

The Maslow's pyramid of climate change

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Some facts

“In the United States, conservative white men are more likely than other Americans to deny climate change. [...]

A very similar trend has been documented in Norway, where 63% of conservative men deny anthropogenic climate change compared to just 36% of the general Norwegian population. [...]

Social media can significantly influence positive beliefs of climate change. [...]

A 2018 study found that individuals were more likely to accept that global temperatures were increasing if they were shown the information in a chart rather than in text.”¹

The results of a survey presented in a Nature paper show that 58% of questioned people feel powerless when it comes to climate change.²

So, how can we act? How can we fight this powerless feeling?

The theory of the social tipping point:

Malcolm Gladwell describes the tipping point as “that magic moment when an idea, trend, or social behavior crosses a threshold, tips, and spreads like wild-fire.”

The question one might ask is: how many people should be aware of climate change, willing to take action and actually acting in order to reach this tipping point and force governments into taking serious measures?

There is no clear answer but our best weapon as individuals is to bring people together to reach this tipping point as soon as possible.³ Once reached, governments will be forced to take actions

How?

Linked to the fact listed above, we need:

- To spread information: something visual, easy to understand, that people are familiar with

¹ https://en.wikipedia.org/wiki/Public_opinion_on_climate_change

² <https://www.nature.com/articles/d41586-021-02582-8>

³ <https://bonpote.com/climat-point-de-bascule-et-optimisme/>

- Using our nicest tool: the Internet, the social media, enabling the instant dissemination of something that the day before was unknown.

An example of a visual representation could be Maslow's pyramid (see Fig. 1), which argues that people's motivation is driven by five hierarchical levels of human needs. One starts at the lowest level represented by physiological needs and, as these needs are satisfied, one moves up the pyramid to the highest level, where one aspires to develop personal satisfaction. As you satisfy the most basic needs, you develop higher needs and desires.

The idea: building a worldwide index taking into account the psychological and social impact of climate change

For each country, we combine existing data (poverty rate, life expectancy, satisfaction with life index,...) and compute an index called the Maslow's index. This index will show at which stage, on the Maslow's pyramid of needs, each country of the world is. This is done for the year 2020 and, using prediction models from the Intergovernmental Panel on Climate Change (IPCC) report, this index can be projected at mid and long-term under three different climate change scenarios (from the best case scenario to the worst case scenario). The index is presented in a world map, with 5 different colors, corresponding to the five levels in Maslow's pyramid.

Expected results

Even though they will be the most affected by climate change, poor countries are already at the bottom of Maslow's pyramid. Thus, projections in the year 2100 will not change their position in the pyramid, thus their color on the world map. However, wealthy countries (Europe, Australia, the US,...) are nowadays at a quite high level in the pyramid. In 2100, we expect them to decrease in the "Maslow's scale". Consequently, our world map of Maslow's index will be a visual indicator showing that the comfort and psychological health of people living in developed countries will be drastically impacted.

Why this project?

- To decrease the powerless feeling one might feel, showing that we can act as individual to reach this tipping point. Once this point is reached, governments will be forced to take actions.
- To target wealthy countries. They have the means to act. The change will come from our governments.
- As scientists, we have access to a broad and international network. We can reach out to both the population and the governments.

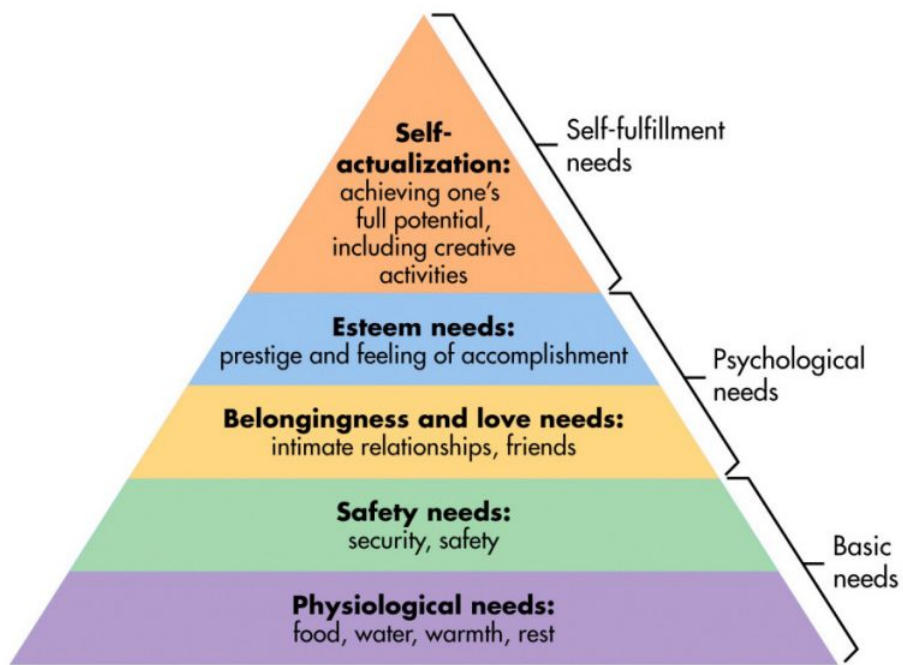


Fig. 1. Maslow's pyramid of needs (1943)