

AI Translation Evaluated: Effort and Risks

In march 2025 I decided to try LLM translation from German to English. I had given the [original article](#) to others via Google translate many times, and I had been asked to evaluate AI tools, so I decided to give ChatGPT a try for translating moderately complex text. It took about two hours of work over several days to fix up the [translated article](#) so it actually says what the original says, with corrections for a lot of subtle mistakes that corrupted even the core message. This article follows the process and evaluates the risks.

To read only the part that worries me the most, you can jump right ahead to the section [Subtle content corruption](#) (page 39).

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1 Approach to writing this article

I pulled the steps needed to get from a first version to a final article from the ChatGPT log and then from the change to the last ChatGPT version to the actually published article.

To get from „new version“ that AI gives me to seeing the changes, I committed the versions into a [Mercurial](https://mercurial.sr.ht/~arnebab/ai-translation-evaluated) repository, grouped by type of change. You can check them yourself at hg.sr.ht/~arnebab/ai-translation-evaluated.

Then I collected the diffs into this article.

1.1 What's a diff?

A diff is a representation of a change between versions of a text. It shows a + in front of lines that were added and a - in front of lines that were removed. Removed lines are usually also colorized red, added lines green.

Changes are shown by removing the original line and adding the fixed line afterwards. In this case changed words are shown in a stronger color.

Lines without + or - (also uncolorized) are context lines to make it easy to locate the point in the file and still be able to apply the change with [patch](#) when other places in the file changed.

Around the lines are change markers that give the line numbers.

In this article very long lines are wrapped, so only the actual start of the line has the #, #, or - marker.

Example:

```
diff -r b0f58b3543b2 challenges-social--process.org
--- a/challenges-social--process.org      Sat May 17 12:24:55 2025
↪ +0200
+++ b/challenges-social--process.org      Fri Jul 25 07:52:24 2025
↪ +0200
@@ -34,7 +34,7 @@
    leading
    context
    lines
-old line (by the AI)
+new line (by me)
    trailing
    context
    lines
```

2 Initial Version

This is what you get when you ask AI to translate an article for you. From German to English, two pretty similar languages.

```
@@ -0,0 +1,79 @@
++INCLUDE: ../org-templates/level-1.org
++title: The Challenges of Our Time Are Not Technical but Social in
  ↳ Nature
++date: <2017-01-01 Sun>
+
+# #+LANGUAGE: en
+
++begin_quote
+/How do we decide where we are going? And why?/
++end_quote
++begin_export html
+
+<div class="sourcebox" style="text-align: center">
+<a href="herausforderungen-technisch-sozial.pdf">
+
+</a><br />
+<a href="herausforderungen-technisch-sozial.pdf">PDF</a> (print)
+<div style="text-align: center; margin-top: 0.5em;">
+<audio style="width: 70px;"
  ↳ src="https://www.draketo.de/files/Die_Herausforderungen_unserer_Zei
  ↳ t_sind_nicht_technischer_sondern_sozialer_Natur--text_Arne_Babenhau
  ↳ serheide--gesprochen-Tallur--lizenz-cc_by_sa_0.mp3"
  ↳ controls="controls"></audio><br />
+<a href="https://www.draketo.de/files/Die_Herausforderungen_unserer_Ze
  ↳ it_sind_nicht_technischer_sondern_sozialer_Natur--text_Arne_Babenhau
  ↳ userheide--gesprochen-Tallur--lizenz-cc_by_sa_0.mp3">Spoken by
  ↳ Tallur</a>
+</div>
+</div>
++end_export
+
```

+I read a lot about new technologies regarding health, the energy
→ transition, the future of mobility, or mobile phones. And for many
→ engineers, legal or societal issues are "non-problems." I used to
→ see it that way myself. But when I look at the world, it is actually
→ the opposite: *Every technical challenge* we currently face *can be
→ solved* if we, as a society, decide to tackle it together. The real
→ problems, however, are not technical. They lie in the decision of
→ *what is truly important to us*.

+

+* What is important to us:

+ :PROPERTIES:

+:CUSTOM_ID: important

+:END:

+ If health were truly important to us as a society, then there would
→ be no antibiotic-resistant germs because neither doctors nor farmers
→ would distribute antibiotics like candy. Instead, billions would be
→ invested in research on how to keep animals healthy without
→ antibiotics, and doctors would receive training from independent,
→ publicly funded institutions, while drug development would be more
→ socially financed rather than by companies that need to sell in the
→ largest possible quantities at the highest possible price. The money
→ is there; it is just used differently.

+

+ We see how much money is available in every war, where billions are
→ burned without hesitation. For the cost of just four hours of the
→ Iraq war, we could launch a research satellite into space
→ \[fn:4hours]. NASA's entire budget is only 5% of the U.S. military
→ budget.

+

+ Or, closer to home, we see it in the massive financing of smartphone
→ development. As a society, we choose to invest enormous amounts in
→ computing development-because most people constantly buy new phones,
→ leading software to be developed mainly for the latest devices
→ rather than for all devices sold in the last ten years.

+

+ And smartphones instead of health is not the only example. If the
→ energy transition were important to us, we would have stopped
→ burning coal, oil, and gas ten years ago. We would have invested
→ hundreds of billions in research and would be much further ahead
→ than we are today. We saw during the banking bailout that the money
→ for this exists. If combating extremism and terrorism were important
→ to us, then no child in the world would go hungry-not even in
→ Germany. That money exists too. It is just used differently.

+

+ But none of this is happening. Because today's real problems are not
↳ technical but social in nature.

+
+* Technology:
+ PROPERTIES::CUSTOM_ID: technology
+:END:

+ That does not mean that technology is unimportant. This is
↳ particularly evident in advancements in agriculture and medicine.
↳ Thanks to plows, vaccinations, and antibiotics, fewer people were
↳ needed to secure a community's basic needs, freeing up workforce for
↳ education and research. And when guns and long spears were
↳ developed, nations no longer needed a lifelong-trained knight caste
↳ to protect themselves from neighbors. The invention of the printing
↳ press facilitated the spread of ideas beyond church structures.

+
+ Technology shifts the framework of our decision-making. It changes
↳ how large certain groups must be to dominate societal discourse. If
↳ there are enough autonomous combat drones to control a country and a
↳ small group of people has control over them, then others in society
↳ no longer have much say, making their discourse irrelevant. The same
↳ applies when self-proclaimed religious warriors roam with weapons.

+
+ Technology can increase or decrease the number of people who must
↳ collaborate to control society, just as the internet initially
↳ expanded this number before shrinking it again due to the dominance
↳ of public perception and personal communication by a few
↳ corporations \[fn
+:informationpower].

+
+ And due to climate change, we may push ourselves as a species so far
↳ out of our comfort zone that technology becomes a real challenge
↳ again-so that we do not know whether we, as individuals, as a
↳ society, and as a species, can survive in the long run.

+
+* Society:
+ PROPERTIES::CUSTOM_ID: society
+:END:

+ However, the decision of which technology we use and which we allow
↳ or limit-or develop only defensively-is a social decision. While our
↳ understanding of technology improves and the number of natural
↳ scientists continues to rise, the social sciences stagnate:
↳ disciplines like psychology, sociology, and political science that
↳ explore how we make decisions in groups and how we can make better
↳ decisions. Despite the fact that technology-through Facebook,
↳ YouTube, Twitter, and extensive communication analysis-has opened
↳ gold mines for social sciences, they receive little support. And
↳ that is a problem.

+
+* Enlightenment:
+ PROPERTIES::CUSTOM_ID: enlightenment
+;END:
+ This means we need the next step of enlightenment: the path of human
↳ society out of self-imposed immaturity. If we all understand who and
↳ what influences our decisions, we can also decide for ourselves to
↳ whom we grant this influence. And that will be uncomfortable
↳ because, just like during individual enlightenment, immaturity is
↳ pleasant as long as we ignore its consequences. But as in individual
↳ enlightenment, the gain from responsibility and self-determination
↳ is far greater than the inconvenience of having to acknowledge
↳ reality.

+
+ This step requires you-the one reading this text. Because while we
↳ can only take many of the important steps in a community,
↳ enlightenment always begins with individuals.

+
+ It begins with questions:
+
+ * Which sources of information do I trust?
+ * How do the things I focus on change me? \[fn:experience]
+ * Who do I want to work with?
+ * Who do I discuss news with? Do we question the sources?
+ * Where can I discuss news confidentially?
+ * Who do I want to create change with?
+ * Who do I want to spend my free time with?
+ * What do I want to change?
+ * What do I want to preserve?
+ * How do I ensure that my representatives understand what matters to
↳ me?

+
+

```
+ And after the questions: Please pass this text on to those who might
↳ be interested, in a way that shows them you have truly considered
↳ it. This way, it contributes to societal (self-)enlightenment.
+
+ \#+latex: \footnotesize Link to share:\ \[\[https://www.draketo.de/
↳ politik/herausforderungen-technisch-sozial](https://www.draketo.de/
↳ politik/herausforderungen-technisch-sozial)]]
```

That's the first version with the simple task: translate this text to English. Looks already quite good from a first glance, but there are glaring errors.

These aren't the problematic parts, though. Glaring errors are the easy fixes: easy to spot, easy to rectify if you know the source text (but thoroughly embarrassing if you don't fix them).

Keep in mind that if you let an AI translate a website for you, it may make exactly such errors and if you **don't** know the source text, you won't automatically spot them.

3 Easy fixes

The biggest errors were that the translation left out complete paragraphs and footnotes. Another was that the list of questions at the end left out questions.

Additionally there were simple syntax errors. Easy to spot, easy to fix.

3.1 Missing paragraphs

You may be able to spot these without understanding the source by checking the length. Fixing them just required explicitly requesting the translation.

```
@@ -37,6 +37,11 @@ I read a lot about new technologies rega
```

```
But none of this is happening. Because today's real problems are not
↳ technical but social in nature.
```

```
+How do we decide as a society where we want to go together? How do we
↳ know what is true, and how do we know what is important? How do we
↳ decide what we ourselves consider to be reality? And whom do we
↳ believe and trust?
```

```
+
```

```
+These are the truly difficult questions of our time-and they have been
↳ important questions ever since humanity no longer had to fight for
↳ survival every single day.
```

+
+

```
* Technology:
  PROPERTIES::CUSTOM_ID: technology
:END:
```

@@ -82,3 +82,9 @@ These are the truly difficult questions of our
→ time-and they have been important questions ever since humanity no
→ longer had to fight for survival every single day.

And after the questions: Please pass this text on to those who might
→ be interested, in a way that shows them you have truly considered
→ it. This way, it contributes to societal (self-)enlightenment.

\#+latex: \footnotesize Link to share: \ \[\[<https://www.draketo.de/politik/herausforderungen-technisch-sozial>] (<https://www.draketo.de/politik/herausforderungen-technisch-sozial>)]]

+

+**"What does it cost to launch a satellite? 4 hours in Iraq."** - Dr.
→ David Crisp, OCO-2 Science Team Leader, Jet Propulsion Laboratory,
→ NASA

+

+The internet initially increased the number of people required to
→ control society, [because we could all
→ publish] (<http://www.draketo.de/licht/politik/das-internet-durchbricht-die-strukturelle-informationshoheit>). Today, it is reducing that
→ number, as it becomes increasingly difficult to distinguish who is
→ actually reliable-or even whether we are interacting with a real
→ person or a paid propagandist.

+

+How can we sustain our communities despite opposition from those who
→ seek to prevent group formation? How do we resist [power
→ concentration, surveillance, and fragmentation] (<http://www.draketo.de/licht/politik/machtkonzentration-ueberwachung-zersplitterung>)?

@@ -88,3 +88,10 @@ These are the truly difficult questions of our
→ time-and they have been important questions ever since humanity no
→ longer had to fight for survival every single day.

The internet initially increased the number of people required to
→ control society, [because we could all
→ publish] (<http://www.draketo.de/licht/politik/das-internet-durchbruch-die-strukturelle-informationshoheit>). Today, it is reducing
→ that number, as it becomes increasingly difficult to distinguish
→ who is actually reliable-or even whether we are interacting with a
→ real person or a paid propagandist.

How can we sustain our communities despite opposition from those who
→ seek to prevent group formation? How do we resist [power
→ concentration, surveillance, and fragmentation] (<http://www.draketo.de/licht/politik/machtkonzentration-ueberwachung-zersplitterung>)?

+

+How paying attention to certain things changes us is described, for
→ example, by cycling journalist Kate Wagner in her report on [how she
→ was once invited to Formula
→ 1] (<https://web.archive.org/web/20240301170542/https://www.roadandtrack.com/car-culture/a46975496/behind-f1-velvet-curtain/>):

+

+#begin_quote

+“I experienced firsthand the intended effect of allowing riffraff like
→ me, those who distinguish themselves by way of words alone, to
→ mingle with the giants of capitalism and their cultural attachés.”

+#end_quote

+

@@ -59,6 +59,13 @@ These are the truly difficult questions of our
→ time-and they have been important questions ever since humanity no
→ longer had to fight for survival every single day.

:END:

However, the decision of which technology we use and which we allow
→ or limit-or develop only defensively-is a social decision. While
→ our understanding of technology improves and the number of
→ natural scientists continues to rise, the social sciences
→ stagnate: disciplines like psychology, sociology, and political
→ science that explore how we make decisions in groups and how we
→ can make better decisions. Despite the fact that
→ technology-through Facebook, YouTube, Twitter, and extensive
→ communication analysis-has opened gold mines for social sciences,
→ they receive little support. And that is a problem.

```

+And unfortunately, this too is a social issue. As a society, we must
↳ recognize that the key to solving the major problems of our time
↳ lies in the social sciences. More precisely, in social sciences that
↳ serve the common good and help everyone understand how people can
↳ make meaningful decisions in groups-especially when different
↳ interests are at odds.
+
+These sciences must seek out (and communicate) ways to organize society
↳ so that more people can see which measures truly align with their
↳ interests and what other interests exist. This would ensure that
↳ politics acts more in the interest of the people it represents.
+
+Additionally, they should help societies assess the consequences of
↳ their collective decisions-to understand what freedoms they truly
↳ have and which choices would have side effects that we would
↳ consider worse than their immediate benefits.
+
+
* Enlightenment:
  PROPERTIES::CUSTOM_ID: enlightenment
:END:

```

3.2 Missing questions in a list

A really horrid mistake that no human would make is that the list was missing items. I fixed that by telling the AI to include the missing items.

```

@@ -76,15 +76,21 @@ Additionally, they should help societies assess the
↳ consequences of their collective decisions-to understand what
↳ freedoms they truly have and which choices would have side effects
↳ that we would consider worse than their immediate benefits.
It begins with questions:

* Which sources of information do I trust?
- * How do the things I focus on change me? \[fn:experience]
+ * How do the things I focus my attention on change me?
↳ \[fn:experience]
* Who do I want to work with?
- * Who do I discuss news with? Do we question the sources?
+ * With whom do I discuss news? Do we question the sources?
  * Where can I discuss news confidentially?
- * Who do I want to create change with?

```

- * Who do I want to spend my free time with?
- + * With whom do I want to create change?
- + * With whom do I want to spend my free time?
- + * From which groups can a larger movement emerge?
- + * How can we sustain it?
 - * What do I want to change?
 - * What do I want to preserve?
- * How do I ensure that my representatives understand what matters to me?
 - ↪
- + * How does my elected representative inform me about what they have achieved for me thanks to my vote?
 - ↪
- + * How do I ensure that those representing me understand what matters to me?
 - ↪
- + * To whom have I entrusted the task of representing my interests?
- + * What gives me the courage to take action?
- +

And after the questions: Please pass this text on to those who might
 ↪ be interested, in a way that shows them you have truly considered
 ↪ it. This way, it contributes to societal (self-)enlightenment.

3.3 Missing image

This just needed to be copied verbatim from the source article.

```
@@ -67,6 +67,13 @@ money exists too. It is just used differ
But none of this is happening. Because today's real problems are not
technical but social in nature.

+
+##+html: <div style="float:right;font-size:smaller;padding-left:0.5em;">
+##+attr_latex: :width 0.3\textwidth
+##+caption: My @@html:<br />@@sign for Science @@html:<br />@@March,
  ↪ Stuttgart 2017
+[[file:2017-04-science-march-stuttgart-woher-weiß-du-was-stimmt.jpg]]
+##+html: </div>
+
```

How do we decide as a society where we want to go together? How do we know what is true, and how do we know what is important? How do we decide what we ourselves consider to be reality? And whom do we

3.4 Purely technical changes

Most of these are syntax error, missing links, and so forth, easy to find in one round of proof-reading, and took about 30 Minutes of work. One is re-formatting the text to have shorter lines in the source file.

In a source format better supported by the AI (like Markdown) I expect fewer of these.

You may want to skip them and jump directly to [Small adjustments](#). They are included for the sake of completeness.

```
@@ -1,7 +1,6 @@
#+INCLUDE: ../org-templates/level-1.org
#+title: The Challenges of Our Time Are Not Technical but Social in
  ↳ Nature
#+date: <2017-01-01 Sun>
-
-# #+LANGUAGE: en
++#LANGUAGE: en

#+begin_quote
```

```
@@ -23,18 +23,18 @@
I read a lot about new technologies regarding health, the energy
  ↳ transition, the future of mobility, or mobile phones. And for many
  ↳ engineers, legal or societal issues are "non-problems." I used to
  ↳ see it that way myself. But when I look at the world, it is
  ↳ actually the opposite: *Every technical challenge* we currently
  ↳ face *can be solved* if we, as a society, decide to tackle it
  ↳ together. The real problems, however, are not technical. They lie
  ↳ in the decision of *what is truly important to us*.

* What is important to us:
- :PROPERTIES:
++PROPERTIES:
:CUSTOM_ID: important
:END:
```

- If health were truly important to us as a society, then there would
→ be no antibiotic-resistant germs because neither doctors nor farmers
→ would distribute antibiotics like candy. Instead, billions would be
→ invested in research on how to keep animals healthy without
→ antibiotics, and doctors would receive training from independent,
→ publicly funded institutions, while drug development would be more
→ socially financed rather than by companies that need to sell in the
→ largest possible quantities at the highest possible price. The money
→ is there; it is just used differently.

+If health were truly important to us as a society, then there would be
→ no antibiotic-resistant germs because neither doctors nor farmers
→ would distribute antibiotics like candy. Instead, billions would be
→ invested in research on how to keep animals healthy without
→ antibiotics, and doctors would receive training from independent,
→ publicly funded institutions, while drug development would be more
→ socially financed rather than by companies that need to sell in the
→ largest possible quantities at the highest possible price. The money
→ is there; it is just used differently.

- We see how much money is available in every war, where billions are
→ burned without hesitation. For the cost of just four hours of the
→ Iraq war, we could launch a research satellite into space
→ \[fn:4hours]. NASA's entire budget is only 5% of the U.S. military
→ budget.

+We see how much money is available in every war, where billions are
→ burned without hesitation. For the cost of just four hours of the
→ Iraq war, we could launch a research satellite into space
→ \[fn:4hours]. NASA's entire budget is only 5% of the U.S. military
→ budget.

- Or, closer to home, we see it in the massive financing of smartphone
→ development. As a society, we choose to invest enormous amounts in
→ computing development-because most people constantly buy new phones,
→ leading software to be developed mainly for the latest devices
→ rather than for all devices sold in the last ten years.

+Or, closer to home, we see it in the massive financing of smartphone
→ development. As a society, we choose to invest enormous amounts in
→ computing development-because most people constantly buy new phones,
→ leading software to be developed mainly for the latest devices
→ rather than for all devices sold in the last ten years.

- And smartphones instead of health is not the only example. If the
↳ energy transition were important to us, we would have stopped
↳ burning coal, oil, and gas ten years ago. We would have invested
↳ hundreds of billions in research and would be much further ahead
↳ than we are today. We saw during the banking bailout that the money
↳ for this exists. If combating extremism and terrorism were important
↳ to us, then no child in the world would go hungry-not even in
↳ Germany. That money exists too. It is just used differently.

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↳ for this exists. If combating extremism and terrorism were important
↳ to us, then no child in the world would go hungry-not even in
↳ Germany. That money exists too. It is just used differently.

- But none of this is happening. Because today's real problems are not
↳ technical but social in nature.

+But none of this is happening. Because today's real problems are not
↳ technical but social in nature.

How do we decide as a society where we want to go together? How do we
↳ know what is true, and how do we know what is important? How do we
↳ decide what we ourselves consider to be reality? And whom do we
↳ believe and trust?

@@ -42,21 +42,23 @@ These are the truly difficult questions of our
↳ time-and they have been important questions ever since humanity no
↳ longer had to fight for survival every single day.

* Technology:

- PROPERTIES::CUSTOM_ID: technology

+:PROPERTIES:

+:CUSTOM_ID: technology

:END:

- That does not mean that technology is unimportant. This is
 - ↪ particularly evident in advancements in agriculture and medicine.
 - ↪ Thanks to plows, vaccinations, and antibiotics, fewer people were
 - ↪ needed to secure a community's basic needs, freeing up workforce for
 - ↪ education and research. And when guns and long spears were
 - ↪ developed, nations no longer needed a lifelong-trained knight caste
 - ↪ to protect themselves from neighbors. The invention of the printing
 - ↪ press facilitated the spread of ideas beyond church structures.
 - +That does not mean that technology is unimportant. This is particularly
 - ↪ evident in advancements in agriculture and medicine. Thanks to
 - ↪ plows, vaccinations, and antibiotics, fewer people were needed to
 - ↪ secure a community's basic needs, freeing up workforce for education
 - ↪ and research. And when guns and long spears were developed, nations
 - ↪ no longer needed a lifelong-trained knight caste to protect
 - ↪ themselves from neighbors. The invention of the printing press
 - ↪ facilitated the spread of ideas beyond church structures.
 - Technology shifts the framework of our decision-making. It changes
 - ↪ how large certain groups must be to dominate societal discourse. If
 - ↪ there are enough autonomous combat drones to control a country and a
 - ↪ small group of people has control over them, then others in society
 - ↪ no longer have much say, making their discourse irrelevant. The same
 - ↪ applies when self-proclaimed religious warriors roam with weapons.
 - +Technology shifts the framework of our decision-making. It changes how
 - ↪ large certain groups must be to dominate societal discourse. If
 - ↪ there are enough autonomous combat drones to control a country and a
 - ↪ small group of people has control over them, then others in society
 - ↪ no longer have much say, making their discourse irrelevant. The same
 - ↪ applies when self-proclaimed religious warriors roam with weapons.
 - Technology can increase or decrease the number of people who must
 - ↪ collaborate to control society, just as the internet initially
 - ↪ expanded this number before shrinking it again due to the dominance
 - ↪ of public perception and personal communication by a few
 - ↪ corporations \[fn
 - +Technology can increase or decrease the number of people who must
 - ↪ collaborate to control society, just as the internet initially
 - ↪ expanded this number before shrinking it again due to the dominance
 - ↪ of public perception and personal communication by a few
 - ↪ corporations \[fn
- :informationpower].

- And due to climate change, we may push ourselves as a species so far
↳ out of our comfort zone that technology becomes a real challenge
↳ again-so that we do not know whether we, as individuals, as a
↳ society, and as a species, can survive in the long run.

+And due to climate change, we may push ourselves as a species so far
↳ out of our comfort zone that technology becomes a real challenge
↳ again-so that we do not know whether we, as individuals, as a
↳ society, and as a species, can survive in the long run.

* Society:

- PROPERTIES::CUSTOM_ID: society

+:PROPERTIES:

+:CUSTOM_ID: society

:END:

- However, the decision of which technology we use and which we allow
↳ or limit-or develop only defensively-is a social decision. While our
↳ understanding of technology improves and the number of natural
↳ scientists continues to rise, the social sciences stagnate:
↳ disciplines like psychology, sociology, and political science that
↳ explore how we make decisions in groups and how we can make better
↳ decisions. Despite the fact that technology-through Facebook,
↳ YouTube, Twitter, and extensive communication analysis-has opened
↳ gold mines for social sciences, they receive little support. And
↳ that is a problem.

+However, the decision of which technology we use and which we allow or
↳ limit-or develop only defensively-is a social decision. While our
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↳ scientists continues to rise, the social sciences stagnate:
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↳ explore how we make decisions in groups and how we can make better
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↳ YouTube, Twitter, and extensive communication analysis-has opened
↳ gold mines for social sciences, they receive little support. And
↳ that is a problem.

And unfortunately, this too is a social issue. As a society, we must
↳ recognize that the key to solving the major problems of our time
↳ lies in the social sciences. More precisely, in social sciences
↳ that serve the common good and help everyone understand how people
↳ can make meaningful decisions in groups-especially when different
↳ interests are at odds.

@@ -66,34 +68,39 @@ Additionally, they should help societies assess the
↳ consequences of their collective decisions-to understand what
↳ freedoms they truly have and which choices would have side effects
↳ that we would consider worse than their immediate benefits.

* Enlightenment:

- PROPERTIES::CUSTOM_ID: enlightenment

+::PROPERTIES:

+::CUSTOM_ID: enlightenment

:END:

- This means we need the next step of enlightenment: the path of human
↳ society out of self-imposed immaturity. If we all understand who and
↳ what influences our decisions, we can also decide for ourselves to
↳ whom we grant this influence. And that will be uncomfortable
↳ because, just like during individual enlightenment, immaturity is
↳ pleasant as long as we ignore its consequences. But as in individual
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↳ reality.

- This step requires you-the one reading this text. Because while we
↳ can only take many of the important steps in a community,
↳ enlightenment always begins with individuals.

+This step requires you-the one reading this text. Because while we can
↳ only take many of the important steps in a community, enlightenment
↳ always begins with individuals.

- It begins with questions:

+It begins with questions:

- * Which sources of information do I trust?
- * How do the things I focus my attention on change me?
↳ \[fn:experience]
- * Who do I want to work with?

- * With whom do I discuss news? Do we question the sources?
- * Where can I discuss news confidentially?
- * With whom do I want to create change?
- * With whom do I want to spend my free time?
- * From which groups can a larger movement emerge?
- * How can we sustain it?
- * What do I want to change?
- * What do I want to preserve?
- * How does my elected representative inform me about what they have
↳ achieved for me thanks to my vote?
- * How do I ensure that those representing me understand what matters
↳ to me?
- * To whom have I entrusted the task of representing my interests?
- * What gives me the courage to take action?

+ #+begin_kasten

- + - Which sources of information do I trust?
- + - How do the things I focus my attention on change me? \[fn:experience]
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- + - With whom do I discuss news? Do we question the sources?
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↳ me?
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- + - What gives me the courage to take action?

+ #+end_kasten

+And after the questions: Please pass this text on to those who might be
↳ interested, in a way that shows them you have truly considered it.
↳ This way, it contributes to societal (self-)enlightenment.

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+#+latex: \footnotesize

```
- \#+latex: \footnotesize Link to share:\ \\[https://www.draketo.de/
↳ politik/herausforderungen-technisch-sozial](https://www.draketo.de/
↳ politik/herausforderungen-technisch-sozial))]
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+Link to share:\\
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+[[https://www.draketo.de/politik/herausforderungen-technisch-sozial][h
↳ ttps://www.draketo.de/politik/herausforderungen-technisch-sozial]]
```

```
**"What does it cost to launch a satellite? 4 hours in Iraq."** - Dr.
↳ David Crisp, OCO-2 Science Team Leader, Jet Propulsion Laboratory,
↳ NASA
```

```
@@ -20,66 +20,149 @@
```

```
</div>
```

```
#+end_export
```

```
-I read a lot about new technologies regarding health, the energy
↳ transition, the future of mobility, or mobile phones. And for many
↳ engineers, legal or societal issues are "non-problems." I used to
↳ see it that way myself. But when I look at the world, it is actually
↳ the opposite: *Every technical challenge* we currently face *can be
↳ solved* if we, as a society, decide to tackle it together. The real
↳ problems, however, are not technical. They lie in the decision of
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+*what is truly important to us*.
```

```
* What is important to us:
:PROPERTIES:
:CUSTOM_ID: important
:END:
```

-If health were truly important to us as a society, then there would be
↳ no antibiotic-resistant germs because neither doctors nor farmers
↳ would distribute antibiotics like candy. Instead, billions would be
↳ invested in research on how to keep animals healthy without
↳ antibiotics, and doctors would receive training from independent,
↳ publicly funded institutions, while drug development would be more
↳ socially financed rather than by companies that need to sell in the
↳ largest possible quantities at the highest possible price. The money
↳ is there; it is just used differently.

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-We see how much money is available in every war, where billions are
↳ burned without hesitation. For the cost of just four hours of the
↳ Iraq war, we could launch a research satellite into space
↳ \[fn:4hours]. NASA's entire budget is only 5% of the U.S. military
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+burned without hesitation. For the cost of just four hours of the Iraq
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-Or, closer to home, we see it in the massive financing of smartphone
↳ development. As a society, we choose to invest enormous amounts in
↳ computing development-because most people constantly buy new phones,
↳ leading software to be developed mainly for the latest devices
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+development. As a society, we choose to invest enormous amounts in
+computing development-because most people constantly buy new phones,
+leading software to be developed mainly for the latest devices rather
+than for all devices sold in the last ten years.

-And smartphones instead of health is not the only example. If the
→ energy transition were important to us, we would have stopped
→ burning coal, oil, and gas ten years ago. We would have invested
→ hundreds of billions in research and would be much further ahead
→ than we are today. We saw during the banking bailout that the money
→ for this exists. If combating extremism and terrorism were important
→ to us, then no child in the world would go hungry-not even in
→ Germany. That money exists too. It is just used differently.

-

-But none of this is happening. Because today's real problems are not
→ technical but social in nature.

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-How do we decide as a society where we want to go together? How do we
→ know what is true, and how do we know what is important? How do we
→ decide what we ourselves consider to be reality? And whom do we
→ believe and trust?

+But none of this is happening. Because today's real problems are not
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-These are the truly difficult questions of our time-and they have been
→ important questions ever since humanity no longer had to fight for
→ survival every single day.

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* Technology:
:PROPERTIES:
:CUSTOM_ID: technology
:END:

-That does not mean that technology is unimportant. This is particularly
→ evident in advancements in agriculture and medicine. Thanks to
→ plows, vaccinations, and antibiotics, fewer people were needed to
→ secure a community's basic needs, freeing up workforce for education
→ and research. And when guns and long spears were developed, nations
→ no longer needed a lifelong-trained knight caste to protect
→ themselves from neighbors. The invention of the printing press
→ facilitated the spread of ideas beyond church structures.

-

-Technology shifts the framework of our decision-making. It changes how
→ large certain groups must be to dominate societal discourse. If
→ there are enough autonomous combat drones to control a country and a
→ small group of people has control over them, then others in society
→ no longer have much say, making their discourse irrelevant. The same
→ applies when self-proclaimed religious warriors roam with weapons.

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+facilitated the spread of ideas beyond church structures.

-Technology can increase or decrease the number of people who must
→ collaborate to control society, just as the internet initially
→ expanded this number before shrinking it again due to the dominance
→ of public perception and personal communication by a few
→ corporations \[fn
-:informationpower].

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+applies when self-proclaimed religious warriors roam with weapons.

-And due to climate change, we may push ourselves as a species so far
→ out of our comfort zone that technology becomes a real challenge
→ again-so that we do not know whether we, as individuals, as a
→ society, and as a species, can survive in the long run.

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+out of our comfort zone that technology becomes a real challenge
+again-so that we do not know whether we, as individuals, as a society,
+and as a species, can survive in the long run.

* Society:

:PROPERTIES:

:CUSTOM_ID: society

:END:

-However, the decision of which technology we use and which we allow or
↪ limit-or develop only defensively-is a social decision. While our
↪ understanding of technology improves and the number of natural
↪ scientists continues to rise, the social sciences stagnate:
↪ disciplines like psychology, sociology, and political science that
↪ explore how we make decisions in groups and how we can make better
↪ decisions. Despite the fact that technology-through Facebook,
↪ YouTube, Twitter, and extensive communication analysis-has opened
↪ gold mines for social sciences, they receive little support. And
↪ that is a problem.

-

-And unfortunately, this too is a social issue. As a society, we must
↪ recognize that the key to solving the major problems of our time
↪ lies in the social sciences. More precisely, in social sciences that
↪ serve the common good and help everyone understand how people can
↪ make meaningful decisions in groups-especially when different
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-These sciences must seek out (and communicate) ways to organize society
↪ so that more people can see which measures truly align with their
↪ interests and what other interests exist. This would ensure that
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+and which choices would have side effects that we would consider worse
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* Enlightenment:
:PROPERTIES:
:CUSTOM_ID: enlightenment
:END:

-This means we need the next step of enlightenment: the path of human
→ society out of self-imposed immaturity. If we all understand who and
→ what influences our decisions, we can also decide for ourselves to
→ whom we grant this influence. And that will be uncomfortable
→ because, just like during individual enlightenment, immaturity is
→ pleasant as long as we ignore its consequences. But as in individual
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-This step requires you-the one reading this text. Because while we can
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It begins with questions:

```
#+begin_kasten
- Which sources of information do I trust?
-- How do the things I focus my attention on change me? \[fn:experience]
+- How do the things I focus my attention on change me?
+ \[fn:experience]
- Who do I want to work with?
- With whom do I discuss news? Do we question the sources?
- Where can I discuss news confidentially?
@@ -89,28 +172,47 @@ It begins with questions:
- How can we sustain it?
- What do I want to change?
- What do I want to preserve?
-- How does my elected representative inform me about what they have
↪ achieved for me thanks to my vote?
-- How do I ensure that those representing me understand what matters to
↪ me?
+- How does my elected representative inform me about what they have
+ achieved for me thanks to my vote?
+- How do I ensure that those representing me understand what matters
+ to me?
- To whom have I entrusted the task of representing my interests?
- What gives me the courage to take action?
#+end_kasten
```

-And after the questions: Please pass this text on to those who might be
↪ interested, in a way that shows them you have truly considered it.
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#+latex: \footnotesize

Link to share:\\

[[<https://www.draketo.de/politik/herausforderungen-technisch-sozial>][h
→ <https://www.draketo.de/politik/herausforderungen-technisch-sozial>]]

-**"What does it cost to launch a satellite? 4 hours in Iraq."** - Dr.
→ David Crisp, OCO-2 Science Team Leader, Jet Propulsion Laboratory,
→ NASA

-

-The internet initially increased the number of people required to
→ control society, [because we could all
→ publish] (<http://www.draketo.de/licht/politik/das-internet-durchbricht-die-strukturelle-informationshoheit>). Today, it is reducing that
→ number, as it becomes increasingly difficult to distinguish who is
→ actually reliable-or even whether we are interacting with a real
→ person or a paid propagandist.

+**"What does it cost to launch a satellite? 4 hours in Iraq."** - Dr.
+David Crisp, OCO-2 Science Team Leader, Jet Propulsion Laboratory,
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-How can we sustain our communities despite opposition from those who
→ seek to prevent group formation? How do we resist [power
→ concentration, surveillance, and fragmentation] (<http://www.draketo.de/licht/politik/machtkonzentration-ueberwachung-zersplitterung>)?

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-How paying attention to certain things changes us is described, for
→ example, by cycling journalist Kate Wagner in her report on [how she
→ was once invited to Formula
→ 1] (<https://web.archive.org/web/20240301170542/https://www.roadandtrack.com/car-culture/a46975496/behind-f1-velvet-curtain/>):

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→ ueberwachung-zersplitterung)?

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+was once invited to Formula

+1] (<https://web.archive.org/web/20240301170542/https://www.roadandtrack.com/car-culture/a46975496/behind-f1-velvet-curtain/>):

```
#+begin_quote
-“I experienced firsthand the intended effect of allowing riffraff like
  ↳ me, those who distinguish themselves by way of words alone, to
  ↳ mingle with the giants of capitalism and their cultural attachés.”
+“I experienced firsthand the intended effect of allowing riffraff like
+me, those who distinguish themselves by way of words alone, to mingle
+with the giants of capitalism and their cultural attachés.”
#+end_quote
```

@@ -29,10 +29,10 @@ solved* if we, as a society, decide to t
problems, however, are not technical. They lie in the decision of
what is truly important to us.

```
-* What is important to us:
-:PROPERTIES:
-:CUSTOM_ID: important
-:END:
+* What is important to us
+ :PROPERTIES:
+ :CUSTOM_ID: important
+ :END:
```

If health were truly important to us as a society, then there would be
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@@ -77,10 +77,10 @@ important questions ever since humanity
survival every single day.

```
-* Technology:
-:PROPERTIES:
-:CUSTOM_ID: technology
-:END:
+* Technology
+ :PROPERTIES:
+ :CUSTOM_ID: technology
+ :END:
```

That does not mean that technology is unimportant. This is
particularly evident in advancements in agriculture and medicine.

@@ -109,10 +109,10 @@ out of our comfort zone that technology
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and as a species, can survive in the long run.

```
-* Society:
-:PROPERTIES:
-:CUSTOM_ID: society
-:END:
+* Society
+ :PROPERTIES:
+ :CUSTOM_ID: society
+ :END:
```

However, the decision of which technology we use and which we allow or
limit-or develop only defensively-is a social decision. While our
@@ -143,10 +143,10 @@ and which choices would have side effect
than their immediate benefits.

```
-* Enlightenment:
-:PROPERTIES:
-:CUSTOM_ID: enlightenment
-:END:
+* Enlightenment
+ :PROPERTIES:
+ :CUSTOM_ID: enlightenment
+ :END:
```

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@@ -193,9 +193,10 @@ This way, it contributes to societal (se
Link to share:\\
[[https://www.draketo.de/politik/herausforderungen-technisch-sozial][h
↪ ttps://www.draketo.de/politik/herausforderungen-technisch-sozial]]

```
-**"What does it cost to launch a satellite? 4 hours in Iraq."** - Dr.
-David Crisp, OCO-2 Science Team Leader, Jet Propulsion Laboratory,
-NASA
+[fn:4hours] @@html:<a name="fn:4hours"></a>@@»What does it cost to
↪ launch a satellite? 4 hours in Iraq.«\\
+ --- Dr. David Crisp, OCO-2 Science Team Leader, Jet Propulsion
+ Laboratory, NASA
```

```
+      ([https://www.youtube.com/watch?v=tJJZol2o1ug] [2015-09]),
↪    [[http://www.draketo.de/zitate#4hoursinirak] [Zitate]])).
```

The internet initially increased the number of people required to control society, [because we could all

@@ -198,22 +198,20 @@ Link to share:\\

Laboratory, NASA

```
([https://www.youtube.com/watch?v=tJJZol2o1ug] [2015-09]),
↪  [[http://www.draketo.de/zitate#4hoursinirak] [Zitate]])).
```

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↪ [die-strukturelle-informationshoheit](http://www.draketo.de/licht/politik/das-internet-durchbricht-die-strukturelle-informationshoheit)).

-Today, it is reducing that number, as it becomes increasingly
-difficult to distinguish who is actually reliable-or even whether we
-are interacting with a real person or a paid propagandist.

```
+ [fn:informationcontrol] @@html:<a
↪   name="fn:informationcontrol"></a>@@The internet initially increased
↪   the number of people required to
+     control society, [[http://www.draketo.de/licht/politik/das-inte
↪   rnet-durchbricht-die-strukturelle-informationshoheit] [because we
↪   could all publish]].
+     Today, it is reducing that number, as it becomes increasingly
+     difficult to distinguish who is actually reliable-or even
↪   whether we
+     are interacting with a real person or a paid propagandist.
```

-How can we sustain our communities despite opposition from those who
-seek to prevent group formation? How do we resist [power
-concentration, surveillance, and
-fragmentation] ([http://www.draketo.de/licht/politik/machtkonzentration-](http://www.draketo.de/licht/politik/machtkonzentration-ueberwachung-zersplitterung)
↪ [ueberwachung-zersplitterung](http://www.draketo.de/licht/politik/machtkonzentration-ueberwachung-zersplitterung))?

```
+ [fn:verstetigen] @@html:<a name="fn:verstetigen"></a>@@How can we
+   sustain our communities despite opposition from those who seek
+   to prevent group formation? How do we resist
↪   [[http://www.draketo.de/licht/politik/machtkonzentration-ueberwachu
↪   ng-zersplitterung] [power concentration, surveillance, and
↪   fragmentation?]]
+   (German article)
```

```

-How paying attention to certain things changes us is described, for
-example, by cycling journalist Kate Wagner in her report on [how she
-was once invited to Formula
-1] (https://web.archive.org/web/20240301170542/https://www.roadandtrack.
↪ .com/car-culture/a46975496/behind-f1-velvet-curtain/):
+[fn:experience] @@html:<a name="fn:experience"></a>@@ How paying
+      attention to certain things changes us is described, for
+      example, by cycling journalist Kate Wagner in her report on
↪      [[https://web.archive.org/web/20240301170542/https://www.roadandtra
↪ ck.com/car-culture/a46975496/behind-f1-velvet-curtain/] [how she was
↪ once invited to a Formula 1 race]]:\\

```

#+begin_quote

“I experienced firsthand the intended effect of allowing riffraff like

```

@@ -212,10 +212,8 @@ Link to share:\\
[fn:experience] @@html:<a name="fn:experience"></a>@@ How paying
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      example, by cycling journalist Kate Wagner in her report on
↪      [[https://web.archive.org/web/20240301170542/https://www.ro
↪ adandtrack.com/car-culture/a46975496/behind-f1-velvet-curta
↪ in/] [how she was once invited to a Formula 1 race]]:\\
+      “I experienced firsthand the intended effect of allowing
+      riffraff like me, those who distinguish themselves by way of
+      words alone, to mingle with the giants of capitalism and their
+      cultural attachés.”

```

-#+begin_quote

-“I experienced firsthand the intended effect of allowing riffraff like
-me, those who distinguish themselves by way of words alone, to mingle
-with the giants of capitalism and their cultural attachés.”

-#+end_quote

-

```

@@ -195,7 +195,10 @@ This way, it contributes to societal (se
#+latex: \footnotesize

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Link to share:\\

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-[[https://www.draketo.de/politik/herausforderungen-technisch-sozial] [h
↪ ttps://www.draketo.de/politik/herausforderungen-technisch-sozial]]
+[[https://www.draketo.de/politik/challenges-technical-social]]

```

```
+
+Call for a new step in enlightenment:\\
+[[https://www.draketo.de/politik/challenges-technical-social#enlighten|
↪ ment]]
```

```
[fn:4hours] @@html:<a name="fn:4hours"></a>@@»What does it cost to
↪ launch a satellite? 4 hours in Iraq.«\\
    --- Dr. David Crisp, OCO-2 Science Team Leader, Jet Propulsion
```

3.5 Small adjustments

These are changes needed that a human would spot: noting that an existing link is in German, updating the date of the article, updating some links, allow linking to the questions, and noting that the translation was started from AI.

```
@@ -199,7 +199,7 @@ Link to share:\\
    ([https://www.youtube.com/watch?v=tJJZol2o1ug] [2015-09]),
    ↪ [[http://www.draketo.de/zitate#4hoursinirak] [Zitate]]).
```

```
[fn:informationcontrol] @@html:<a
↪ name="fn:informationcontrol"></a>@@The internet initially increased
↪ the number of people required to
-     control society, [[http://www.draketo.de/licht/politik/das-inte|
↪ rnet-durchbricht-die-strukturelle-informationshoheit] [because we
↪ could all publish]].
+     control society, [[http://www.draketo.de/licht/politik/das-inte|
↪ rnet-durchbricht-die-strukturelle-informationshoheit] [because we
↪ could all publish]] (German article).
    Today, it is reducing that number, as it becomes increasingly
    difficult to distinguish who is actually reliable-or even
    ↪ whether we
    are interacting with a real person or a paid propagandist.
```

```
@@ -242,4 +242,3 @@ Link to share:\\
# override template options:
#+options: toc:nil H:1 num:nil ^:nil
#+latex_class_options: [a5paper]
-
```

```
@@ -1,6 +1,6 @@
#+INCLUDE: ../org-templates/level-1.org
```

```
#+title: The Challenges of Our Time Are Not Technical but Social in
↳ Nature
-#+date: <2017-01-01 Sun>
+#+date: <2025-03-21 Fr>
#+LANGUAGE: en
```

```
#+begin_quote
```

```
@@ -9,14 +9,10 @@
```

```
#+begin_export html
<div class="sourcebox" style="text-align: center">
- <a href="herausforderungen-technisch-sozial.pdf">
+ <a href="challenges-technical-social.pdf">

</a><br />
- <a href="herausforderungen-technisch-sozial.pdf">PDF</a> (print)
- <div style="text-align: center; margin-top: 0.5em;">
- <audio style="width: 70px;"
↳ src="https://www.draketo.de/files/Die_Herausforderungen_unserer_Zei
↳ t_sind_nicht_technischer_sondern_sozialer_Natur--text_Arne_Babenhau
↳ serheide--gesprochen-Tallur--lizenz-cc_by_sa_0.mp3"
↳ controls="controls"></audio><br />
- <a href="https://www.draketo.de/files/Die_Herausforderungen_unserer_Ze
↳ it_sind_nicht_technischer_sondern_sozialer_Natur--text_Arne_Babenhau
↳ userheide--gesprochen-Tallur--lizenz-cc_by_sa_0.mp3">Spoken by
↳ Tallur</a>
- </div>
+ <a href="challenges-technical-social.pdf">PDF</a> (print)
</div>
#+end_export
```

```
@@ -168,7 +168,7 @@ This step needs you-the one reading this text.
```

```
↳ Because while we
can only take many of the important steps in a community,
enlightenment always begins with individuals.
```

```
-It begins with questions:
```

+It starts with questions:@@html:@@

#+begin_kasten

- Which sources of information do I trust?

@@ -25,6 +25,10 @@ solved* if we, as a society, decide to t
problems, however, are not technical. They lie in the decision of
what is truly important to us.

+/Translated article. German original: [[https://www.draketo.de/politik_]
↪ /herausforderungen-technisch-sozial.html][Die Herausforderungen
↪ unserer Zeit sind nicht technischer, sondern sozialer Natur]]/
+

+/This translation was started with an AI model to test its quality and
↪ then revised again and again over at least two hours to fix errors
↪ which distorted even the core message./
+

* What is important to us
:PROPERTIES:
:CUSTOM_ID: important

3.6 Doing too much

The next mainly reverts changes to the typography-style. For some reason the translator replaced --- with its typographic equivalent -, but that does not work as well when exported via L^AT_EX to PDF.

Also it left out a link to a footnote.

@@ -53,7 +53,7 @@ U.S. pay for spaceflight.

Or, closer to home, we see it in the massive financing of smartphone development. As a society, we choose to invest enormous amounts in
-computing development-because most people constantly buy new
+computing development---because most people constantly buy new
phones, leading to software developed mainly for the latest
devices rather than for all devices sold in the last ten years.

@@ -64,7 +64,7 @@ hundreds of billions in research and wou
ahead 10 years ago than we are today. We saw during the banking
bailout that the needed money exists. If combating extremism and

terrorism were important to us, then no child in the world would go
-hungry-also not in Germany or the U.S.. The money for that
+hungry---also not in Germany or the U.S.. The money for that
exists, too. It is just used differently.

But none of this happens. Because today's real problems are not
@@ -112,12 +112,12 @@ force everyone to obey.
Technology can increase or decrease the number of people who must
collaborate to control society. For example the internet initially
expanded this number before shrinking it again due to the dominance
-over public perception and personal communication by a few corporations
-\[fn :informationpower].
+over public perception and personal communication by a few
+corporations[fn:informationcontrol].

And due to climate change, we may push ourselves as a species so far
out of our comfort zone that technology becomes the real challenge
-again-so that we do not know whether we, as individuals, as a
+again---so that we do not know whether we, as individuals, as a
society, and as a species, can survive in the long run.

* Society
@@ -126,7 +126,7 @@ society, and as a species, can survive i
:END:

However, the decision which technology we use and which we allow or
-limit-or develop only defensively-is a social decision. While our
+limit---or develop only defensively---is a social decision. While our
understanding of technology improves and the number of
scientists in natural sciences continues to rise, the social sciences
↪ stagnate:
disciplines like psychology, sociology, and political science that
@@ -140,13 +140,13 @@ And unfortunately, this, too, is social.
that the key to solving the major problems of our time lies in the
social sciences. More precisely, in social sciences that serve society
and the common good and everyone by helping to understand how people
↪ can
-make meaningful decisions in groups-also and especially when
+make meaningful decisions in groups---also and especially when
different interests are at odds. Sciences that search for (and
communicate) ways to organize society such that more people can see
which measures truly align with their interests and which other
interests exist. How to make political structures act more in the
↪ interest of the

people they represent. And how to assess the consequences of their
-collective decisions-to understand what freedoms they really have
+collective decisions---to understand what freedoms they really have
and which choices would have side effects they would consider worse
than their immediate benefits.

@@ -165,7 +165,7 @@ in individual enlightenment, the gain fr
self-determination is far greater than the inconvenience of having
to acknowledge reality.

-This step needs you-the one reading this text. Because while we
+This step needs you---the one reading this text. Because while we
can only take many of the important steps in a community,
enlightenment always begins with individuals.

@@ -173,15 +173,14 @@ It starts with questions:@@html:<a name=

```
#+begin_kasten
- Which sources of information do I trust?
-- How do the things I focus my attention on change me?
- \[fn:experience]
+- How do the things I focus my attention on change me?[fn:experience]
- Who do I want to work with?
- With whom do I discuss news? Do we question the sources?
- Where can I discuss news confidentially?
- With whom do I want to create change?
- With whom do I want to spend my free time?
- Which groups can bring forth a larger movement?
-- How can we sustain it?
+- How can we sustain it?[fn:verstetigen]
- What do I want to change?
- What do I want to preserve?
- How does my elected representative inform me about what they have
  ↪ achieved with my vote?
@@ -195,7 +194,7 @@ be interested, in a way and with a note
truly considered it. This way, it contributes to societal
(self-)enlightenment.
```

```
-#+latex: \footnotesize
+ #+latex: \footnotesize
```

Link to share:\\
[[https://www.draketo.de/politik/challenges-technical-social]]

And it removed the footer to export correctly.

```
@@ -217,3 +217,29 @@ Link to share:\\
    words alone, to mingle with the giants of capitalism and their
    cultural attachés.”

+
+#+latex_header: \usepackage{tocloft}
+#+latex_header: \newcommand{\listlinksname}{List of Links}
+#+latex_header: \newlistof{links}{lnks}{\listlinksname}
+#+latex_header: \let\oldhref\href
+#+latex_header: \renewcommand{\href}[2]{\oldhref{#1}{#2}\addcontentsli
↪ ne{lnks}{figure}{#2: \url{#1}}}
+#+latex_header: \usepackage{xurl}\urlstyle{same}\renewcommand\cftsecafi
↪ tersnum{\newline}
+#+latex: \listoflinks
+
+
+
+
+
+
+#+ #+toc: headlines 2
+
+
+
+#+setupfile: ../org-templates/level-1-politik.org
+#+ Local Variables:
+#+ org-confirm-babel-evaluate: nil
+#+ org-export-default-language: de
+#+ org-babel-noweb-wrap-start: "{{{"
+#+ org-babel-noweb-wrap-end: "}}}"
+#+ org-latex-images-centered: nil
+#+ End:
+#+ override template options:
+#+options: toc:nil H:1 num:nil ^:nil
+#+latex_class_options: [a5paper]
+
```

3.7 Genuine manual improvements

These are improvements I found while proofreading. Shorter sentences, merged paragraphs, and so forth.

```
@@ -16,7 +16,7 @@
</div>
```

#+end_export

-I read a lot about new technologies regarding health, the energy
+I read a lot about new technologies. Technologies for health, the
↪ energy
transition, the future of mobility, or mobile phones. And for many
engineers, legal or societal issues are "non-problems." I used to see
it that way myself. But when I look at the world, it is actually the

@@ -137,15 +137,12 @@ recognize that the key to solving the ma
in the social sciences. More precisely, in social sciences that serve
the common good and help everyone understand how people can make
meaningful decisions in groups-especially when different interests are
-at odds.

-
-These sciences must seek out (and communicate) ways to organize
-society so that more people can see which measures truly align with
-their interests and what other interests exist. This would ensure that
-politics acts more in the interest of the people it represents.

-
-Additionally, they should help societies assess the consequences of
-their collective decisions-to understand what freedoms they truly have
-and which choices would have side effects that we would consider worse
-than their immediate benefits.

+at odds. These sciences must seek out (and communicate) ways to
+organize society so that more people can see which measures truly
+align with their interests and what other interests exist. This would
+ensure that politics acts more in the interest of the people it
+represents. Additionally, they should help societies assess the
+consequences of their collective decisions-to understand what freedoms
+they truly have and which choices would have side effects that we
+would consider worse than their immediate benefits.

@@ -21,7 +21,7 @@ transition, the future of mobility, or m
engineers, legal or societal issues are "non-problems." I used to see
it that way myself. But when I look at the world, it is actually the
opposite: *Every technical challenge* we currently face *can be
-solved* if we, as a society, decide to tackle it together. The real
+solved* if we, as a society, decide to take it on together. The real
problems, however, are not technical. They lie in deciding
what matters most to us. Which challenges we *want* to solve.

,* Enlightenment

#+end_src

@@ -23,7 +23,7 @@ it that way myself. But when I look at t
opposite: *Every technical challenge* we currently face *can be
solved* if we, as a society, decide to tackle it together. The real
problems, however, are not technical. They lie in deciding
-*what matters most to us*.
+*what matters most to us*. Which challenges we *want* to solve.

/Translated article. German original: [[https://www.draketo.de/politik_/_herausforderungen-technisch-sozial.html] [Die Herausforderungen
↳ unserer Zeit sind nicht technischer, sondern sozialer Natur]]/

@@ -47,8 +47,9 @@ The money is there; it is just used diff
We see how much money is available in every war, where billions are
burned without hesitation. For the cost of just four hours of the
Iraq war, we can launch a research satellite into
-space\[\fn:4hours]. NASA's entire budget is only 5% of the U.S.
-military budget.
+space\[\fn:4hours]. NASA's entire budget is only 5% of the U.S.
+military budget. China now pays far more for the military than the
+U.S. pay for spaceflight.

Or, closer to home, we see it in the massive financing of smartphone
development. As a society, we choose to invest enormous amounts in

@@ -109,7 +110,7 @@ The same applies when armed, self-procla
force everyone to obey.

Technology can increase or decrease the number of people who must
-collaborate to control society, just as the internet initially
+collaborate to control society. For example the internet initially
expanded this number before shrinking it again due to the dominance
over public perception and personal communication by a few corporations
\[\fn :informationpower].

@@ -130,10 +131,10 @@ understanding of technology improves and
scientists in natural sciences continues to rise, the social sciences
↳ stagnate:
disciplines like psychology, sociology, and political science that
explore how we make decisions in groups and how we can make better

-decisions. Despite the fact that technology-through Facebook, YouTube, Twitter, and extensive communication analysis-has opened gold mines for social sciences, they receive little support. And that is a problem.

+decisions. Despite the fact that technology---through Facebook, YouTube, Mastodon, and extensive communication analysis---has opened gold mines for social sciences, they receive little support. +And that is a problem.

And unfortunately, this, too, is social. As a society, we must
↪ recognize
that the key to solving the major problems of our time lies in the

4 Subtle content corruption

While the previous errors are all annoying, you can spot most of them without understanding the source text (as long as you can see how it's separated into paragraphs).

But the following errors are a real danger.

I added notes for each, explaining why these are insidious and can severely mislead readers.

They are ordered by severity: from *slightly misleading* to *completely changed meaning*.

4.1 Slightly misleading

Since the changes in this section are just minor annoyances, I'm not commenting in detail.

@@ -22,8 +22,8 @@ engineers, legal or societal issues are
it that way myself. But when I look at the world, it is actually the
opposite: *Every technical challenge* we currently face *can be
solved* if we, as a society, decide to tackle it together. The real
-problems, however, are not technical. They lie in the decision of
-*what is truly important to us*.
+problems, however, are not technical. They lie in deciding
+*what matters most to us*.

/Translated article. German original: [[https://www.draketo.de/politik_
↪ [herausforderungen-technisch-sozial.html](https://www.draketo.de/politik_/herausforderungen-technisch-sozial.html)] [Die Herausforderungen
↪ unserer Zeit sind nicht technischer, sondern sozialer Natur]]/

@@ -47,11 +47,12 @@

We see how much money is available in every war, where billions are
-burned without hesitation. For the cost of just four hours of the Iraq
-war, we could launch a research satellite into space \[fn:4hours].
-NASA's entire budget is only 5% of the U.S. military budget.
+burned without hesitation. For the cost of just four hours of the Iraq
+war, we can launch a research satellite into
+space\[fn:4hours]. NASA's entire budget is only 5% of the U.S.
+military budget.

Or, closer to home, we see it in the massive financing of smartphone
development. As a society, we choose to invest enormous amounts in
-computing development-because most people constantly buy new phones,
-leading software to be developed mainly for the latest devices rather
-than for all devices sold in the last ten years.
+computing development-because most people constantly buy new phones,
+leading to software developed mainly for the latest devices rather
+than for all devices sold in the last ten years.

@@ -67,4 +69,4 @@

-But none of this is happening. Because today's real problems are not
+But none of this happens. Because today's real problems are not
technical but social in nature.

@@ -89,6 +91,6 @@ survival every single day.

:CUSTOM_ID: technology

:END:

-That does not mean that technology is unimportant. This is
-particularly evident in advancements in agriculture and medicine.
+That does not mean that technology is irrelevant. This is
+evident in advancements in agriculture and medicine.
Thanks to plows, vaccinations, and antibiotics, fewer people were

@@ -124,7 +127,7 @@

-However, the decision of which technology we use and which we allow or
+However, the decision which technology we use and which we allow or
limit-or develop only defensively-is a social decision. While our
-understanding of technology improves and the number of natural
-scientists continues to rise, the social sciences stagnate:
+understanding of technology improves and the number of

+scientists in natural sciences continues to rise, the social sciences
↪ stagnate:

disciplines like psychology, sociology, and political science that
explore how we make decisions in groups and how we can make better
decisions. Despite the fact that technology-through Facebook, YouTube,

@@ -157,13 +159,14 @@

what influences our decisions, we can also decide for ourselves to
-whom we grant this influence. And that will be uncomfortable because,
-just like during individual enlightenment, immaturity is pleasant as
-long as we ignore its consequences. But as in individual
-enlightenment, the gain from responsibility and self-determination is
-far greater than the inconvenience of having to acknowledge reality.
+whom we want to grant this power. And that will be uncomfortable
+because, just like during individual enlightenment, immaturity is
+pleasant as long as we blind ourselves to its consequences. But as
+in individual enlightenment, the gain from responsibility and
+self-determination is far greater than the inconvenience of having
+to acknowledge reality.

-This step requires you-the one reading this text. Because while we can
-only take many of the important steps in a community, enlightenment
-always begins with individuals.

+This step needs you-the one reading this text. Because while we
+can only take many of the important steps in a community,
+enlightenment always begins with individuals.

It begins with questions:

4.2 Moderate distortions

While not what I said, leaving out “10 years ago” still leaves the core message “we would be further ahead” intact.

@@ -58,9 +59,10 @@

And smartphones instead of health is not the only example. If the
-energy transition were important to us, we would have stopped burning
-coal, oil, and gas ten years ago. We would have invested hundreds of
-billions in research and would be much further ahead than we are
-today. We saw during the banking bailout that the money for this
-exists. If combating extremism and terrorism were important to us,

-then no child in the world would go hungry-not even in Germany. That
-money exists too. It is just used differently.
+energy transition were important to us, we would have stopped
+burning coal, oil, and gas ten years ago. We would have invested
+hundreds of billions in research and would have been much further
+ahead 10 years ago than we are today. We saw during the banking
+bailout that the needed money exists. If combating extremism and
+terrorism were important to us, then no child in the world would go
+hungry-also not in Germany or the U.S.. The money for that
+exists, too. It is just used differently.

It's not the framework that changes, but the limits what we can decide. The rest is just less clear.

@@ -101,7 +103,8 @@

-Technology shifts the framework of our decision-making. It changes how
-large certain groups must be to dominate societal discourse. If there
-are enough autonomous combat drones to control a country and a small
-group of people has control over them, then others in society no
-longer have much say, making their discourse irrelevant. The same
-applies when self-proclaimed religious warriors roam with weapons.
+Technology shifts the boundaries of our decision-making. It changes
+how large certain groups must be to dominate societal discourse. If
+there are enough autonomous combat drones to control a country and a
+small group of people has control over them, then others in society
+can no longer make a difference, making their discourse irrelevant.
+The same applies when armed, self-proclaimed religious warriors
+force everyone to obey.

This is not necessarily “the” one next step, just “a” next step.

@@ -155,2 +157,2 @@

-This means we need the next step of enlightenment: the path of human
+This means we need a next step of enlightenment: the path of human
society out of self-imposed immaturity. If we all understand who and

The translation turned “I want them to get informed regularly”, “groups bring forth a larger movement”, and “champion my interests” into passive versions: “understand me”, “movement emerges from”, and “representing my interests”.

```

@@ -176,12 +179,12 @@ It begins with questions:
- Where can I discuss news confidentially?
- With whom do I want to create change?
- With whom do I want to spend my free time?
-- From which groups can a larger movement emerge?
+- Which groups can bring forth a larger movement?
- How can we sustain it?
- What do I want to change?
- What do I want to preserve?
-- How does my elected representative inform me about what they have
  ↳ achieved for me thanks to my vote?
-- How do I ensure that those representing me understand what matters to
  ↳ me?
-- To whom have I entrusted the task of representing my interests?
+- How does my elected representative inform me about what they have
  ↳ achieved with my vote?
+- How do I ensure that those representing me learn what matters to me?
+- To whom have I entrusted the task to champion my interests?
- What gives me the courage to take action?
#+end_kasten

```

The concrete example call to action (add a note) was left out.

```

@@ -189,6 +192,7 @@
And after the questions: Please pass this text on to those who might
-be interested, in a way that shows them you have truly considered it.
-This way, it contributes to societal (self-)enlightenment.
+be interested, in a way and with a note that shows them you have
+truly considered it. This way, it contributes to societal
+(self-)enlightenment.

#+latex: \footnotesize

```

4.3 Completely changed meaning

Healthy without antibiotics implies treating sickness differently. But the source text is about not getting sick in the first place, because they live in a more healthy environment.

No we should not reject antibiotics. Where they are needed, they should be used. We should just avoid acting in ways that make them necessary all the time.

@@ -37,10 +37,10 @@ problems, however, are not technical. Th

If health were truly important to us as a society, then there would be no antibiotic-resistant germs because neither doctors nor farmers would distribute antibiotics like candy. Instead, billions would be -invested in research on how to keep animals healthy without -antibiotics, and doctors would receive training from independent, -publicly funded institutions, while drug development would be more -socially financed rather than by companies that need to sell in the -largest possible quantities at the highest possible price. The money -is there; it is just used differently.

+invested in research on how to keep animals in a way that they don't +get sick in the first place, and doctors would receive training from +independent, publicly funded institutions, while drug development +would be more socially financed rather than by companies that need to +sell in the largest possible quantities at the highest possible price. +The money is there; it is just used differently.

That the fight for survival is “as a species” is essential, because this is about going extinct, not about individuals trying not to die.

@@ -80,8 +82,8 @@ decide what we ourselves consider to be believe and trust?

These are the truly difficult questions of our time-and they have been -important questions ever since humanity no longer had to fight for -survival every single day.

+the important questions ever since humanity no longer had to fight for +survival as a species every day.

* Technology

Spreading ideas “beyond” church structures would mean that they still originate from the church. Like teaching people what the church knows. But this is about ideas being able to spread efficiently without *any* church involvement.

@@ -95,6 +97,6 @@

needed to secure a community's basic needs, freeing up workforce for -education and research. And when guns and long spears were developed, -nations no longer needed a lifelong-trained knight caste to protect

-themselves from neighbors. The invention of the printing press
-facilitated the spread of ideas beyond church structures.
+education and research. And when guns and long spears were
+developed, nations no longer needed a knight caste trained from
↪ childhood
+to protect themselves from neighbors. The invention of the printing
+press facilitated the spread of ideas outside church structures.

It's not public perception that *dominates*. Public perception is what is *being dominated*.

@@ -108,6 +111,6 @@

Technology can increase or decrease the number of people who must
collaborate to control society, just as the internet initially
-expanded this number before shrinking it again due to the dominance of
↪ public
-perception and personal communication by a few corporations
+expanded this number before shrinking it again due to the dominance
↪ over public
+perception and personal communication by a few corporations
\[fn :informationpower].

“A” real challenge is one of many, “the” real challenge is what dominates. I didn’t just say that it may get hard, I said that it may become **the one thing** that stands between survival and extinction as a species.

@@ -114,10 +117,10 @@

And due to climate change, we may push ourselves as a species so far
-out of our comfort zone that technology becomes a real challenge
-again-so that we do not know whether we, as individuals, as a society,
-and as a species, can survive in the long run.
+out of our comfort zone that technology becomes the real challenge
+again-so that we do not know whether we, as individuals, as a
+society, and as a species, can survive in the long run.

```
* Society
:PROPERTIES:
:CUSTOM_ID: society
:END:
```

The translation phrased this as “these scientists must do” and not “must search ways to”. A request for more communicated research turned into a call for action. And then the claim that if they did, politics would get better, instead of the original: that they should research **how** politics can get better at acting in the interest of people they represent.

@@ -132,8 +135,8 @@ Twitter, and extensive communication analysis-has
↪ opened gold mines
for social sciences, they receive little support. And that is a
problem.

-And unfortunately, this too is a social issue. As a society, we must
↪ recognize
-that the key to solving the major problems of our time lies in the
-social sciences. More precisely, in social sciences that serve
-the common good and help everyone understand how people can make
-meaningful decisions in groups-especially when different interests are
+And unfortunately, this, too, is social. As a society, we must
↪ recognize
+that the key to solving the major problems of our time lies in the
+social sciences. More precisely, in social sciences that serve society
↪ and
+the common good and everyone by helping to understand how people can
↪ make
+meaningful decisions in groups-also and especially when different
↪ interests are

@@ -140,6 +143,6 @@
-at odds. These sciences must seek out (and communicate) ways to
-organize society so that more people can see which measures truly
-align with their interests and what other interests exist. This would
-ensure that politics acts more in the interest of the people it
-represents. Additionally, they should help societies assess the
-consequences of their collective decisions-to understand what freedoms
+at odds. Sciences that search for (and communicate) ways to
+organize society such that more people can see which measures truly
+align with their interests and which other interests exist. How to
+make political structures act more in the interest of the people they
+represent. And how to assess the
+ consequences of their collective decisions-to understand what freedoms

What matters is not what I think about side effects, but what the represented people think about them.

@@ -146,10 +149,10 @@

-they truly have and which choices would have side effects that we would
-consider worse than their immediate benefits.
+they really have and which choices would have side effects they would
+consider worse than their immediate benefits.

```
* Enlightenment
:PROPERTIES:
:CUSTOM_ID: enlightenment
:END:
```

5 Takeaway

The subtle content corruptions changed the core message of some of the paragraphs completely. These are hard to find — if you don't know the source by heart you have little chance of finding them — and they cast debilitating doubt on the reliability of information you get from reading AI translated text.

Different from more primitive machine translation, readers have no chance to note that some parts could have additional meaning, because the text lacks all the warning signs of simpler translation, for example words not fitting in the surrounding context.

My personal takeaway is not to trust any fully automatic AI translation. It could even shorten lists with tasks and reverse the meaning of parts of the text into its opposite.

People who don't know both languages, have no chance to find those errors, so it does not enable beginners to do good translations. Just to make bad ones that have harder to spot mistakes, so they cause more damage.

And looking at the time it took me to find and fix all those subtle errors, I could have done the translation by hand with maybe 30% more time, and I would have actually honed my translation and typing skills by that instead of copy-pasting text from the AI and then reading it over and over again. Had I not written the text myself, spotting the errors of the AI would have required even more time.

So I should just translate my articles by hand.