of the 401 German districts still had ZERO dead people counted, on that day.

Here's the full data. I have made that googlesheet auto-updated, and since yesterday also auto-sorted (approx every hour); get your updated numbers of your home district there. The top of both tables contains simple statistics measures over all of Germany, so you can compare the region where *you* live with “the average” and “the extreme” situations in Germany:



Andreas Krüger  
@drandreaskruger

Germany 401 districts sorted by #COVID19  
\* #prevalence  
\* #mortality (\*) & #CFR #CaseFatalityRate (\*)  
(\*) preliminary

GoogleSheet 2x401 rows:  
[docs.google.com/spreadsheets/d/...](https://docs.google.com/spreadsheets/d/...)

Plus simple statistics.  
@RiskLayer source data auto-updated!  
USEFUL. Find your district. Screenshot. RETWEET.

The screenshot shows two side-by-side tables titled "SARS-Cov2 PREVALENCE Proxy (Germany)". The left table is sorted by prevalence, and the right table is sorted by mortality. Both tables have columns for District, Prevalence, Mortality, and CFR. Below these are two more tables titled "SARS-Cov2: CFR & Mortality - Proxies (Germany)".

5:25 AM · Apr 5, 2020 · Twitter Web App

<https://twitter.com/drandreaskruger/status/1246639968702861312>

Splitting the country (hopefully temporarily) might be good idea, with that variability of situations. But those regions will *then grow apart*, for sure.

Example: Easter celebrations with 10 family members were suddenly encouraged in “Schleswig-Holstein” (which had not been hit so hard yet). Announced by a government of these parties: *CDU, Grüne, FDP*.

As infection processes are stochastic, literally nothing worse might happen in Schleswig-Holstein, due to that misconception. However, quite as well, it could become the recorded and well documented beginning of a Northern tragedy.

Probably a huge mistake also because sending ambiguous signals. To e.g. those Bavarian people who do not fully grasp their situation, and “*want to have the same rights now*” (yes, some simple-minds are like that), even though their local *infection probability in the South is a hundred times worse*.

So, irresponsible politics in the German North ... can kill people in the German South. Apart from the now needlessly infected in Schleswig-Holstein.

**The additional “Easter deaths” will be ~early May ...**

... as deaths usually happen 15–30 days after the infection.

### (1.3.5) conjecture: Western countries will do much worse than (Japan, SouthKorea, Taiwan, China)

“Westerners” have been turned into **egoists**. Probably due to 200 years of (even only partial) **capitalism**. Initially we humans were all the same, right? So what else could have turned *us* into that bad version of a human being?

Imagine a traditional village of 150 people living together, needing each other. Who there would invent such a sentence:

**“I do NOT wear a mask because it does NOT protect ME”.**

That is barbaric egoism, no?

Competition, wealth inequality, desolidarisation, precarious poverty, banking scammers and stock markets, Hartz4, etc—the past 40 years of neoliberalism have turned many of the already quite barbaric egoists ... into real monsters.



<https://twitter.com/drandreaskruger/status/1244051975165087747>

Let's do something about it. Read this aloud three times now, so that you burn it into your brain. And then again in an hour, repeat. And tomorrow again:

**“My mask protects you. Your mask protects me”**

A concept that even Western *scientists* *had* struggled to grasp, for more than a month, in February to April 2020. (But those scientists have inhaled capitalist culture as well, of course. Don't blame science, blame their *culture* instead!)

So simple: We all *must* wear mouth-nose-cover, when we leave quarantine.

Perhaps call that *egoistic altruism*? Or is it *altruistic egoism*?

(Really curious to see: Now that the public discussion had been dirtied, obstructed, destroyed, and idioticised by the barbarians who wrongly “discussed” masks in March) ... how long will it take until >90% of the population in these egoistic countries will have learned the lesson?

No, not pointing fingers—I *am part of it myself*. But I am really *sad* too:

## #WeAreBarbaric !

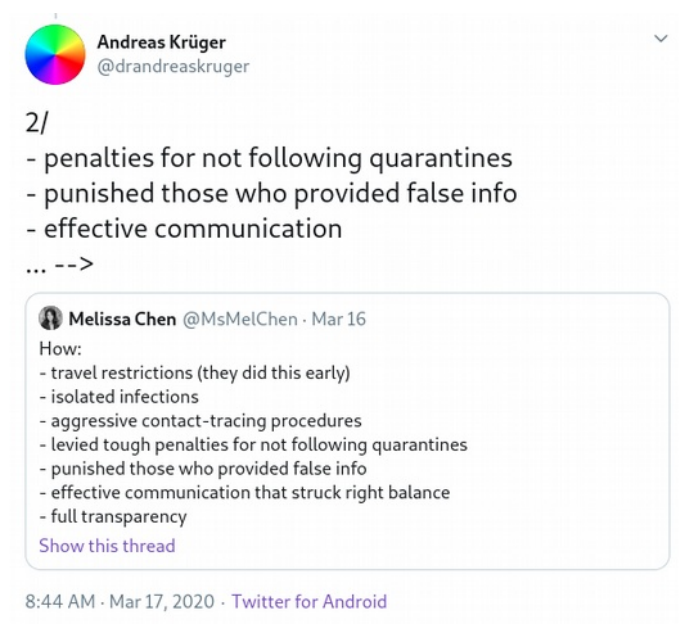
Deeply pessimistic about our culture. Why is it that only 15% can think for themselves (so few wore a mask in a supermarket), but 85% can not; and they always need *commands orders and punishments*, for them to uplift their behaviour? Why is that? I don't know. But it means one thing:

## Obligatory masks !! Maskenpflicht !! They must be TOLD what to do.

Some background wanted? 53% infections (47% pre-symptomatic + 6% a-symptomatic, see Christophe Fraser simulation paper, March 2020) happen from people who DO NOT LOOK ILL; so nothing else but *masking everyone* can help to massively reduce more than HALF of the infections. Not proven experimentally—it's simply a deductive conjecture. Plus: Tradition in Asia.

Let's look at the mask wearing countries:

**Asian (and some Arabic)** countries suffered from SARS-1 and MERS. That taught them lessons. In March, **Japan** early started paying parents 80\$/day, to not go to work but stay home, so their children's schools could be closed (same thread March 10). **Singapore** developed an advanced set of (clearly communicated) rules to fight the outbreak. See these 4 tweets, and the thread linked from there:



<https://twitter.com/drandreaskruger/status/1239820001688915968>

Initially, **China** made a huge mistake to not take Sars-2 seriously in the very beginning. (But then *almost every country -including Germany- repeated that same mistake*. And some countries started much much worse than China; they waited too long, and then too late ... even did only a *partial* shutdown).

But once they realised it, then China acted efficiently and swiftly. They **closed factories on February 13th**. Until releasing the shutdown, they needed only 38 days:

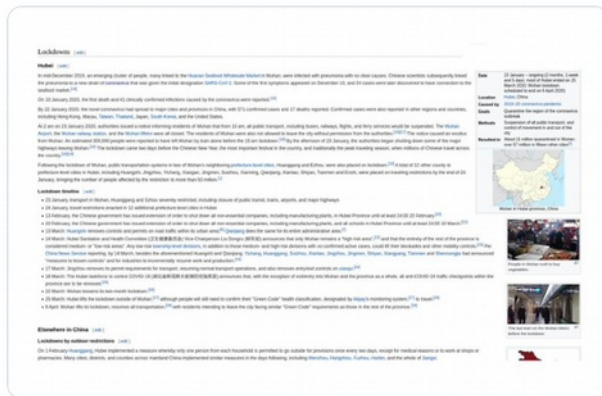


Andreas Krüger  
@drandreaskruger

TIMELINE Wuhan, Hubei province.

[en.wikipedia.org/wiki/2020\\_Wuhan\\_lockdown](https://en.wikipedia.org/wiki/2020_Wuhan_lockdown)... They managed to contain the outbreak, see ^ above. Kudos.

May that info help you IF you must live in a clueless society. Some nations who elect leaders by 'popularity' are of that type - perhaps due to #DunningKrugerEffect?



4:31 PM · Apr 4, 2020 · Twitter Web App

<https://twitter.com/drandreaskruger/status/1246445174353428482>

What worked *there*, has to be done in other countries too now.

China kept the total number of infected well below 100k cases, so *any country with more than that* ... has to be humble, and should perhaps consider to invite Chinese experts to come over—and help to fight the pandemic, with more suitable methods.

Additionally, and for harder numbers (as the total number of *known infected* is dependent on how much testing is done at all) China had less than 3500 deaths from Covid19. Any country with more deaths has a serious explanatory duty *why* they did not just follow the good examples, and why they *did not act humanely*, and why they *did not contain* the pandemics with all their vigour.

*Ask: Why did **your** contry protect its population not as good as China did?*

## Propaganda

Assumption: Countries getting close to and crossing 3500 Covid19 deaths will probably try to gas-light you. In your mass media, you might recognise it when propaganda against China is suddenly broadcast.

Keep your eyes open, and decypher the lies. If you see well-timed propaganda, then you know that they implicitly agree that China has actually done a better job than they could ever do. To apologize would be more noble—but at least they admit it somehow.

Indeed, I am not terribly surprised. They managed a lot of tough problems, that our baby steps cultures had not even encountered yet. Let's learn from them, right? That culture has a 5000 years history ...



### (1.3.6) “My mask protects you. Your mask protects me”

**Repeat after me.**

“My mask protects you. Your mask protects me”

**Preach that.**

“My mask protects you. Your mask protects me”

**Wear the T-Shirt.**

Literally: **You can wear the T-shirt now.** Born out of *the total catastrophe that this text here is in, on April 17th 2020*. After many many days of so much work to write it, and then many many additional days to promote it ... I still only had SIXTEEN readers. That is not good. Hello planet, anyone out there?

So, next attempt. Perhaps what *humans really want to be*, as their highest goal in life is ... **being consumers?** Then here you go. I made some products you can BUY (or just paint it manually on a T-Shirt, and not waste money for this).

PLEASE when you do, spread the word about → [tiny.cc/ptools](https://tiny.cc/ptools) ← this text. See bottom of page for ready-made tweets, and images you can share. Thx!



“My mask protects you, your mask protects me” = spread the word about wearing masks and about this text. More info on the site <https://covh.github.io/maskunity/> = shortcut = [tiny.cc/maskunity](https://tiny.cc/maskunity)  
Thanks, you're good.

---

Chapter (1) end. Next chapters:

(2) conceptual traps

(3) deniers

## (2) Conceptual Traps

Here are 7 dangerous thought patterns: **hating maths, euthanasia, economy first, excluding your churches, egoism, conspiracies, ideology can kill.**

Plus an 8th one, which until now few countries want to touch, even though it looks as if it could be the best PandemicResponse setup to

- save time
- save money
- save lives

However - as no country wants to do it, *perhaps it is a conceptual trap too?* Please you analyse it thoroughly. Chapter (2.8) PandemicBasicIncome.

But first the 7 obviously idiotic traps:

## (2.1) hating maths ... is dangerous

The relevant Mathematics is fully thought through by 3%, and understood mostly by 12% of the population - so 85% do *not know enough* to even get the full message. Approx 50% population are *literally clueless* about Exponential Growth, its source, properties, and consequences. Sad, yes.

Numbers are hypothetical (also e.g. in cities in Asia, ratios are different; this maths weakness is based in Western culture too). Please demographists - create verifiable tests to (dis)prove -or improve- the guessed numbers.

Sadly, the *majority* cannot even ‘just learn it now’, as as they lack the very foundations in maths. Thus in exponential times, they *can not be treated as self responsible people*—because they do not understand the world as it is. The responsible way sounds unusual (but comes from deeply humane thinking):

*Tell them what to do.* In clear, *unambiguous* words.

Who are our leaders though? Selected by “popularity democracy”, which allows maths haters to get all the way “to the top”. How would you even try to explain such a choice in a collective decision apparatus which should attain the highest common good? Sounds like an impossibility conundrum, right?

It’s really NOT OK to elect maths haters into responsible positions, as: (a) it is super dangerous for the collective, and (b) it is an absolute imposition to all of us people *who do know their way around with mathematics* - that we have to accept feeble laws & policies created by maths haters.

Unacceptable, really.

First half of March was the most catastrophic two weeks since 1986 at least, for non-dumb people in many so called ‘democratic’ countries. In Asia, my own survival might have felt rather ‘safe’ -but here ... not.

Let’s think *constructively* how to solve *dangerous shortcomings of elections*:

A really simple and even short term solution could be: When elected into parliament—then each candidate is tested for a set of maths abilities—and those who fail that test must repeat it after a specific, high quality training. Until they pass, their *voting ability* in parliament is just paused. Those who fail three times are excused, and their seat stays empty for 5 years. Something like that. What do you think? Or what is a *better concept* that would *fix it* for sure?

For avoidance of doubt: Of course I’m not asking for higher mathematics. But someone who *rules over millions of human lives* must be able to turn a growth percentage into its equivalent doubling time. Just one example. Simple stuff.

## (2.2) Euthanasia

*“Vulnerable populations should volunteer or be sacrificed to die, so that the strong people can continue with their lives.”*

That is comparable to the Aryan ideology of my grandparents' Nazi regime. Warning: Afterwards generations of innocent young people were forced to wander through museums to see their grandparents' idiotic necroticism.

*“A low mortality means ... we should go that route, and sacrifice human life.”*

No. Because: *Germany could end*, as the very basis of our “constitution”, articles §2 and §1, directly forbid euthanasia. Afterwards, perhaps nothing in “Grundgesetz” would have to be respected any longer? Yes, this country needs a new system for sure - but pandemic times are not *really* the perfect moment to eradicate the very basis that this half-broken society is built on. Right?

Definitions from wikipedia, that field of concepts is ugly (**trigger warning!**):

**Euthanasia** (from Greek: εὐθανασία; “good death”: εὖ, eu; “well” or “good” + θάνατος, thanatos; “death”) is the practice of intentionally ending a life to relieve pain and suffering.

Different countries have different euthanasia laws. ... “a deliberate intervention undertaken with the express intention of ending a life, to relieve intractable suffering” ... “termination of life by a doctor at the request of a patient” ... “assisted suicide and termination of life on request”.

**Eugenics** (/juːˈdʒeniks/; from Greek εὖ- “good” and γένις “come into being, growing”) is a set of beliefs and practices that aim to improve the genetic quality of a human population, typically by excluding people and groups judged to be inferior, and promoting those judged to be superior.

The concept predates the term; Plato suggested applying the principles of selective breeding to humans around 400 BC. Early advocates of eugenics in the 19th century regarded it as a way of improving groups of people. In contemporary usage, the term eugenics is closely associated with scientific racism and white supremacy. ...

**Ableism** (/ˈeɪbəlɪzəm/; also known as ablism, disablism (Brit. English), anaprophobia, anapirism, and disability discrimination) is discrimination and social prejudice against people with disabilities or who are perceived to have disabilities. Ableism characterizes persons as defined by their disabilities and as inferior to the non-disabled. On this basis, people are assigned or denied certain perceived abilities, skills, or character orientations.

**Culling**—In biology, culling is the process of segregating organisms from a group according to desired or undesired characteristics. In animal breeding, it is the process of removing or segregating animals from a breeding stock based on specific trait. This is done to exaggerate desirable characteristics, or to remove undesirable characteristics by altering the genetic diversity of the population. For livestock and wildlife, culling often refers to the act of killing removed animals based on their individual characteristics, such as their gender or species membership.

**Life unworthy of life**—The phrase “life unworthy of life” (in German: “**Lebensunwertes Leben**”) was a Nazi designation for the segments of the populace which, according to the Nazi regime of the time had no right to live. Those individuals were targeted to be *euthanized by the state*, usually through the compulsion or deception of their caretakers. The term included people with serious medical problems and those considered grossly inferior according to the racial policy of Nazi Germany. This concept formed an important component of the ideology of Nazism and eventually helped lead to the Holocaust.

Before *those recent TV & media discussions*, I would have never ever expected that our “modern” societies would dare to go close to such concepts again.

But now I also understand how desperate the ethical minority must have felt back then during my grandparent generation’s falling-out-of-humanity. Ouch.

## (2.3) Economy first

*Ideology: “caring for corporations IS caring for humans”*

Plain wrong. Caused by a blind spot: Party ideology of the blackred party (in Germany. Or the redblue party in the US. Yes, they are not 2 distinct parties , but actually two wings of the same one ideology. Try to disproof that ...). For decades we have been ruled by the same people, the same ideology, the same party, the same concepts. Try this: Look at 1970–2020 from an ecological and climate perspective: Minor shades of differentiation never made big enough differences. The same destructive forces, destroying the future. Rant end.

But admittedly, if *any other party* was ruling now, we would suffer under *their* ideological misconcepts. Ideology kills - has never been truer than now.

Neoliberal, market-glorifying, economy-first thinking is ... an ideology. A long term lethal one (see #SixthExtinction and #ClimateEmergency); and short term (in #Covid19 exponential times) we witness their wrong focus, right?

When we look at *individual workers*—some are literally *sacrificed for profits*. Assess it from a *legal* perspective—what is the compensation sum that such a company can be sentenced to pay afterwards, to the family of the employee when that employee catches Covid19 *only because* they met an infected worker—at *their workplace*? Is it economically wise to gain 5 weeks of extra profits, and then pay 500 weeks of profits for the dead or crippled? Yes, this paragraph is just a cold hearted money & law perspective. But it tells, no?

And now the medicine perspective: That “economy first” ideology leads to nonessential workers *still meeting in person now*, so there are some infections happening *that would not have to happen at all*. 1000s per day in total. To me it looks as if *that* is the reason why the *linear growth* was just not bent towards stagnation, for full 2 weeks. Proper contact tracing will clarify that, right?

If my suspicion is confirmed, then *their ideology* is *extending* the shutdown, unnecessarily—and *that harms the whole country*. **Including the economy**, paradoxically. Wrong focus on economy first ... harms the economy. Yes.

Is a complete shutdown better, because it is over faster? China did it that way. Simple. Not difficult to understand. Unless your blind spot makes you not seeing reality well. Blinding are those dollar signs in your eyes - right?



## (2.4) exclude “your precious” from the response

Every society will be tempted to keep their holiest structures & processes exempt from the pandemic response. And that then will cause unnecessary trouble. Again: A virus cannot distinguish school from church from factory.

In our case, keeping some lucrative (or influential) businesses running ... they then can become source of the next generations of infected people.

It was impressive to see that actually churches were shut down, without much hesitation. But then again—that was the *previous religious system* of a long past society. The cathedrals of capitalism are the large for-profit factories.

It would just be a few weeks, so where’s the problem? Why are factories & workplaces not all shut down now? If they are nonremote, nonessential, then:

Shut them down. Now.

And if in doubt, ask Chinese experts:



Andreas Krüger  
@drandreaskruger

Expert from vastly superior civilisation visits Europe.  
Cannot believe what he sees.

#China please send know-how, our governments are good with ❤ corporations, but lack focus on ❤ humans?

HOW did you succeed to quickly pause capitalism to protect humans?



10:13 PM · Mar 22, 2020 · Twitter for Android

<https://twitter.com/drandreaskruger/status/1241835483673567233>

## (2.5) cultural ideology: egoism as the basis in 200y capitalist societies

Political parties compete *against* each other. Companies compete *against* each other. Workers compete *against* each other. Schoolkids are made to compete *against* each other. Markets make participants compete *against* each other. Shopping today means that “a winner” *steals toilet paper out of your trolley*.

Solidaric & altruistic humans have *competitive disadvantages*, in capitalism.

**“Masks don’t protect ME”** is a deeply barbaric sentence to say.

Asians are probably nauseated by our ‘Western’ selfishness ? *Instead:*

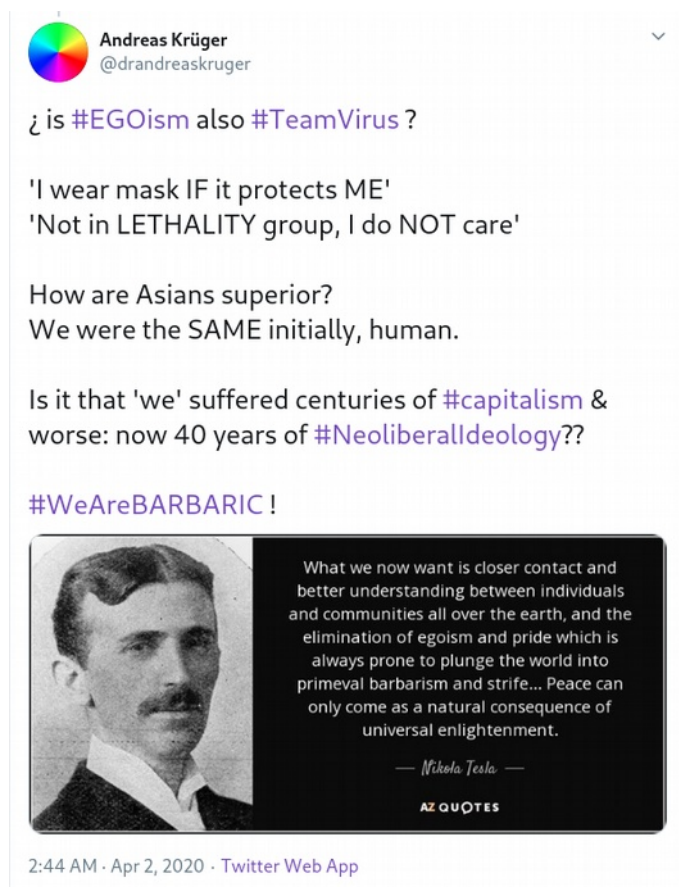
**“My mask protects you. Your mask protects me”.**

Say it three times now. And in an hour again. And tomorrow again.

From now on I am calling ‘mask users’ **humans**. All others are ethically & socially & intellectually speaking not how and what I expect humans to be to each other. I haven’t found a word for them yet. Inspire me.

And *oblige* those > 85% egoists to wear masks, and punish them if not.

More about this topic in chapters 1.2.7 and 1.3.5



<https://twitter.com/drandreaskruger/status/1245512277463359492>

## (2.6) Conspiracies

Colourful fairy-tales like e.g.: “... *the actions and reactions of society that we are seeing now (economic shutdown, contact tracing, house arrest, ...) were the long planned intention of that secret cabal who manufactured an artificial virus, to change the world in their image ...*”

Lol. I will not even go there, there are simpler and more pressing questions still unanswered, and I am really not bored. Just some helping perspective:

- For identical factual empirics, you find several explanatory worldviews which are *all* fitting and are *all internally consistent* - i.e. when you think *within* one of them, you will not find any contradiction. Plus, you will be able to find more and more arguments in favour of of your belief, the longer you think, and look around to confirm your bias. That however, never relieves you from your OBLIGATION FOR TRUTH. Not every of your thoughts is true, and consistency is necessary but not sufficient for truth.
- Truth is holy. Be you religious or not, truth is better. For you, for us, for all.  
And for those with a conscience, yet another perspective:  
Those who are spreading lies ... are called *liars*.
- For truly unanswerable questions, there is an old tool called Ockham's razor (he lived 1287–1347 AD): “Entities should not be multiplied without necessity”. In other words: “The simplest solution is most likely the right one”. Occam's razor says that when presented with competing hypotheses that make the same predictions, one should select the solution with the fewest assumptions. (Wikipedia)
- This might apply too, and is well meant, really: About a year after quitting Marijuana, the sharp distinction between fantasy and reality will be back. I suggest to take a break, in order to regain mental health, and tidy up your inner library. We need your clarity. Careful: Sobriety is addictive ;-)

## (2.7) ideologies can kill

*This chapter could be longer. For now, only “partisan answers”; and “class differences”—which explains why they are “wasting money”. Similar views are scattered over this whole text though. ToDo: find those chapter numbers.*

**Partisan answers.** The binary US American version of “democracy” seems to be the most dangerous globally, for humans in their country (and for the remaining >7 billion humans on this planet). *Fox news* equals the Republican party (comparable to “Bild” had always equalled the German CDU...).

Fox literally murdered countless US people (only because the “Democratic Party” half was a bit quicker in upgrading their minds about the pandemic than the “Republican Party” half?). Partisan weeks in February & March initiated a huge seed of cluelessly infected, into a broken country. Poor them.

Here you see true evil of mass media & journalists—no: “freedom of press” is not *guaranteed* to always be just “good” - it can be the *exact opposite*:



Andreas Krüger  
@drandreaskruger

#Murdoch's #CoronaDeniers will have killed countless people with such disinformation, this is brutal:



12:33 PM · Mar 18, 2020 · Twitter Web App

<https://twitter.com/drandreaskruger/status/1240240023796166657>

**Class differences:** a more unequal society is much worse off now, on so many levels, as it “affords” differences like

- in health care, nutrition, and hygiene
- in living together closely; in high vs low virus load neighbourhoods
- in (lack of) knowledge about reality, natural world, its mathematics

Hypothesis: The better a society is *balanced*, the quicker the whole society will come out of this, mostly unharmed, and start (re)building a better place. (Simplistic test: time length of shutdown versus Gini coefficient?)

And in *Pandemic Response*, to make class differences (e.g. some humans get more money than others) when fighting a virus illness resembles a *mental illness*. A virus cannot see money. It infects human bodies, not their bank accounts.

More about this in chapter (1.2.6).

A **class-less response** is much more functional: **PBI**, next chapter 2.8.

### **Wasting money = sacrificing the future:**

In Germany even too long 10 weeks of PBI will cost (€190–380 billion)  
= *so much less than the* current policies (which announced **€700 billion**).

The blackred party is wasting 2–3 times more than a (more effective) PBI would cost. And because of their wasting ... the black half is even discussing to kick climate agreements in the bin (“CDU-Wirtschaftsrat”, April 11th).

Do you *really* want to play the “young versus old” death card now—in this dangerous situation where inter-generational solidarity is indispensable?

Truly incredible; even self-harming: *Most of your voters are old, or very old, or very very old*. You really resemble the RepublicanParty sometimes \*sigh\*.

See chapter “**The Coronavirus Kills Republican-Leaning Voters More**” in @TomasPueyo’s recent article “[Coronavirus: Out of Many, One](#)”.

It is probably wise now to publicly apologise, for the lethally dangerous (for all old & vulnerable people in this country) *threat against young & very young people that the* “CDU-Wirtschaftsrat” announced last week (could that splinter group be kicked out of the party perhaps? That could show a clear sign now).

*However, bad concepts & politics must end anyways, and ASAP. Here is a simple and better way (to save 46% to 73% of the expenses, and) to beat the virus:*

## (2.8) Pandemic Basic Income = PBI

Example for a rich country (that announced it wants to spend €700 billion).

- Pay PBI to all German humans, for 10 weeks:  
83,000,000 \* 2.301 months \* 1000 to 2000 Euros = €191–382 billion
- Pause all non-essential non-remote economic activity.
- Pause all apartment rent payments. The landlord gets PBI too. Reason: Then there's nearly no difference between countryside & city dwellers.
- Every HUMAN gets the *same* amount of MONEY: Food electricity internet telephone heating water and a few other expenses. What else would one need in quarantine? Buying a 2nd car? Renovating your yacht? Diamonds?
- Let us all be out of it alive ... after ~10 weeks (my initial estimate, because sooooo much of the most precious time was wasted, February & March).
- If it really lasted such long 10 weeks (and twice as fast is possible, see China's 38 days until ~ZERO new infections; BUT: *they all wear masks*)  
... it would still only cost: €181–381 billion.

*Not 700 billion.* Please do not waste *our* money. We demand a future.

For the some of the **really bad effects** in countries *without a PBI*, read these chapters: (1.2.5) *Humans are endangered, not entities.* And (1.2.6) *All human lives are equal before the virus.* Plus the warning in (2.8.1) here:



### (2.8.1) N.B.: Possibly invisible dangers ^ here!

**Important:** *I might have a blind spot.* That is why I deliberately put the PBI *here*, into the “ideologies can kill” chapter. Please people, think hard and long:

- What would be “ideological” about a PBI?
- What are the biggest dangers? What is the worst disaster if it goes bad?
- What is missing? What has to be done differently? What can be simplified?

Fact is: *Not implemented anywhere.* No example case. No one knows how it plays out. The deductive perspective on it ... looks convincing. But that’s all.

Anyone willing to turn it into some *computer simulation*?

*Any country* willing to try it out? You might beat the class-based countries!

*Any billionaire* would want to simply try it out *for their favourite region*? Burn 90% of your wealth on it; but create the first Covid19-free metropolis in your nation? You might want to team up with a few other billionaires - then you can afford it. Perhaps for you *easier to do* than for ideological nation states?

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This idea works. I would like to see it.

Please someone good—put it in action. Thank you.

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*End of chapter (2). Last one (3) is coming up - you’ve almost made it. Congrats. Please reach out on twitter insta whatsapp ... to spread the word about this:*

→ [tiny.cc/pTpdf](https://tiny.cc/pTpdf) ← *abbreviated URL of this text, for easier sharing. Thanks!*

*Finally, my urgent plea to you. That same trouble started originally with #ScienceDenial #ClimateDeniers. But now & here it’s obvious & urgent: How to help CoronaDeniers? And, of course, how to protect society against them?*



<https://twitter.com/drandreaskruger/status/1238668383010336768>

### (3) How to help CoronaDeniers to arrive in the now?

My working assumption for now is sadly:

**“That CoronaDeniers could ever change their mind ... is an illusion.”**

Myself, I am not able to switch into “TeamVirus” even for a short moment, to perhaps understand them bit better. That is my working assumption why my insights are blocked how to help them. I see nothing. No way out.

(They are similar to #ClimateDeniers i.e. #ScienceDeniers. Impossible to make those see reality. The only way out on twitter was eventually, to *block them*. Cut them out of the loop, prevent their contributions. *Not good here!*)

It is frustrating that reason, data, science, logic, proof, etc. do not help here. So I am calling all empathists and philosophers and psychologists out there (and whoever else might be able to help)—please find a way to get into the mind of a typical CoronaDenier, and change it. Bring them into TeamHuman, please. And if you can explain your successful method to me, that would be helpful.

Please refrain from explaining *to me*, why I should *not* try, and *just leave them be*. Because that is not an option here. If you try that on me, then *you* are in TeamVirus. Go, get lost. Lol.

I think I should tell you my current working assumptions about them ...

**How to recognise**, by their trigger words:

- **“hysteria”** ... colloquially means “*ungovernable emotional excess*” (wikipedia). The word comes from uterus = hystera; i.e. a deeply misogynist word too.
- **“just like flu”**. Wrong. Do your research. Ask real experts. Look at numbers.
- **“only fragile, old, and vulnerable people are dying”**. *Euthanasia*. Visit a Nazi memorial please. Plus: it’s wrong. The largest group of dead is like that, yes. However the ‘only’ is plain wrong. Babies, children, teens, twens, healthy young adults, middle aged people—are among the dead already. And some who *survived the serious course of the illness* .... are crippled now; their lungs are damaged. And on top of it all: *Who has the right to declare vulnerable groups to be “unworthy lives”?*
- synonymous trigger word: **“herd-immunity”** (before a vaccine, of course). 20–50 million dead.
- **I don’t believe that XYZ**. The virus really doesn’t care who believes what. Don’t be a Boris Johnson. Don’t be a WhiteHouse Monster. Just don’t.

(A weirdly human perspective - yes me the author is a human too: Originally in my first draft, *each* of these 5 bullet points ended with a “*Shut the f\*\*k up. You moron.*”. But later I deleted those five expressions of disgust. That anger is understandable, but probably not helpful, so I removed them. Open question: What would *you do* in such a situation, writing a text like this?)

Yes, visibly my patience is long gone. The last trace of respect is long gone. The shared humanity is what is still there—but on shaky grounds already.

It might be, that with CoronaDeniers it’s probably better to avoid any interventions? Arguments, talking, time, understanding, empathy, discussions—nothing helps. Worse: As any discussion soon turns *antithetically*, the denier goes deeper into denial. So even more days are lost for them, before perhaps being able to start seeing glimpses of the truth.

Probably better: Not talk at all. Just wait until the number of deaths has doubled (or tenfolded, for conservatism-damaged people?) again. One day they might simply wake up and drop their misadjusted view on reality?

## Comorbidities:

- **hating math**; no chance to even understand exponential growth
- **“Conservatism”** (i.e. lack of) **“belief revision”**:  
 “In cognitive psychology and decision science ... conservatism or *conservatism bias* is a bias in human information processing, which refers to the tendency to revise one’s belief insufficiently when presented with new evidence.”  
[en.wikipedia.org/wiki/Conservatism\\_\(belief\\_revision\)](https://en.wikipedia.org/wiki/Conservatism_(belief_revision))
- **Low IQ?** Not sure about this. The virus is a simple 30k base pair object; the threat itself is not difficult to understand. Anyone with IQ 80 or higher should be able to grasp what to do and what not to do.  
*However*, while societies are collectively confused, distracted, inhumane (or basing their common knowledge & goals solely on ideologies or worse: majority votes), they are *sending ambiguous signals to the population*. And that affects and confuses especially the ... not so clever people.
- **inability to handle fear**: a lethal pandemics frightens you, but you are not used to handle the emotion fear very well. Solution: Declare the threat to be non-existent, or just a minor problem. Complication: You’ll become *less careful* → higher probability to infect yourself and others. Not good.

Do not treat lightly—those are potentially the most dangerous ones right now. We *must* find ways to invite them back into TeamHuman.

A single CoronaDenier can harm families, cities, countries. Just look at the FoxNews examples in chapter (2.7). Yes “forgive them, for they do not know what they are doing”—but they can harm people badly. *Ignorance kills*.

Contrasting perspective: Better do not wake them up at all? Isolate them, create a memetic quarantine around them? The less they talk about their confusion, the better for the whole planet? *Shhh them?* What is the best way?

## Help please.

As you see, I completely lack *any understanding* for those who are thinking, speaking, or even spreading nonsense about the severity of the attack on our species. And with each day, and the more I am learning about Covid19—the less I understand *them*. Encounters with CoronaDeniers have been leading to nothing. We do not know how to help them. Please you help us, if you can.

We must find out, which keys unlock the doors for them, to invite them to join us, in our collective struggle. And it should probably be an attractive key. And no: Anything brutal (like “just wait until their loved ones are dying”) is *not* helpful—worst case, it would cement their self-deceit about the situation.

Initially in Germany some polls showed that they were only ~3%. But of course, they have been active. And memetically infectious. Reality (and politics) has created many unhappy lives; and unhappy people can be more susceptible for “counter arguments” (even though those are not even close to *valid arguments* and far from truth - but for sure they are “counter”).

By now polls are showing that those have grown considerably. So even the initial 3% were dangerously many in a situation where a shared consensual view on reality is the basis for appropriate measures to protect humanity.

So, pluralist relativism like “*just accept their disbelief*” is dangerous. For them, for all of us. Please think again, if that was your initial view on this riddle.

Very unlike any other previous challenge, this pandemic must be solved with everyone being on the same page about it. Consensus, not majority vote -because the latter always creates a minority, and that is dangerous for the whole population.

So if you want to, please help with one “homework” that this long epic text here is suggesting now: After all we have learned, we still have not solved an important issue at the heart of the pandemic response: **Denial**.

Please you write an essay, film a video, speak a podcast, lead a meditation, or moderate an expert panel -or whatever else might help- for us to find out how to bring the lost souls home who do not even believe that our species has a real problem right now to solve.

There can only be one team—TeamHuman.

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...

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...

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(4) chapter not written. (5) chapter not written.

That means YOU MADE IT, you survived this long text, and the following is ...

THE END.

## (6) time used on this

thinking about this: circa February 25th to April 9th: ~60 hours approx

v01 Thursday April 9th: 13:45 to 15:49 pauses: 45min  
 v01 Thursday April 9th: 16:45 to 19:00 pauses: 30min  
 v02 Thursday April 9th: 23:45 to 0:35 pauses: 20min  
 v02 Friday April 10th: 12:39 to 14:40 pauses: 5min  
 v03 Friday April 10th: 18:13 to 19:20 pauses: 10 min  
 v04 Friday April 10th: 19:00 to 21:00 pauses: 30min TALKING about it  
 v04 Friday April 10th: 22:04 to 23:40 pauses: 0min  
 v05 Saturday April 11th: 13:23 to 15:46 pauses: 0min  
 v06 Saturday April 11th: 17:00 to 19:15 pauses: 0min  
 v07 Sunday April 12th: 00:00 to 03:40 pauses: 30min medium.com  
 v07 Sunday April 12th: 12:27 to 18:07 pauses: 30 medium, ctd.  
 v08 Sunday April 12th: 18:07 to 19:15 medium, ctd.  
 v09 Sunday April 12th: 20:00 to 02:09 pauses: 60min—(1) & stochastics  
 v10 Monday April 13th: 02:09–4:00—re-reading (2), (3), (7)  
 v11 Monday April 13th: 11:30–15:55—(2) & (3). Friends. more tweets.  
 v12 Monday April 13th: 16:15–17:35. Removed some insults. Friend help.  
 1st public version published at 17:42 CET on April 13th 2020. Retweet pls. → [tiny.cc/ptools](https://tiny.cc/ptools) ←  
 v13 Link (1.2.8) to “Stochastics—Quarantine Buddies” text. [Announce tweet](#).  
 v13: Top: forward to (1.1) for skipping the intro. Much “marketing”, 7h?  
 v14: Wednesday April 15th: 01:30–2:51—re-read beginning, until 1.2.10  
 v15: Wednesday April 15th: 4:48–5:25 re-read (1.3)-(1.3.4), fixed data  
 v16: Wednesday April 15th: 17:45–19:05 re-read (1.3.5) to (2.7)  
 v17: Wednesday April 15th: 22:05–23:00 re-read (2.7) to the END.  
 v18: Thursday April 16th: 01:30 -03:00 added cross-links to PBI chapter (2.8) PBI Snapshot yellow.  
 Where are my readers? Getting impatient....  
 v19: Thursday 17:30–17:55 put URL shortcut → [tiny.cc/ptools](https://tiny.cc/ptools) ← everywhere; minor edits.  
**v20 = a disaster 17/4/2020.** See below. More work: ~10 hours.  
 v21 new introduction, new tweet: ~1h  
 v22: Marketing for this text ~30 hours. Edited (2.1) and screenshot tweet.  
 v23 made into a PDF download

**v20 = a disaster 17/4/2020:** Few people only read this text. Worst: Almost no one retweets it. Not good. Please contact me (via medium / twitter), and send me *your explanation, and your hints what I can do to change this.*

Thought: Consumerism is what unites us as a species, right? →

*Desperate attempt: Invested another day of work, to create wearable swag:*



“My mask protects you, your mask protects me” = spread the word about wearing masks and about this text. More info on the site <https://covh.github.io/maskunity/> = shortcut = [tiny.cc/maskunity](https://tiny.cc/maskunity)  
 Thanks, you're good.

Scroll down for the tweets that you can share with your followers. Thanks.



## (7) disclaimer

Most of these ideas began *early March* when I saw Western societies failing, in spite of well documented (but just *too superior*?) Asian example solutions.

By now (mid April) some such countries have gone so deep into the wrong direction that collisions with icebergs are almost sure, and staying in that image—some of those countries might sink. And *Barbarism* is a likely outcome (see the 4 quadrants vision by Simon Mair on Apr 03, 2020).

Perhaps these thoughts come too late now? Then I am profoundly sorry and especially to those who would really not have to have died. And their families. Let me apologize by explaining how I needed so long to finally write this.

A new paradigm means, it is specially difficult to distinguish between *what is important* & what really doesn't matter right now. Initially, I had been very focused and for a long time (see my >300 tweets thread); but tilted by useless communications, and destabilized by crazy politics, also I began to waste my time with initiatives that turned out to lead to absolutely nothing. Probably? You never know before you do...

Moreover, the complete & utter failure of this country in early March resulted in an incredibly high hygienic pressure for me— to create a local environment which has a considerably lower probability of failure here, around us.

Numerous methods I developed would probably work in a 50 times higher virus load environment? Might be worth to compile a “Pandemic algorithms for daily life” text collection. A few such pages are typed already. See tweet #hackathon02 twitter March 22nd = We need expert review on such info.

Eventually it would have *saved so many individual self-protection work hours (i.e. time i.e. money)* IF the collective had an even slightly higher level of hygiene. But compared to e.g. Singapore, I am sadly forced to live in a really “dirty” country, with a large share of clueless & ruthless ignorants. Even in April ... mask-less. (The care-less, mask-less Easter shopping can lead to extra deaths in late April & early May. And a cascading infection avalanche. Hopefully not - but I also wouldn't be surprised ...)

So much time was spent locally everywhere just to develop cleaning & safety routines, and to “arm ourselves” with self protection procedures. Before I could begin to write texts like this. Survival first, altruism later—right?

---

Having said all that, my own shortcoming is lack of focus, I guess. Often I let any information that is coming in, easily sway my actions and plans. I react spontaneously, following into some rabbit hole; and suddenly 5 hours are gone. The current learning is immense, for all of us, right?

Reflecting I'd say I would like to find ways to protect myself better against initiatives which eventually turn out to be useless, ineffective, unwanted—or in *the example case of this lonely text here*, that still almost no one is reading, commenting on, sharing nor retweeting → [tiny.cc/ptools](https://tiny.cc/ptools) ← . Have I perhaps created yet another cemetery of thoughts? I hope not. Can you help? What is the missing bit of action that this text needs, to perhaps go viral?

Thanks for your thoughts!

---

Anyways, some stuff in here is for sure already outdated now; and others will very soon not play a role anymore. (While we are still in) exponential times, that puts a very short “best before xx.xx.2020” date *on any thought*, regardless how seductively true it might still sound on April 9th, 10th or 11th, 12th, 13th, 14th or 15th =Wow, this text turned out to really need full 7 days. Before I had guessed 5 days, but had hoped to lower my standards to be able to do it in 2 days. Wrong. Quality needs time, quality is dangerous. Will think about that ... and you please forgive my typos. (Mark them and send a “private note” to me to correct any language issues—must be logged in for that; use the padlock bubble symbol. Thanks.).

Exponential times are pressing. By tomorrow, the world can have changed fundamentally already. So better today ...

**Please share/retweet/mail it to others** → [tiny.cc/ptools](https://tiny.cc/ptools) ← IF you think your contacts *can benefit from this text*. Thanks.

BUT:

**Do not believe ANYTHING you've just read. I do remind you of the obvious:**  
**Think for yourself.**

---

## (8) Retweet please, thank you →

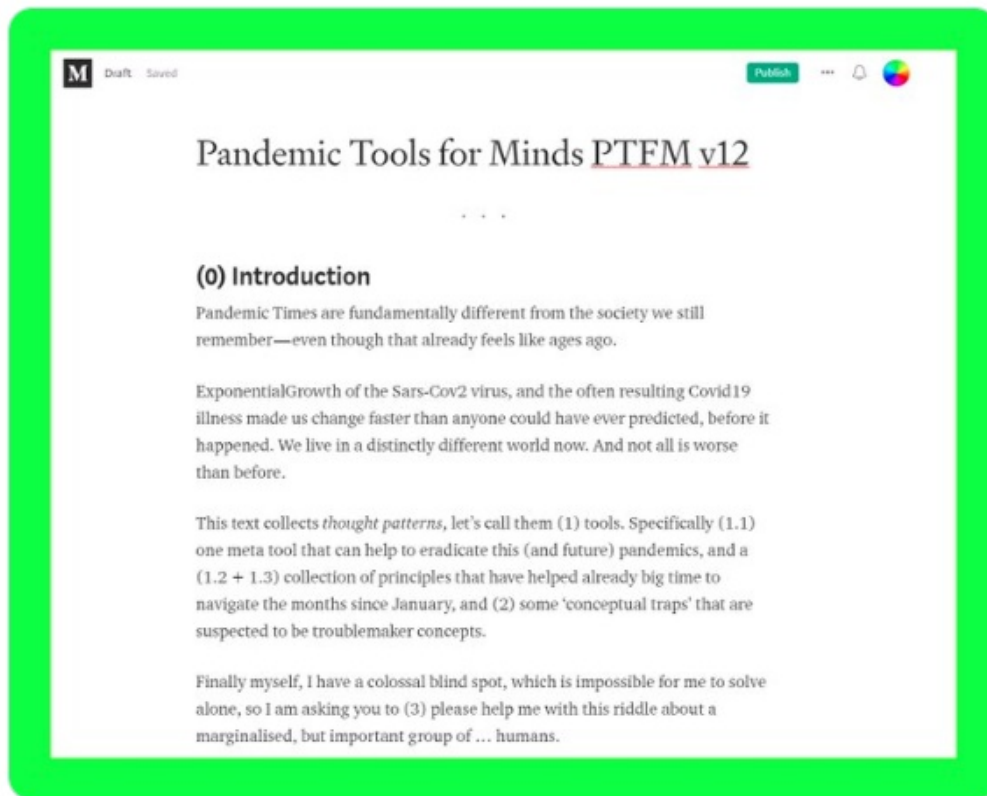
→ [tiny.cc/pTpdf](https://tiny.cc/pTpdf) ← or choose one of the following tweets:



**Andreas Krüger**  
@drandreaskruger

Pandemic Tools for Minds - PTfM v12  
How to better navigate these PandemicTimes.

Dr Andreas Krueger, 13/April/2020  
[medium.com/@andreaskruger...](https://medium.com/@andreaskruger...)



6:00 PM · Apr 13, 2020 · [Twitter Web App](#)

<https://twitter.com/drandreaskruger/status/1249729236694380545>

And/or the **maths** text:



**Andreas Krüger**  
@drandreaskruger



Easy maths = upgrade your [#epidemiology](#) by better understanding [#probability](#). pic: Example chapter.

[tiny.cc/stoch](https://tiny.cc/stoch) = [medium.com/@andreaskruger...](https://medium.com/@andreaskruger...)  
("S"-part of [#PandemicTfM](#)  
PandemicToolsForMinds)

"[#Stochastics](#): 2 people [#quarantine](#) group"

### (S2.2.1) Stochastics: 2 people quarantine group

Now, imagine you are two people living together closely, *and* you even **love each other**. It would break two hearts, if (both or) one of you would die, or have a severe or critical course of [#Covid19](#) illness, right?

What we want here is *both* people getting out of the pandemic alive & kicking, and no big suffering on the way. All good. All beautiful. Right?

So ... how probable is it that two people *do not* roll a six, on their dice?

Here is the simple maths: For the probability of both outcomes *combined*, we must **multiply** their probabilities:

$$\begin{aligned} & (5/6) * (5/6) \\ & = 83.333...% * 83.333...% \\ & = 69.444...% \end{aligned}$$

Please try that on your calculator now. The 83.333...% percentage will look like this: 0.8333... because "per cent" means "per hundred" in Latin (see [www.homeschoolmath.net](http://www.homeschoolmath.net)).

Let's put this percentage into words: *In 69 out of 100* lives that you are living together through this pandemic, *both* of you would have the mild form, if you got infected. However, *in 31 out of 100* lives, *at least one* of you would not be as lucky; or even both.


Right? Continue in (S2.3.1) now, for a slightly larger quarantine group of 3.

Stochastics & quarantine buddies - [tiny.cc/stoch](https://tiny.cc/stoch)  
PandemicTools for Minds - PTfM - [tiny.cc/ptools](https://tiny.cc/ptools)

3:47 PM · Apr 14, 2020 · Twitter Web App

<https://twitter.com/drandreaskruger/status/1250058006802423811>

## Or **Tool#1** i.e. chapter (1.2.1):

 **Andreas Krüger**  
@drandreaskruger

Tool 1: Simplicity. Sequentiality. Causal times.  
exmpl: #Schools #SchoolClosure  
#CloseSchoolsNow


Pandemic Tools for Minds - PTfM v14  
Dr Andreas Krueger [tiny.cc/ptools](https://tiny.cc/ptools) =  
[medium.com/@andreaskruger...](https://medium.com/@andreaskruger...)

**(1.2.1) causal times demand sequentiality — we live in a much simpler world now!**

Explained by example — this mode of thinking *would have worked well*:

(1) identify & close the infection channel (e.g. schools) *immediately*  
(2) solve the created problems (e.g. kids of doctors) *then*, one by one


Why? Pondering about that problem took *much* too long because the old thinking of “balancing the interests” was applied. **But then finally schools were closed anyways.** What had to be done, was clear right from the start — so fricking just do it, and quickly. Every single day longer that schools were open back then ... are *still causing cascaded death* until today!

 **Andreas Krüger** @drandreaskruger · Mar 18, 2020  
Replying to @drandreaskruger  
Paradigmen Wechsel:  
ABWÄGEN IST FALSCH. Problem zu simpel.

Vorher: Abwägen half - in Komplexität.  
Jetzt: Finde einfach die klare Kausalität.

Also: Handeln was nötig ist.  
Dabei entstehende Probleme lösen.

Widerständige Gründe dürfen NICHT dazu führen, dass  
Notwendiges passiert!

 **Andreas Krüger** @drandreaskruger  
Paradigm Change: Balancing interests is WRONG. Problem is too simple.

BEFORE: balancing helped in complexity.  
NOW: simply identify the causality.

So: Act however is necessary.  
THEN solve most resulting problems.

Reactionary resistance MUST NOT prevent needed collective action.

1:27 AM - Mar 18, 2020

[See Andreas Krüger's other Tweets](#)

2 consecutive tweets about this insight, March 18

The old system had needed very different “balancing of interests” concepts.

Life before had conflicting paradigms and interest groups, so politics needed to find a balance between the rich and the poor, the corrupt and the honest, the tax payers and the tax receivers, the young and the old, etc. And politics failed in that often (esp. the last dichotomy), and politics succeeded in it often (e.g. the second last).

Pandemic Times are not complicated. Anything that needs to be done for containment ... has to be done anyways. That might cause 7 new problems, of which you solve half of them (and say sorry about the remainder - and pour money over it possibly). Then you can already move on. Allows to act much quicker, and not lose so much time. Especially not on the precious early days.

*And not to lose so much time! Especially not on the precious early days!*

PandemicTools for Minds - PTfM - [tiny.cc/ptools](https://tiny.cc/ptools)

3:17 AM · Apr 15, 2020 · Twitter Web App

<https://twitter.com/drandreaskruger/status/1250231816323203072>

Or **Tool#14** = chapter (1.3.4)

**Andreas Krüger**  
@drandreaskruger



Tool 14: Quarantine Regions: stay together under the stricter rules - or 'divorce' the country (temporarily?)

Pandemic Tools for Minds - PTfM v15

Dr Andreas Krueger [tiny.cc/ptools](https://tiny.cc/ptools) =  
[medium.com/@andreaskruger...](https://medium.com/@andreaskruger...)

### Pandemic Tools for Minds PTfM v15

**(1.3.4) "quarantine regions" = regions which want to stay together, i.e. allow travel etc**

Classically most of Earth's population is clustered into semi-functional 18th-19th century concepts called "country" or "nation". Note that the virus cannot distinguish this concept (A 30k base pairs program is too dumb to grasp even such primitive concepts like "country" lol).

If regions are small enough and have sufficient autonomy, then such population clustering structures can be useful, to contain & interrupt infection processes —by closing borders. Especially islands can use this for their advantage, no?

Now we encounter a challenge not unlike the "quarantine buddies" problem up there in (1.2.9) after the "stochastic processes" chapter (1.2.8): If areas want to *stay together* during the pandemic, they must all do what the *numbers in the worst area's situation* demand to be rules, prohibitions, punishments, etc.. In other words: The region with the less worse numbers has absolutely no say in this. It can "divorce" —but as long as it stays in the shared situation, it must comply with whatever the region needs ... that was hit hardest.

OR: Introduce border checking, i.e. separate those regions. "Divorce".

Note there's a **HUNDREDFOLD** difference in infection & fatality numbers in Germany. On (9/4/2020) on districts ("Kreis") level it looked like this:

Cases/1mioPeople:  
12344 worst (Tirschenreuth), 170 best (Wilhelmsheaven), i.e. **factor 73**.

Dead/1mioPeople:  
717 worst (Tirschenreuth), 3.0 best (Bielefeld) = i.e. **factor 239**.  
Plus factor "infinite" = as 73 of the 401 German districts still had ZERO dead people counted, on that day.

Here's the full data. I have made that googlesheet auto-updated, and since yesterday also auto-sorted (approx every hour); get your updated numbers of your home district there. The top of both tables contains simple statistics measures over all of Germany, so you can compare the region where you live with "the average" and "the extreme" situations in Germany:

Splitting the country (hopefully temporarily) might be good idea, with that variability of situations. But those regions will then grow apart, for sure.

Example: Easter celebrations with 10 family members were suddenly encouraged in "Schleswig-Holstein" (which had not been hit so hard yet). Announced by a government of these parties: *CDU, Grüne, FDP*.

As infection processes are stochastic, literally nothing worse might happen in Schleswig-Holstein, due to that misconception. However, quite as well, it could become the recorded and well documented beginning of a Northern tragedy.

Probably a huge mistake also because sending ambiguous signals. To e.g. those Bavarian people who do not fully grasp their situation, and "want to have the same rights now" (yes, some simple-minds are like that), even though their local infection probability in the South is a hundred times worse.

So, irresponsible politics in the German North ... can kill people in the German South. Apart from the now needlessly infected in Schleswig-Holstein.

The additional "Easter deaths" will be ~early May ...

... as deaths usually happen 15–30 days after the infection.

PandemicTools for Minds - PTfM - [tiny.cc/ptools](https://tiny.cc/ptools)

5:45 AM · Apr 15, 2020 · Twitter Web App

<https://twitter.com/drandreaskruger/status/1250268861535932416>



Or the translation idea. Long ago, there were auto-translated websites. A pity that google & bing etc switched that off. Now instead you tell your browser to switch this ^ medium page here → [tiny.cc/ptools](https://tiny.cc/ptools) ← to your language:



Andreas Krüger  
@drandreaskruger

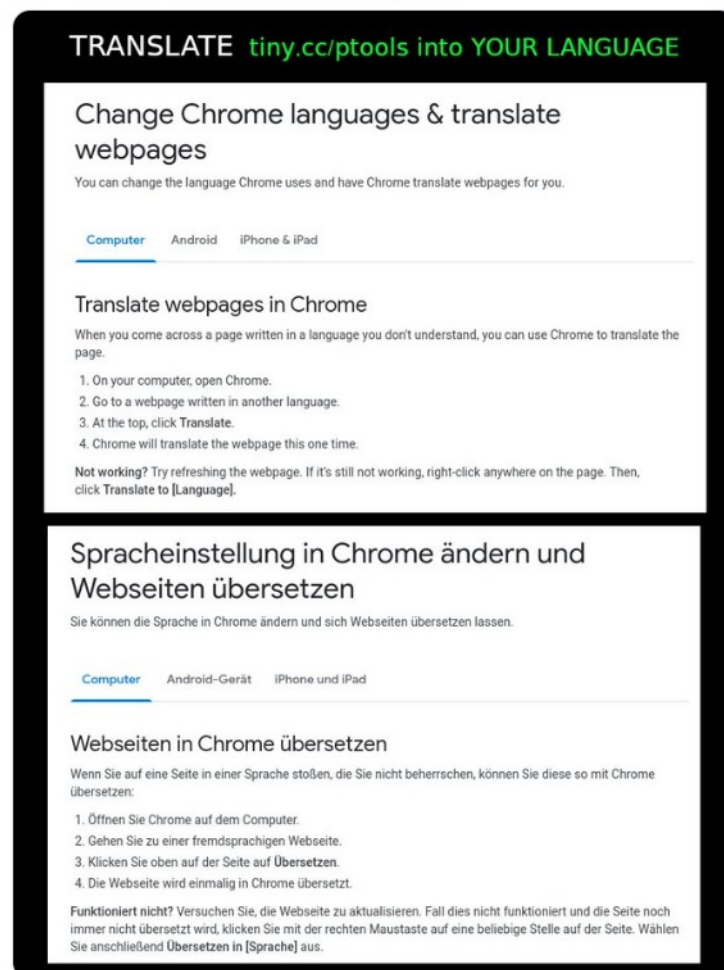


Deutsch? Française? Lietuvis? Ελληνικά? Dansk?

Your BROWSER can translate this TEXT. See pic.

Pandemic Tools for Minds - PTfM v15

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4:07 PM · Apr 15, 2020 · [Twitter Web App](#)

<https://twitter.com/drandreaskruger/status/1250425459927441411>

## Or **Trap#1** = chapter (2.1)



Andreas Krüger  
@drandreaskruger

Trap#1: Hating Maths ... is not OK for politicians  
Pandemic Tools for Minds (PTfM v22)

[tiny.cc/pTools](https://tiny.cc/pTools) = [medium.com/@andreaskruger](https://medium.com/@andreaskruger)...  
retweet please; long but chapters can be read in  
ANY order! Example chapter (2.1):

### Pandemic Tools for Minds PTfM v22

Help spread the word → [tiny.cc/pTools](https://tiny.cc/pTools) ← shortcuts → [tiny.cc/maskunity](https://tiny.cc/maskunity)

#### (2.1) hating maths ... is dangerous

The relevant Mathematics is fully thought through by 3%, and understood mostly by 12% of the population - so 85% do *not know enough* to even get the full message. Approx 50% population are *literally clueless* about Exponential Growth, its source, properties, and consequences. Sad, yes.

Numbers are hypothetical (also e.g. in cities in Asia, ratios are different; this maths weakness is based in Western culture too). Please demographers - create verifiable tests to (dis)prove -or improve- the guessed numbers.

Sadly, the *majority* cannot even 'just learn it now', as as they lack the very foundations in maths. Thus in exponential times, they *can not be treated as self responsible people*—because they do not understand the world as it is. The responsible way sounds unusual (but comes from deeply humane thinking):

**Tell them what to do.** In clear, *unambiguous* words.

Who are our leaders though? Selected by "popularity democracy", which allows maths haters to get all the way "to the top". How would you even try to explain such a choice in a collective decision apparatus which should attain the highest common good? Sounds like an impossibility conundrum, right?

It's really NOT OK to elect maths haters into responsible positions, as: (a) it is super dangerous for the collective, and (b) it is an absolute imposition to all of us people *who do know their way around with mathematics* - that we have to accept feeble laws & policies created by maths haters. Unacceptable, really.

First half of March was the most catastrophic two weeks since 1986 at least, for non-dumb people in many so called 'democratic' countries. In Singapore or China, my own survival might have felt rather 'safe' -but here ... not.

Let's think *constructively* how to solve *dangerous shortcomings of elections*:

A really simple and even short term solution could be: When elected into parliament—then each candidate is tested for a set of maths abilities—and those who fail that test must repeat it after a specific, high quality training. Until they pass, their *voting ability* in parliament is just paused. Those who fail three times are excused, and their seat stays empty for 5 years. Something like that. What do you think? Or what is a *better concept* that would *fix it* for sure?


For avoidance of doubt: Of course I'm not asking for higher mathematics. But someone who *rules over millions of human lives* must be able to turn a growth percentage into its equivalent doubling time. Just one example. Simple stuff.

[tiny.cc/pTools](https://tiny.cc/pTools) = PandemicTools for Minds PTfM v22  
Stochastics & Quarantine Buddies = [tiny.cc/stoch](https://tiny.cc/stoch)

11:41 PM · Apr 19, 2020 · Twitter Web App

<https://twitter.com/drandreaskruger/status/1251989406090739712>

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 **Andreas Krüger**  
@drandreaskruger

Pandemic Tools for Minds PTfM v23  
How to navigate these PandemicTimes.  
Useful toolbox: 17 tools + 8 traps + 1 plea.

pdf DOWNLOAD [tiny.cc/pTpdf](https://tiny.cc/pTpdf) = also for your #eBook reader. The chapters can be read in ANY order, or just some of them. #pantools Retweet please - thanks.

**Pandemic Tools for Minds PTfM v23**

\* This text: | WWW → [tiny.cc/pTools](https://tiny.cc/pTools) | PDF → [tiny.cc/pTpdf](https://tiny.cc/pTpdf) | swag → [tiny.cc/maskunity](https://tiny.cc/maskunity)  
\* Skip introduction? → scroll down to "(1.1) meta tool: emergence ladder"

---

**(0) Introduction**

Pandemic Times are fundamentally different from the society we still remember—even though that feels like ages ago. ExponentialGrowth of Covid19 illness **made us change faster** than anyone could have predicted, before it happened. We live in a distinctly different world now. And not all is worse than before.

This text collects *thought patterns* that are helpful for the now.

Let's call them tools (1). One meta tool (1.1) that can help to eradicate this and future pandemics, and a collection of principles (1.2 + 1.3) that have helped much to navigate the months since January, and some 'conceptual traps' (2) that are suspected to be troublemaker concepts.

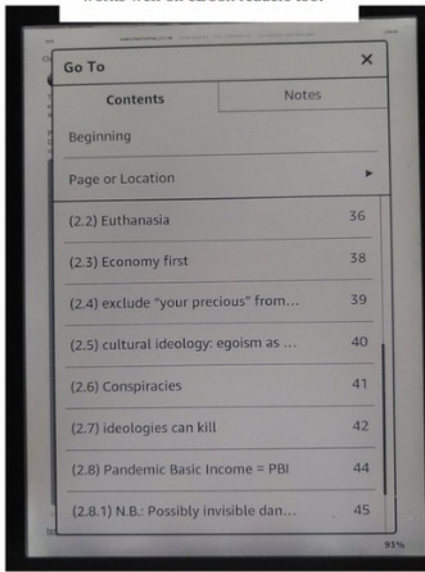
Finally myself, I have a colossal blind spot, impossible for me to solve alone, so I am asking you to (3) please help me with this riddle about a marginalised, but important group of humans.

**May this help you** to build more & better tools for the conceptual, political, philosophical, psychological (and and and) ... **quantum leap** ... that all of humanity is experiencing right now.

*Sometimes without taste nor smell but definitely: Live and in colour.*

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Hint: This PDF ( [tiny.cc/pTpdf](https://tiny.cc/pTpdf) ) works well on eBook readers too:



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Which other chapter do you like most? Then I screenshot that, and make a tweet. Thanks :-)

→ [tiny.cc/ptools](https://tiny.cc/ptools) ←

Swag: desperate attempt because ~no one was reading this text:



**Andreas Krüger**  
@drandreaskruger

my mask protects you,  
your mask protects me.

NEW: swag [tiny.cc/maskunity](https://tiny.cc/maskunity) for promoting masks,  
and my [tiny.cc/ptools](https://tiny.cc/ptools) text. Retweet please.



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<https://twitter.com/drandreaskruger/status/1251538175132078080>

Thanks.