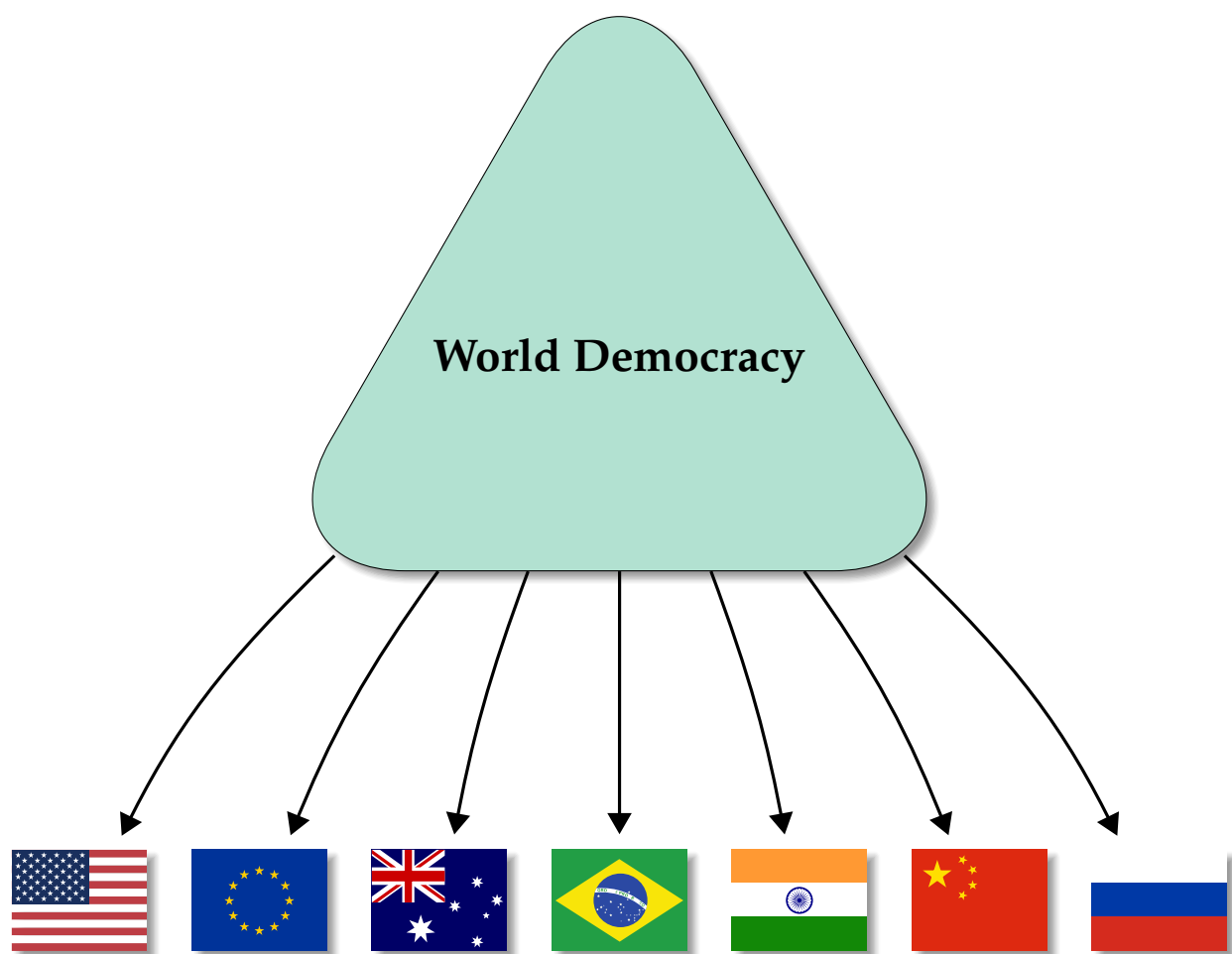


BLUEPRINT FOR A PROGRESSIVE WORLD DEMOCRACY

Published at: <http://www.archania.org>

June 6, 2017



The time has come for a world democracy. With global Internet access it should be possible to efficiently collect votes from most of the world population. Biometric identification can be used to ensure a unique identity of each vote, and help to prevent voting fraud. There are several reasons why we should strive to get a world democracy:

- Humanity is believed to have caused a mass extinction that is comparable to the mass extinction that occurred when the dinosaurs went extinct^[1], and according to the World Wide Fund for Nature global biodiversity has declined by approximately 30% since 1970^[2]. Conversely, it can take many million years to increase the global biodiversity by 30% with the slow evolutionary processes that generate new species. Loss of biodiversity has been shown to negatively influence humanity in numerous of ways^[3]. We believe that policies to reverse the decline in global biodiversity and prevent an ecological disaster must be implemented globally. A new world government therefore seems to be required to deal with the ecological issues that threaten this planet.
- Global wealth inequality is currently enormous, with 0.7% of the richest people in the world owning 45.6% of the world's wealth, while 73.2% of the poorest people in the world own only 2.4% of the world's wealth^[4]. In the current multinational world, there is competition among countries to have the lowest taxes for the rich, since lower taxes for the rich tend to attract businesses^[5,6]. Billionaires also often place their money in "tax havens" to avoid paying taxes. Because of these loopholes, global wealth inequality continues to grow. With a new world government, we can implement the same progressive tax system everywhere. Then there will not be any opportunities for rich people to put their money in "tax havens", and countries will not be allowed to reduce their taxes for the rich to attract businesses. We might then progress towards a more egalitarian world economy.
- Today superpowers are competing against each other to get the most destructive weapons. The nuclear weapons we have today can destroy civilization as we know it^[7]. With a new world government we can order all the superpowers to get rid of their nuclear weapons, and make our civilization much safer. We can also set a limit for how large national armies can be, so that nations do not pose a threat to each other, and nations do not need to waste so much money on military expenditures.
- A new world government gives us the opportunity to implement the same civil rights for all people in the world, and put an end to state-sponsored discrimination against women, homosexuals and ethnic minorities.
- With a new world government we can overthrow authoritarian regimes and make the entire world democratic.

Bibliography

- [1] A. D. B. et al., "Has the earth's sixth mass extinction already arrived?," *Nature*, vol. 471, pp. 51–57, 2011.
- [2] Zoological Society of London (ZSL) and WWF, "Living planet index." <http://www.livingplanetindex.org/home/index>.
- [3] E. Chivian and A. Bernstein, *Sustaining Life: How Human Health Depends on Biodiversity*. Oxford University Press, 2008.
- [4] Credit Suisse Research Institute, "The global wealth report 2016." <https://www.credit-suisse.com/us/en/about-us/research/research-institute/news-and-videos/articles/news-and-expertise/2016/11/en/the-global-wealth-report-2016.html>.
- [5] R. B. Davies and K. C. Vadlamannati, "A race to the bottom in labor standards? an empirical investigation," *Journal of Development Economics*, vol. 103, pp. 1–14, 2013.
- [6] OECD, "Harmful tax competition - an emerging global issue." <https://www.oecd.org/tax/transparency/44430243.pdf>, 1998.
- [7] A. Robock and O. B. Toon, "Self-assured destruction: The climate impacts of nuclear war," *Bulletin of the Atomic Scientists*, vol. 68, pp. 66–74, 2012.

ENDING THE DESTRUCTION OF OUR HABITAT

Published at: <http://www.archania.org>

September 23, 2017

Many of the biggest cities in the world are getting unbearably air, due to smog and particulate matter. In many Chinese cities people are using surgical masks to protect themselves from air pollution (Figure 1).

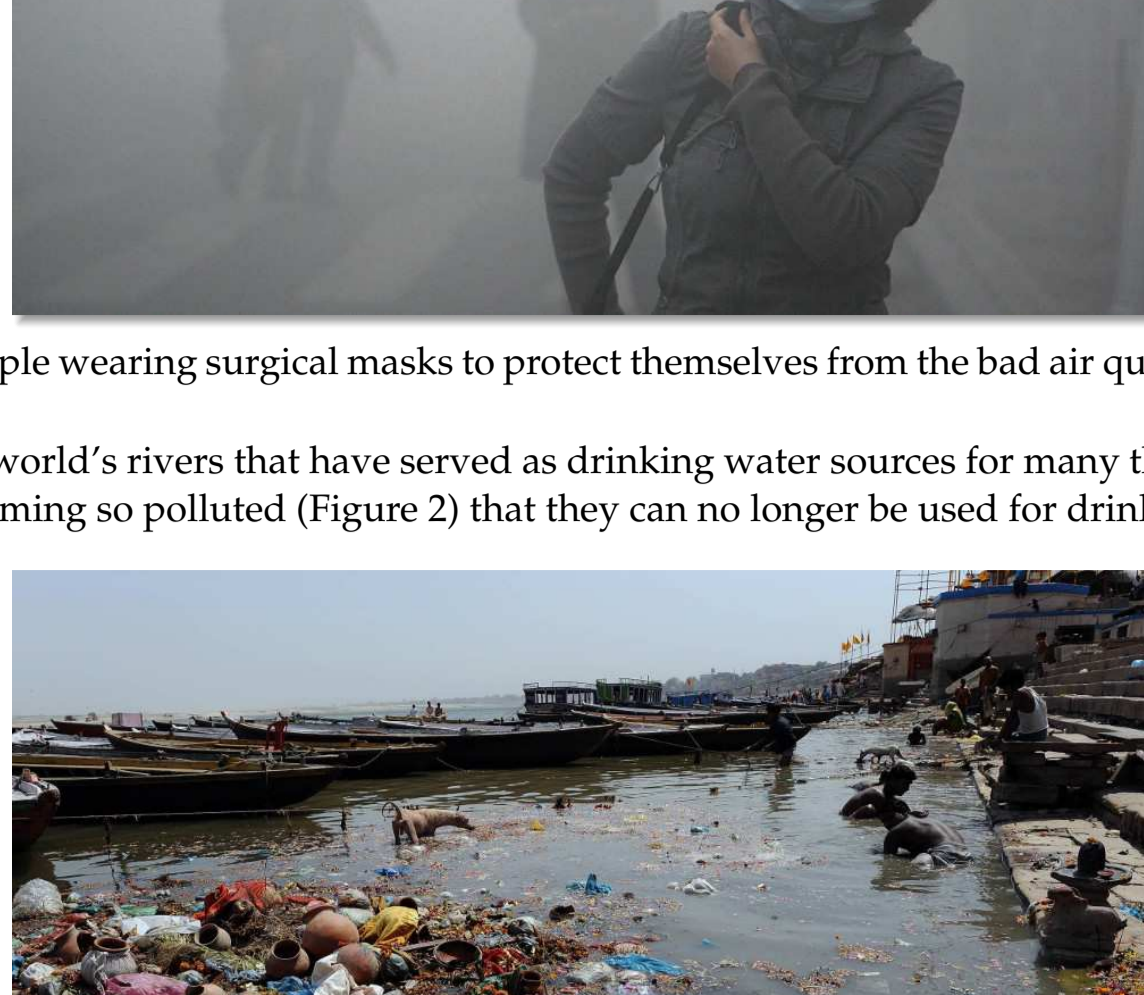


Figure 1: People wearing surgical masks to protect themselves from the bad air quality in Beijing.

Many of the world's rivers that have served as drinking water sources for many thousand years, are now becoming so polluted (Figure 2) that they can no longer be used for drinking water.

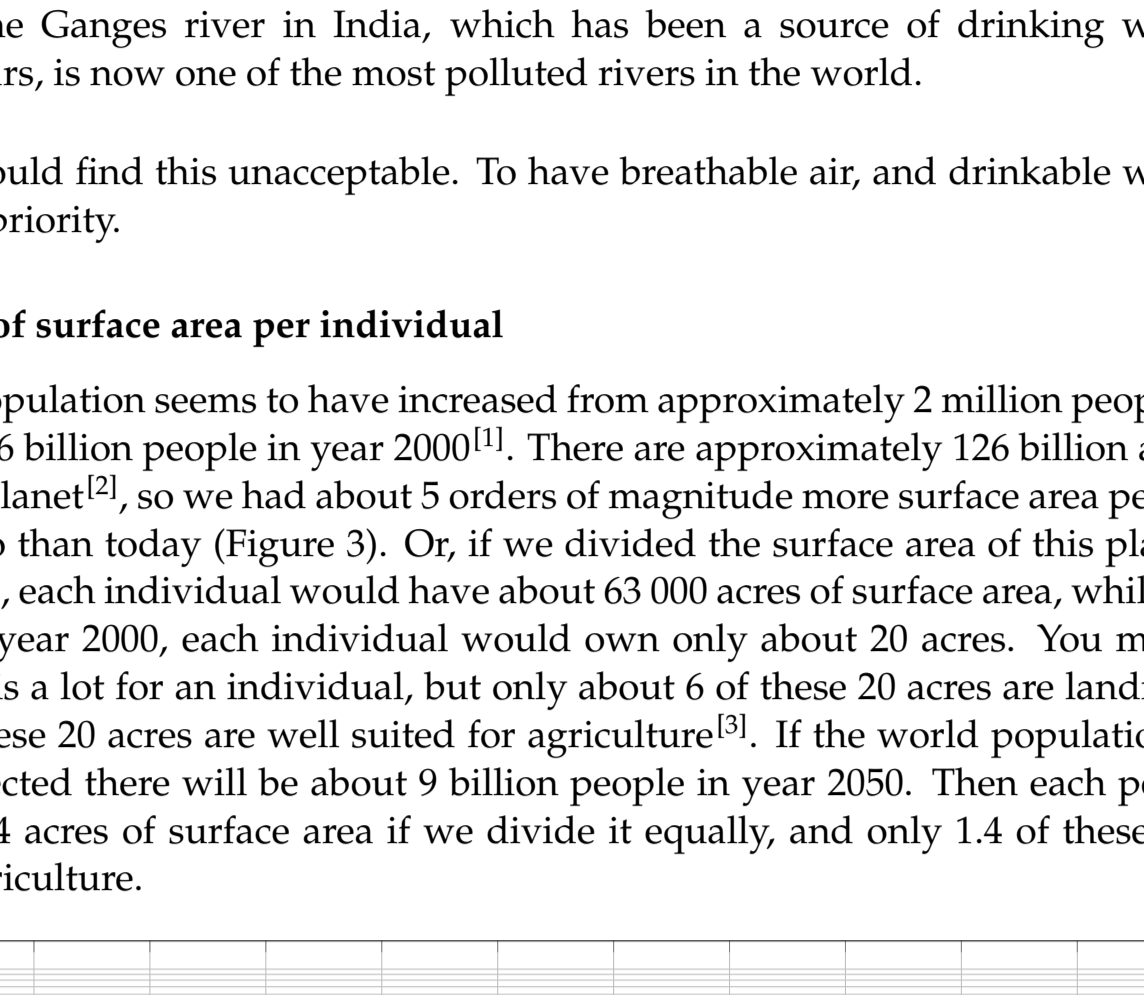


Figure 2: The Ganges river in India, which has been a source of drinking water for many thousand years, is now one of the most polluted rivers in the world.

Everyone should find this unacceptable. To have breathable air, and drinkable water should be our greatest priority.

The decline of surface area per individual

The world population seems to have increased from approximately 2 million people 12 000 years ago to about 6 billion people in year 2000^[1]. There are approximately 126 billion acres of surface area on this planet^[2], so we had about 5 orders of magnitude more surface area per individual 12 000 years ago than today (Figure 3). Or, if we divided the surface area of this planet equally 12 000 years ago, each individual would have about 63 000 acres of surface area, while if we divided it equally in year 2000, each individual would own only about 20 acres. You might think that 20 acres still is a lot for an individual, but only about 6 of these 20 acres are landmass, and only about 2 of these 20 acres are well suited for agriculture^[3]. If the world population continues to grow as expected there will be about 9 billion people in year 2050. Then each person will own only about 14 acres of surface area if we divide it equally, and only 1.4 of these acres are well suited for agriculture.

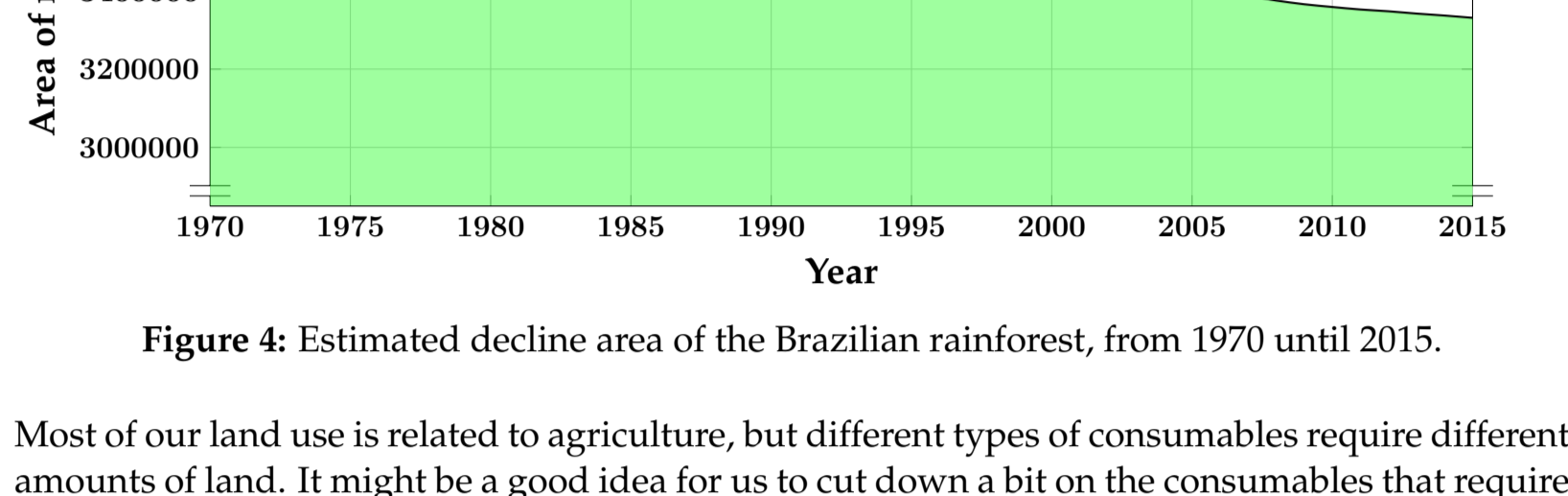


Figure 3: Diagram showing the decline of surface area per individual during the last 12000 years.

In order to create agricultural land we often chop down forests and replace them with monocultures of crops. This leads to a decrease in biological diversity since forests have a much higher biodiversity than monocultures of crops^[4]. From 1970 until today, we have destroyed about 20% of the Brazilian rainforest (Figure 4). Tropical rainforests and coral reefs have the highest biodiversity on Earth, and should therefore be protected at all costs.

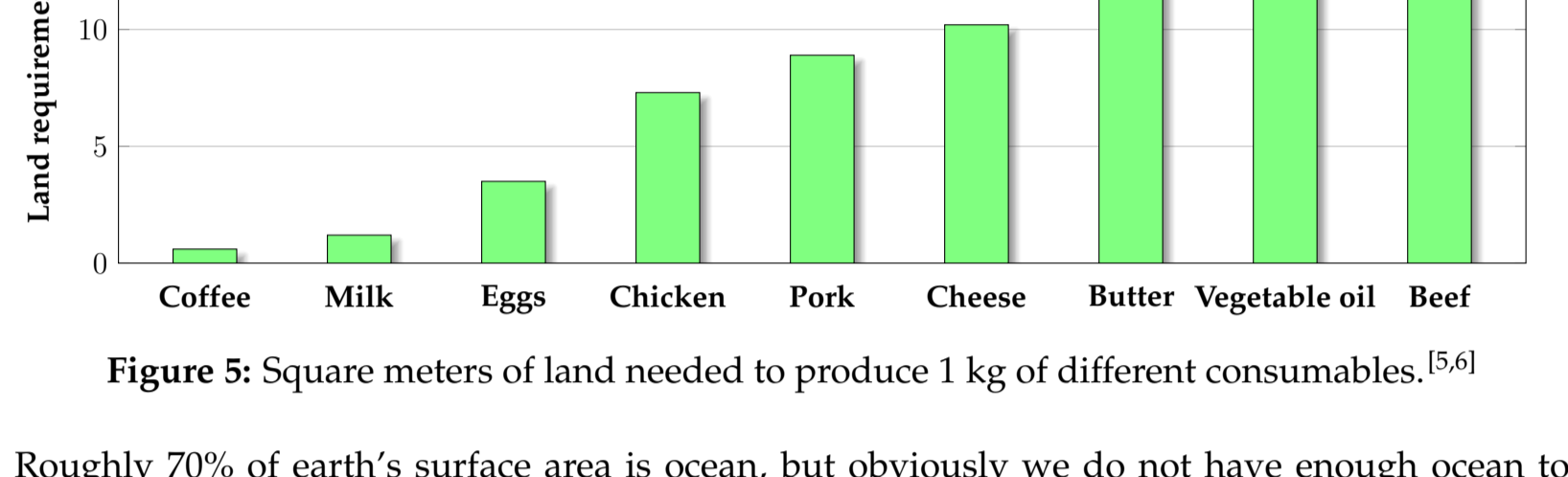


Figure 4: Estimated decline area of the Brazilian rainforest, from 1970 until 2015.

Most of our land use is related to agriculture, but different types of consumables require different amounts of land. It might be a good idea for us to cut down a bit on the consumables that require most land. Or if it is possible, we could try make the consumables use less land, for example by hydroponic farming.

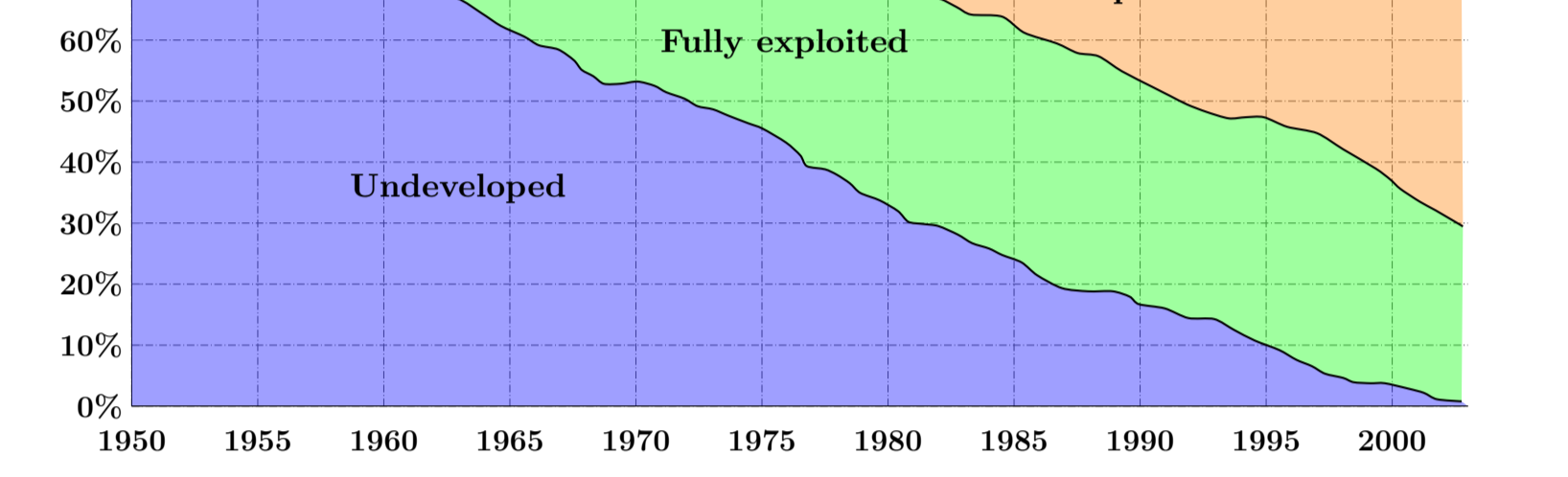


Figure 5: Square meters of land needed to produce 1 kg of different consumables.^[5,6]

Roughly 70% of earth's surface area is ocean, but obviously we do not have enough ocean to feed the world population either, as the amount of fish is dropping rapidly due to overfishing^[7]. Today, there are no undeveloped fish stocks left, and more than 70% of the global fish stocks are either overexploited or have collapsed (Figure 6).

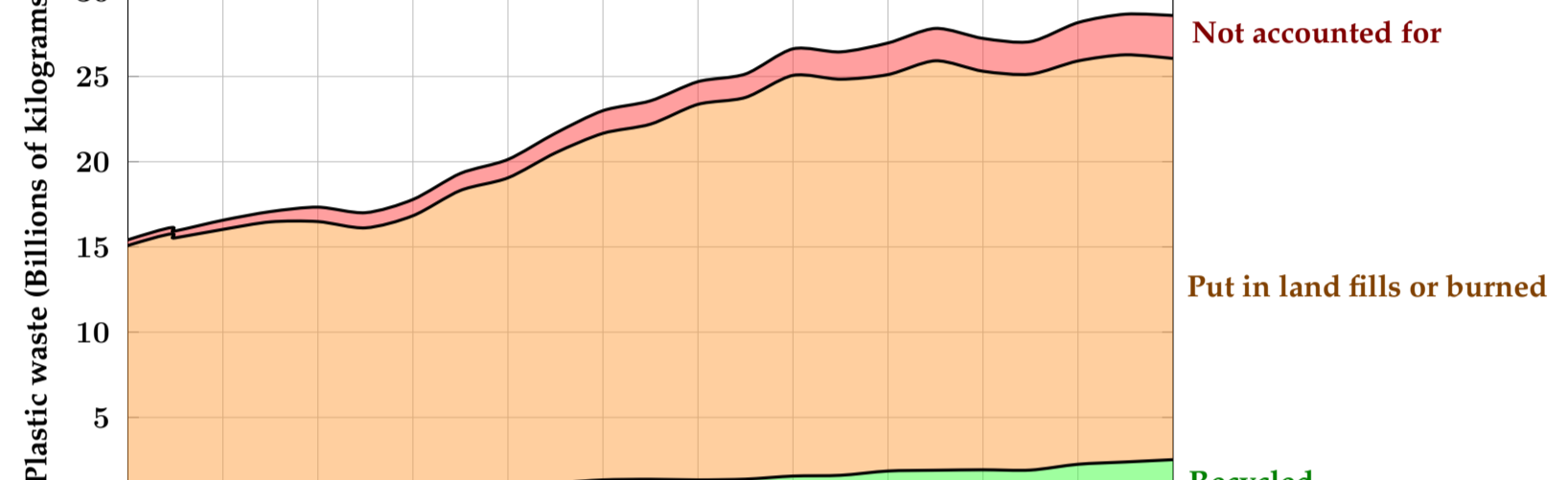


Figure 6: Diagram showing the decline in global fish stocks since 1950 due to overfishing.^[8]

Pollution is also affecting global fish stocks. Plastic waste can take many hundreds of years to decompose. Fish tends to mistake plastic microdebris for food, and it is increasingly found in the flesh of fish meant for human consumption^[9]. Plastic microdebris has also been found in agricultural soil^[10], and perhaps even more disturbingly in our drinking water^[11].

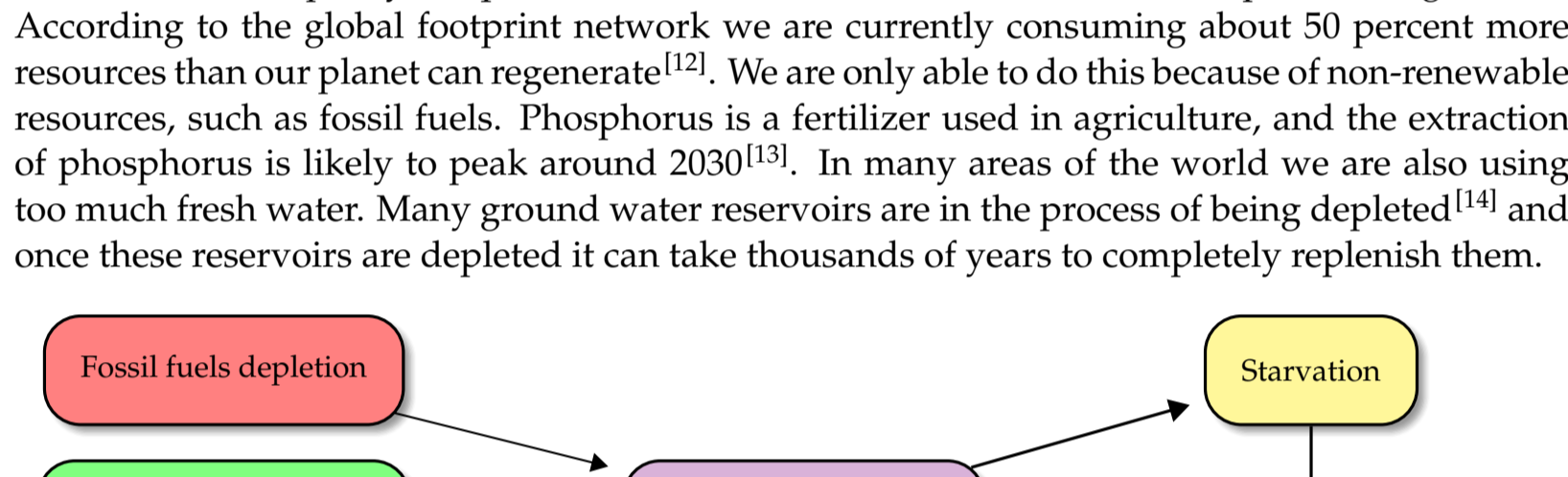


Figure 7: Plastic waste in the United States. Even though we are getting better at recycling, the amount of plastic waste not accounted for is also increasing.

Resources we are in danger of running out of

The world's biocapacity is equal to the amount of renewable resources our planet can generate. According to the global footprint network we are currently consuming about 50 percent more resources than our planet can regenerate^[12]. We are only able to do this because of non-renewable resources, such as fossil fuels. Phosphorus is a fertilizer used in agriculture, and the extraction of phosphorus is likely to peak around 2030^[13]. In many areas of the world we are also using too much fresh water. Many ground water reservoirs are in the process of being depleted^[14] and once these reservoirs are depleted it can take thousands of years to completely replenish them.

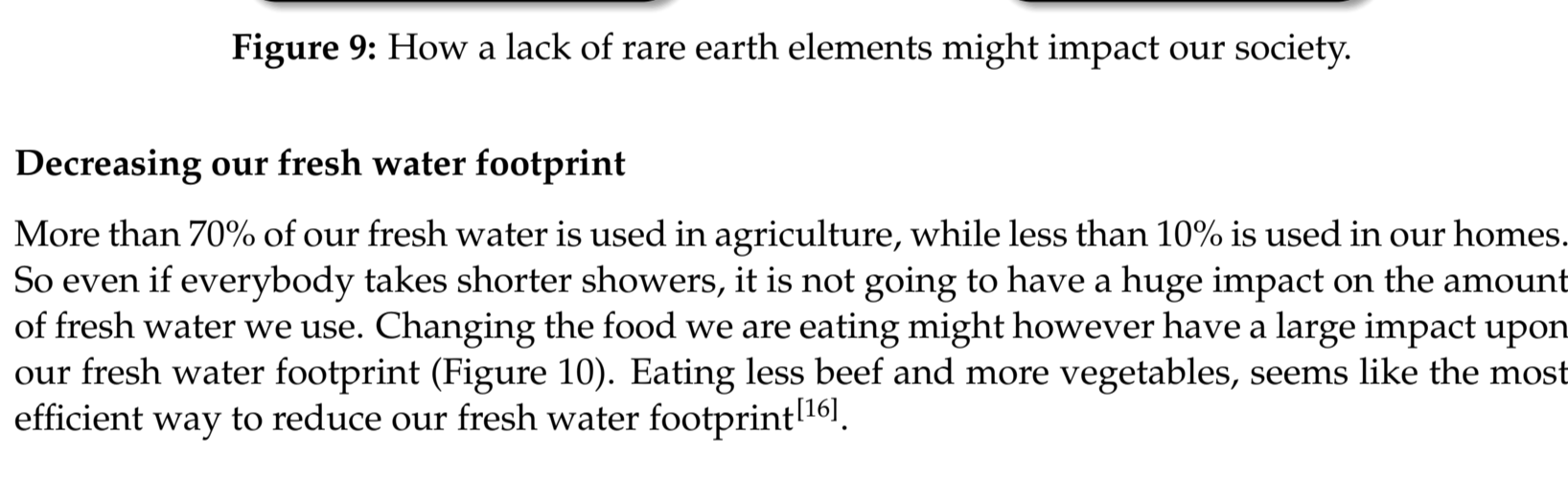


Figure 8: Resources we are in danger of running out of during the next century, and how the depletion of these resources might impact our society.

Billions of people are in danger of dying from hunger when they do not have enough fresh water, fossil fuel and phosphorus to produce food for everyone (Figure 8). The consequences of resource depletion is going to be most severe for people living in overpopulated third world countries. These countries might start to fight against each other for resources, and mass emigration to other places because of migration. Complete chaos might then emerge in the third world, and a horrible situation for the people living there. The demand for rare earth elements is also expected to surpass production soon^[15]. They are used in lasers, magnets, batteries, computers, cellphones and other cutting edge technologies (Figure 9).

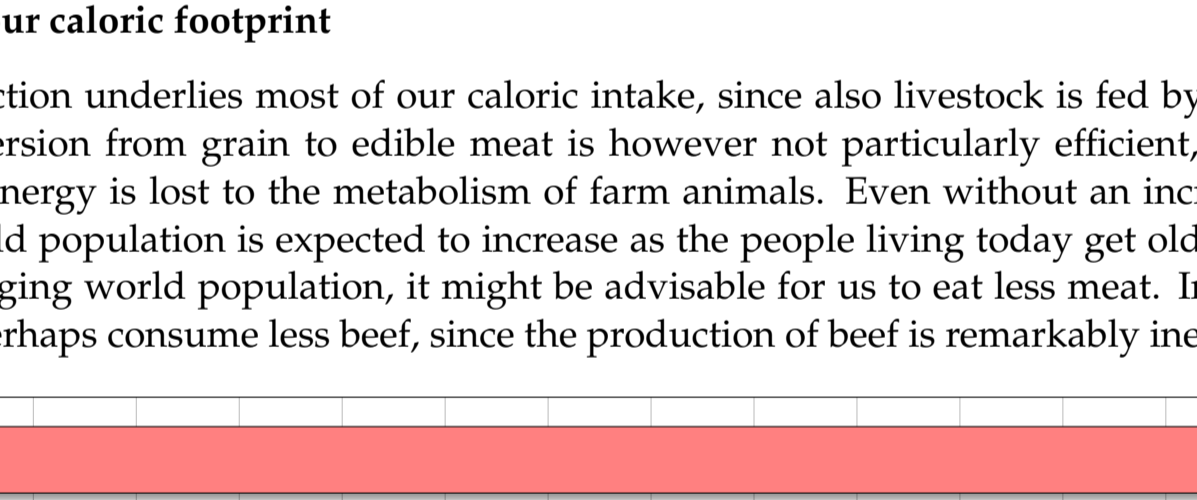


Figure 9: How a lack of rare earth elements might impact our society.

Decreasing our fresh water footprint

More than 70% of our fresh water is used in agriculture, while less than 10% is used in our homes. So even if everybody takes shorter showers, it is not going to have a huge impact on the amount of fresh water we use. Changing the food we are eating might however have a large impact upon our fresh water footprint (Figure 10). Eating less beef and more vegetables, seems like the most efficient way to reduce our fresh water footprint^[16].

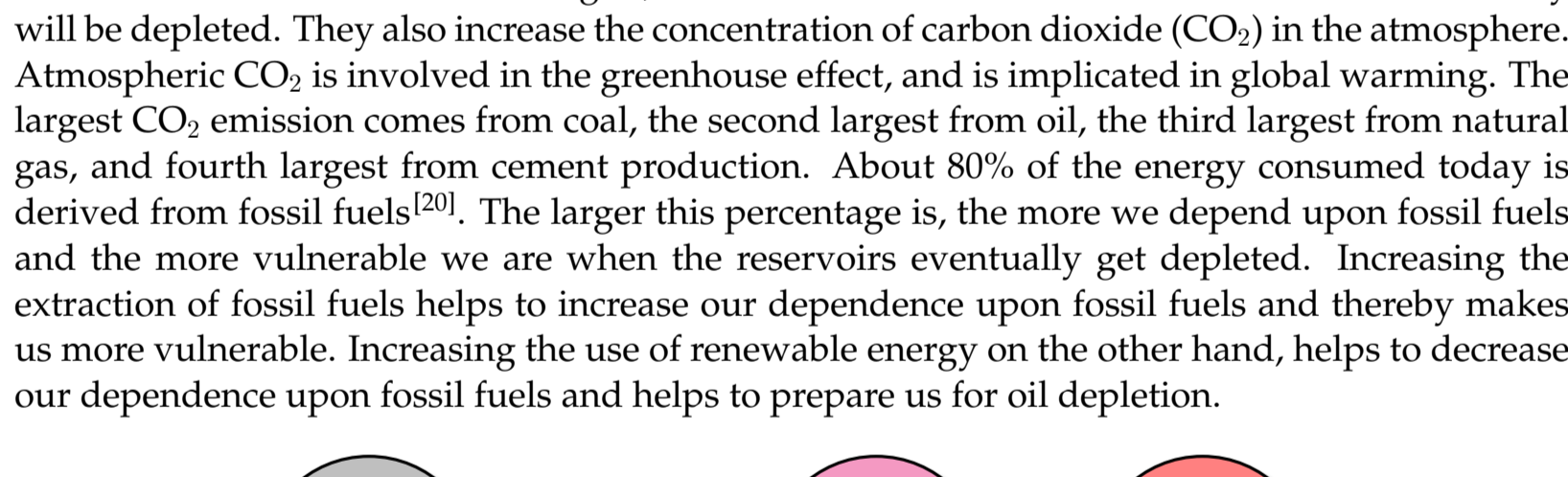


Figure 10: Liters of fresh water needed to produce 1 kg of different consumables.^[17]

Decreasing our caloric footprint

Grain production underlies most of our caloric intake, since also livestock is fed by grain. The production of meat is however not particularly efficient, since large amounts of energy is lost to the metabolism of farm animals. Even without an increased birth rate, the world population is expected to increase as the people living today get older. In order to feed this aging world population, it might be advisable for us to eat less meat. In particular, we should perhaps consume less beef, since the production of beef is remarkably inefficient.

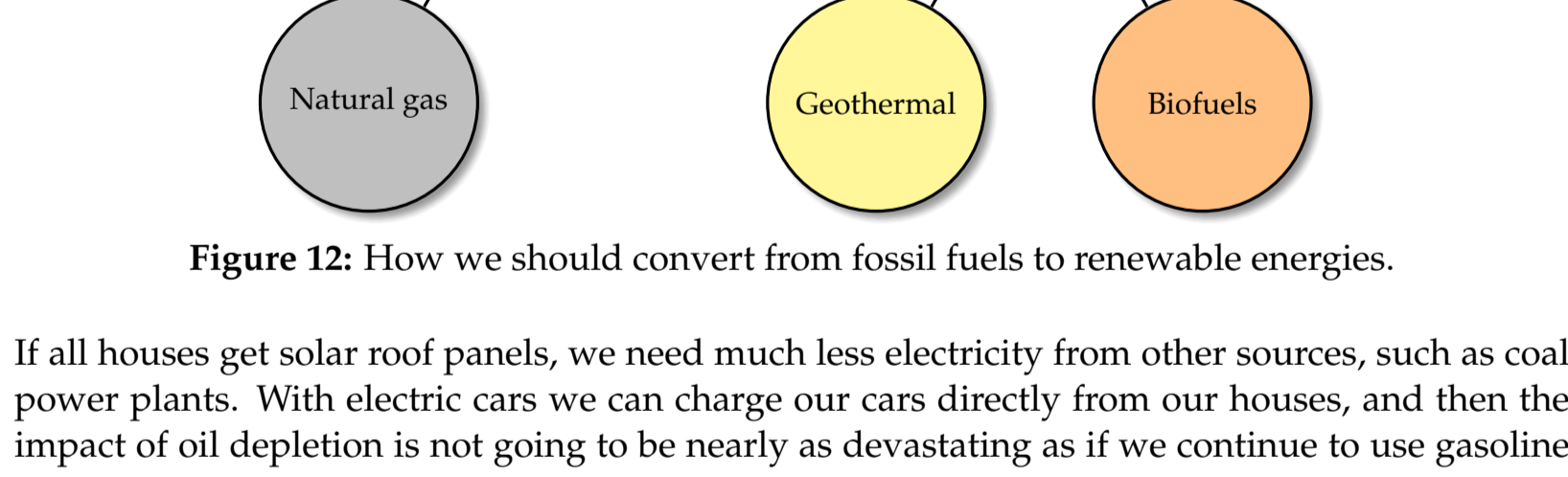


Figure 11: Kilograms of livestock feed needed to produce 1 kg of edible meat.^[18,19]

Decreasing our carbon footprint

Fossil fuels are non-renewable energies, which means that the reservoirs of fossil fuels eventually will be depleted. They also increase the concentration of carbon dioxide (CO₂) in the atmosphere. Atmospheric CO₂ is involved in the greenhouse effect, and is implicated in global warming. The largest CO₂ emission comes from coal, the second largest from oil, the third largest from natural gas, and fourth largest from cement production. About 80% of the energy consumed today is derived from fossil fuels^[20]. The larger this percentage is, the more we depend upon fossil fuels and the more vulnerable we are when the reservoirs eventually get depleted. Increasing the extraction of fossil fuels helps to increase our dependence upon fossil fuels and thereby makes us more vulnerable. Increasing the use of renewable energy on the other hand, helps to decrease our dependence upon fossil fuels and helps to prepare us for oil depletion.

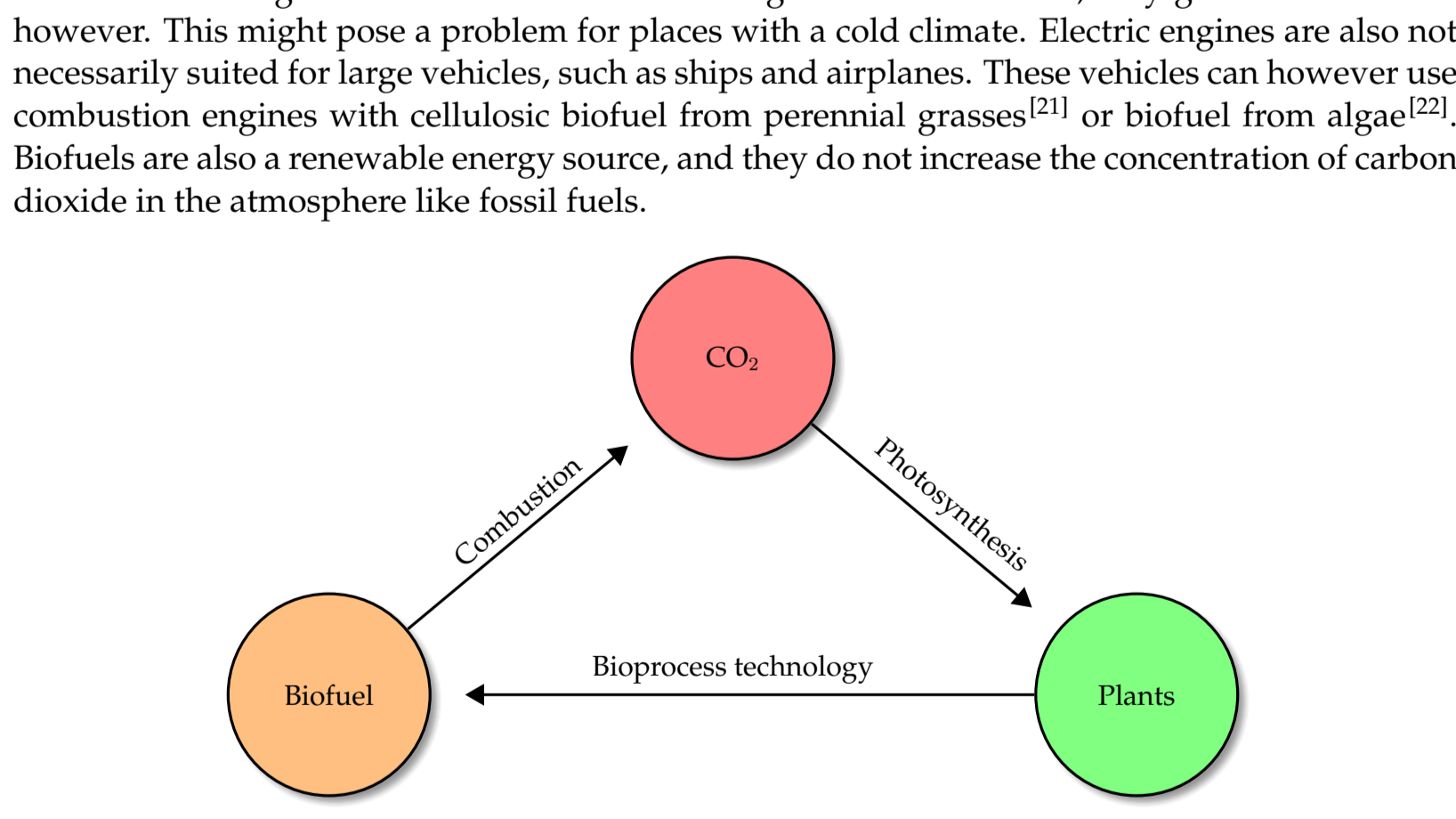


Figure 12: How we should convert from fossil fuels to renewable energies.

If all houses get solar roof panels, we need much less electricity from other sources, such as coal power plants. With electric cars we can charge our cars directly from our houses, and then the impact of oil depletion is not going to be nearly as devastating as if we continue to use gasoline cars.

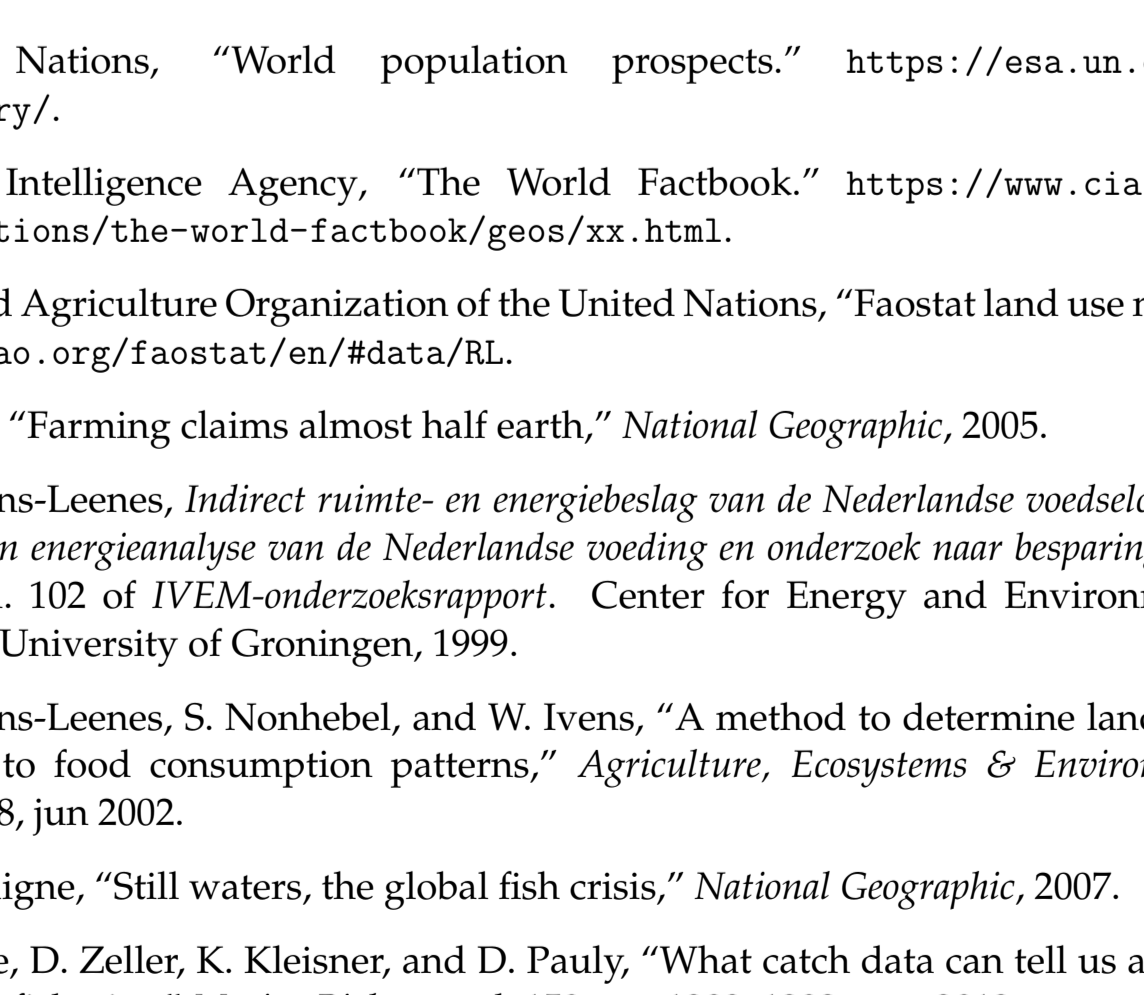


Figure 13: A house with solar panels on the roof.

Electric cars are also much more energy efficient than gasoline cars. Batteries in electric cars can for example be charged by regenerative brakes, so that every time the brakes are used the batteries are charged a little. Since the electric engines are so efficient, they generate little heat however. This might pose a problem for places with a cold climate. Electric vehicles are also not necessarily suited for large vehicles, such as ships and airplanes. These vehicles can however use combustion engines with cellulosic biofuel from perennial grasses^[21] or biofuel from algae^[22]. Biofuels are also a renewable energy source, and they do not increase the concentration of carbon dioxide in the atmosphere like fossil fuels.

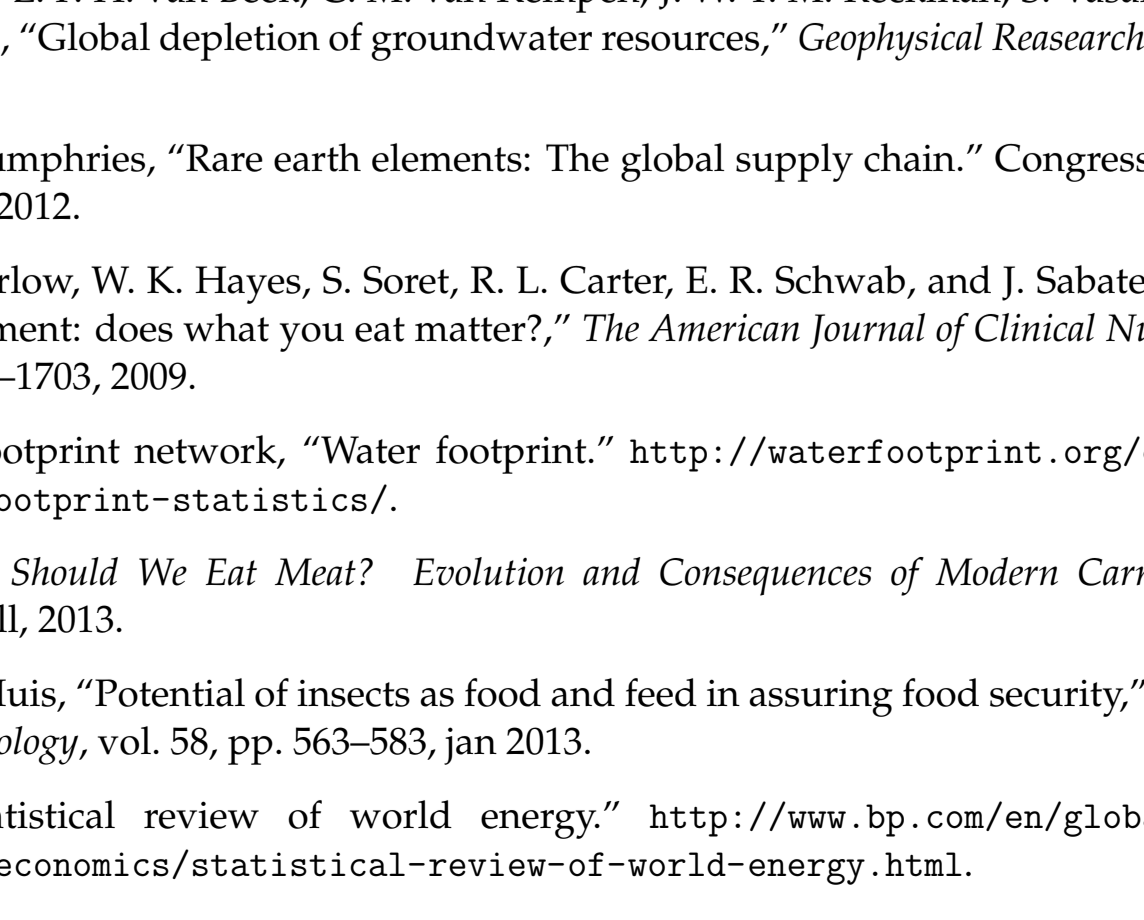


Figure 14: Illustrating why biofuels do not increase the amount of carbon dioxide in the atmosphere.

Increasing the efficiency of solar panels, batteries, and the production of biofuels should be our main objective. This should be done by subsidizing these renewable industries with tax money from the oil industry.

Bibliography

- [1] United Nations, "World population prospects." <https://esa.un.org/unpd/wpp/DataQuery/>.
- [2] Central Intelligence Agency, "The World Factbook." <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>.
- [3] Food and Agriculture Organization of the United Nations, "Faostat land use module." <http://www.fao.org/faostat/en/#data/RL>.
- [4] J. Owen, "Farming claims almost half earth," *National Geographic*, 2005.
- [5] P. Gerbens-Leenes, *Indirect ruimte- en energiebeslag van de Nederlandse voedselconsumptie: Een ruimte- en energieanalyse van de Nederlandse voeding en onderzoek naar besparingsmogelijkheden door*, vol. 102 of *IVEM-onderzoeksrapport*. Center for Energy and Environmental Studies (IVEM), University of Groningen, 1999.
- [6] P. Gerbens-Leenes, S. Nonhebel, and W. Ivens, "A method to determine land requirements relating to food consumption patterns," *Agriculture, Ecosystems & Environment*, vol. 90, pp. 47–58, jun 2002.
- [7] F. Montaigne, "Still waters, the global fish crisis," *National Geographic*, 2007.
- [8] R. Froese, D. Zeller, K. Kleisner, and D. Pauly, "What catch data can tell us about the status of global fisheries," *Marine Biology*, vol. 159, pp. 1283–1292, mar 2012.
- [9] A. L. Andraday, "Microplastics in the marine environment," *Marine Pollution Bulletin*, vol. 62, pp. 1596–1605, aug 2011.
- [10] L. Nizzetto, M. Futter, and S. Langaas, "Are agricultural soils dumps for microplastics of urban origin?," *Environmental Science & Technology*, vol. 50, pp. 10777–10779, oct 2016.
- [11] A. A. Horton, A. Walton, D. J. Spurgeon, E. Lahive, and C. Svendsen, "Microplastics in freshwater and terrestrial environments: Evaluating the current understanding to identify the knowledge gaps and future research priorities," *Science of The Total Environment*, vol. 586, pp. 127–141, may 2017.
- [12] The Global Footprint Network, "World footprint." http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/.
- [13] Global Phosphorus Research Initiative, "Peak phosphorus: the sequel to peak oil." <http://phosphorusfutures.net/peak-phosphorus/>.
- [14] Y. Wada, L. P. H. van Beek, C. M. van Kempen, J. W. T. M. Reckman, S. Vasak, and M. F. P. Bierkens, "Global depletion of groundwater resources," *Geophysical Research Letters*, vol. 37, 2010.
- [15] Marc Humphries, "Rare earth elements: The global supply chain." Congressional Research Service, 2012.
- [16] H. J. Marlow, W. K. Hayes, S. Soret, R. L. Carter, E. R. Schwab, and J. Sabate, "Diet and the environment: does what you eat matter?," *The American Journal of Clinical Nutrition*, vol. 89, pp. 1699–1703, 2009.
- [17] Water footprint network, "Water footprint." <http://waterfootprint.org/en/resources/water-footprint-statistics/>.
- [18] V. Smil, *Should We Eat Meat? Evolution and Consequences of Modern Carnivory*. Wiley-Blackwell, 2013.
- [19] A. van Huis, "Potential of insects as food and feed in assuring food security," *Annual Review of Entomology*, vol. 58, pp. 563–583, jan 2013.
- [20] BP, "Statistical review of world energy." <http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>.
- [21] D. Lobell, "Perennial biofuel grasses could reduce local temperatures: study." <http://www.biofuelsdigest.com/bdigest/2011/03/18/perennial-biofuel-grasses-could-reduce-local-temperatures-study/>, 2011.
- [22] S. A. Scott, M. P. Davey, J. S. Dennis, I. Horst, C. J. Howe, D. J. Lea-Smith, and A. G. Smith, "Biodiesel from algae: challenges and prospects," *Current Opinion in Biotechnology*, vol. 21, pp. 277–286, 2010.

EQUAL OPPORTUNITIES FOR ALL PEOPLE FROM BIRTH

Published at: <http://www.archania.org>

August 18, 2017

According to The Global Wealth Report 2016 by Credit Suisse Research Institute^[1], the 0.7% richest of the world population owns 45.6% of the world's wealth, while the 73.2% poorest of the world population own only about 2.4% of the world's wealth (Figure 1).

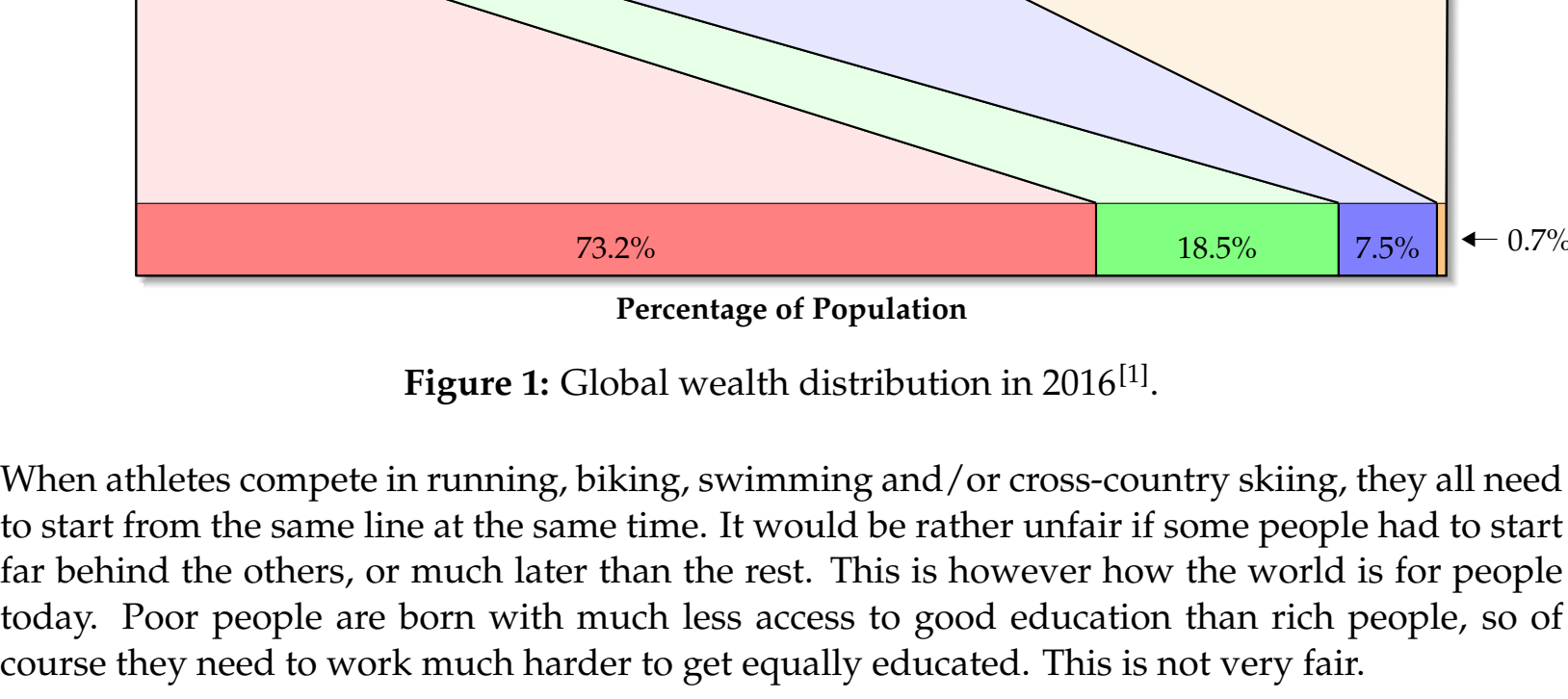


Figure 1: Global wealth distribution in 2016^[1].

When athletes compete in running, biking, swimming and/or cross-country skiing, they all need to start from the same line at the same time. It would be rather unfair if some people had to start far behind the others, or much later than the rest. This is however how the world is for people today. Poor people are born with much less access to good education than rich people, so of course they need to work much harder to get equally educated. This is not very fair.

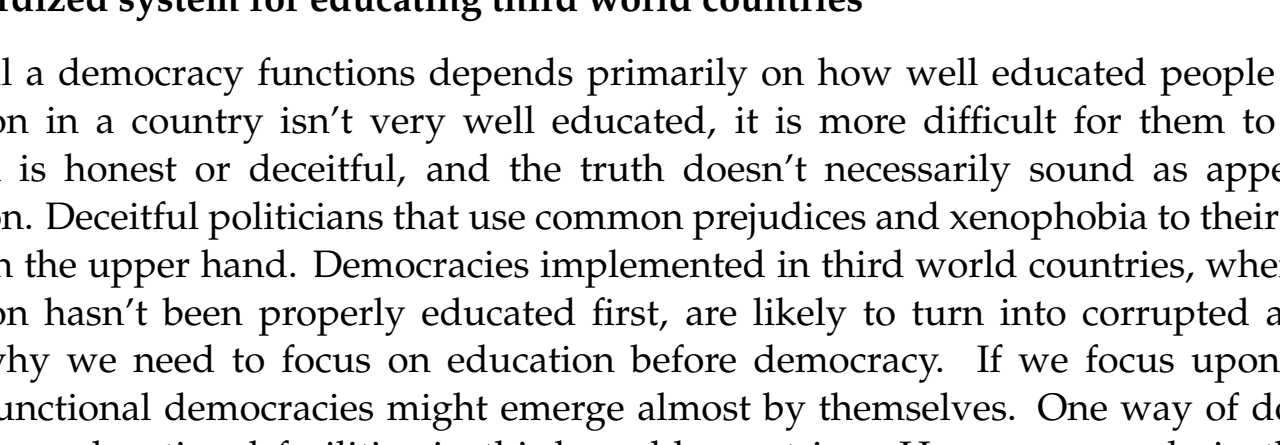


Figure 2: In a fair world we would all have access to equally good education from birth.

A standardized system for educating third world countries

How well a democracy functions depends primarily on how well educated people are. If the population in a country isn't very well educated, it is more difficult for them to know if a politician is honest or deceitful, and the truth doesn't necessarily sound as appealing as a fabrication. Deceitful politicians that use common prejudices and xenophobia to their advantage often gain the upper hand. Democracies implemented in third world countries, where the local population hasn't been properly educated first, are likely to turn into corrupted autocracies. This is why we need to focus on education before democracy. If we focus upon educating people, functional democracies might emerge almost by themselves. One way of doing this is by building educational facilities in third world countries. However, people in third world countries are often skeptical to the idea of getting educated by foreigners. To increase the local popularity of the educational facilities, they should also offer free food and medical aid. Much of the food can be grown at the facility, which will also serve to teach the local population about more efficient ways of farming. Many third world countries are unfortunately dangerous, so there should be armed guard towers to protect the people working in the educational facilities.

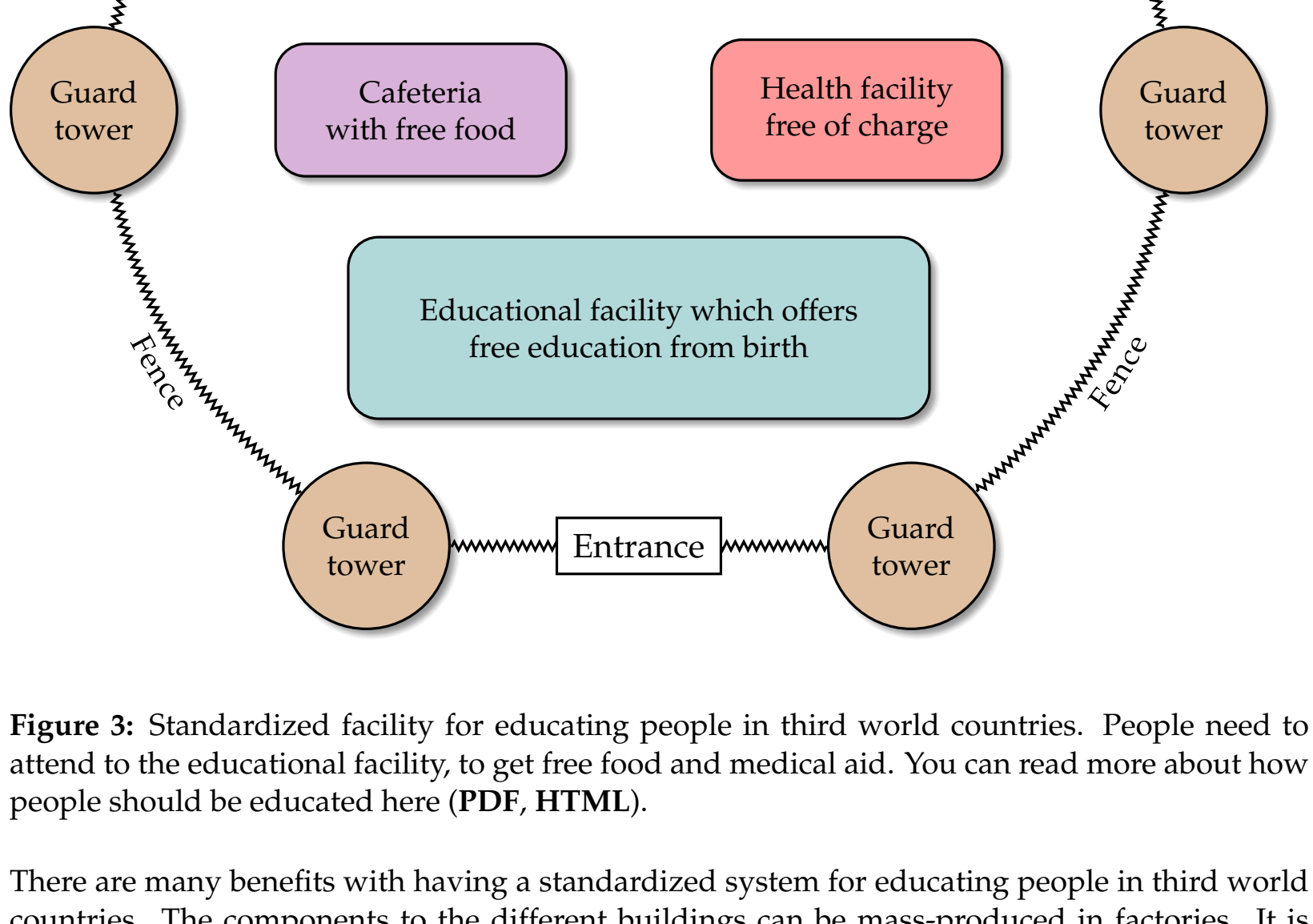


Figure 3: Standardized facility for educating people in third world countries. People need to attend to the educational facility, to get free food and medical aid. You can read more about how people should be educated here (PDF, HTML).

There are many benefits with having a standardized system for educating people in third world countries. The components to the different buildings can be mass-produced in factories. It is also much easier to oversee that the educational facilities work like they should, and that they aren't getting corrupted when they are standardized. Study programs can be made available in universities, which give graduated students the opportunity to work in any of these standardized educational facilities all around the world. Employees can then also easily change to work in different facilities in different countries if they desire to broaden their experiences.

Funding a global welfare system with progressive taxes

Building and maintaining these standardized educational facilities in third world countries is going to be expensive. A global welfare system can however be funded by a highly progressive tax system (Figure 4), so that people pay a higher percentage in taxes the more they earn, while the poorest individuals are completely exempt from taxes.

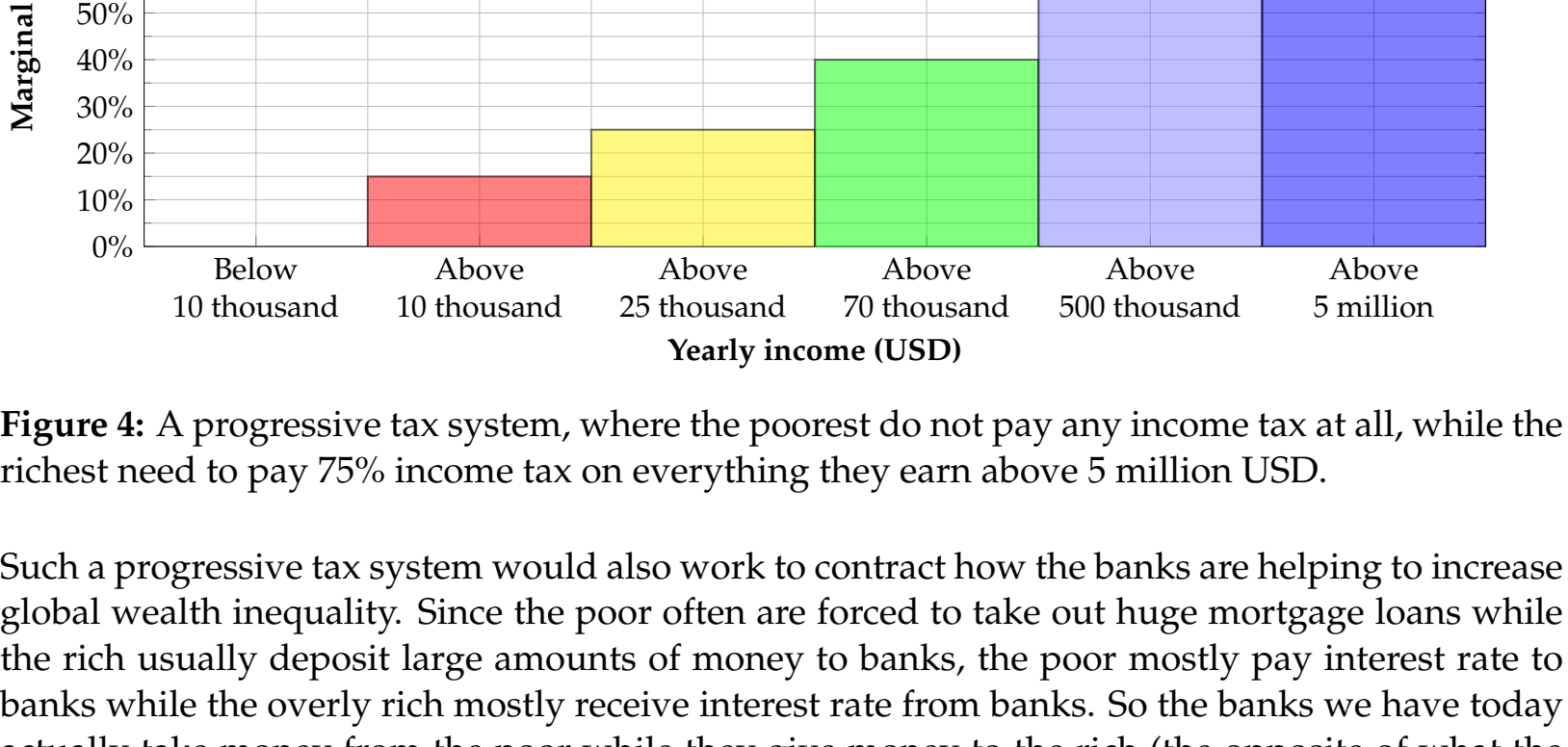


Figure 4: A progressive tax system, where the poorest do not pay any income tax at all, while the richest need to pay 75% income tax on everything they earn above 5 million USD.

Such a progressive tax system would also work to contract how the banks are helping to increase global wealth inequality. Since the poor often are forced to take out huge mortgage loans while the rich usually deposit large amounts of money to banks, the poor mostly pay interest rate to banks while the overly rich mostly receive interest rate from banks. So the banks we have today actually take money from the poor while they give money to the rich (the opposite of what the English folklore hero Robin Hood did^[2]), and this does not just apply to individuals but to whole nations as well (Figure 5).

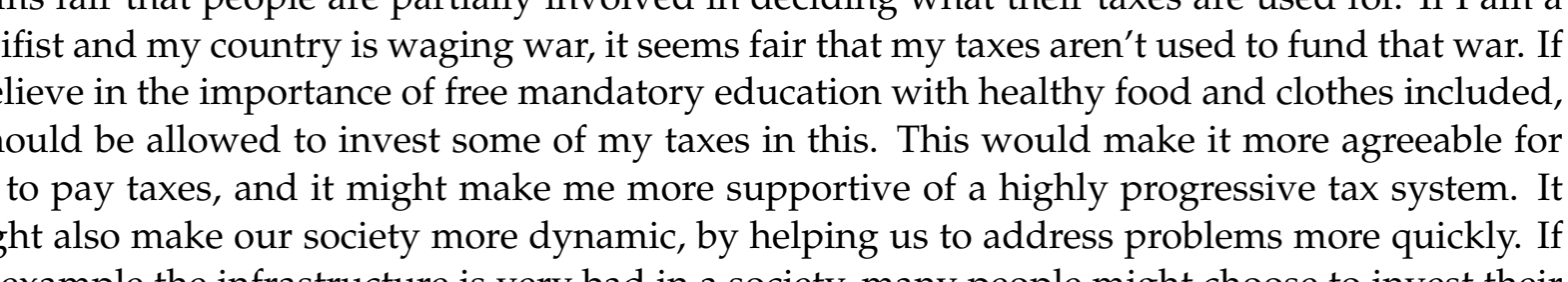


Figure 5: How the poor mostly pay interest rate to banks, while the rich mostly receive interest rate from the banks.

It seems fair to decrease global wealth inequality with a progressive tax system. However, it also seems fair that people are partially involved in deciding what their taxes are used for. If I am a pacifist and my country is waging war, it seems fair that my taxes aren't used to fund that war. If I believe in the importance of free mandatory education with healthy food and clothes included, I should be allowed to invest some of my taxes in this. This would make it more agreeable for me to pay taxes, and it might make me more supportive of a highly progressive tax system. It might also make our society more stable, by helping us to address problems more quickly. If for example the infrastructure is very bad in a society, many people might choose to invest their taxes in infrastructure, and as a consequence it might rapidly improve.

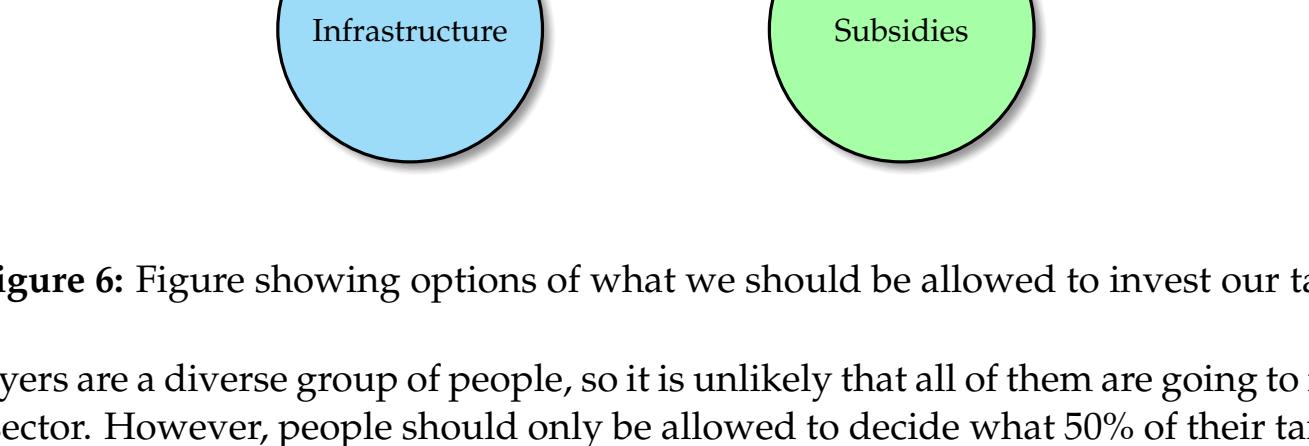


Figure 6: Figure showing options of what we should be allowed to invest our taxes in.

Tax payers are a diverse group of people, so it is unlikely that all of them are going to invest in the same sector. However, people should only be allowed to decide what 50% of their taxes are used for, in case some sectors get little funding from the tax payers. These sectors might nevertheless need money, and if the government gets the remaining 50% of the money paid in taxes they should have more than enough to ensure that all sectors get sufficient funding.

Ending international competition for the lowest corporate taxes

In the current multinational world, countries are competing to have the lowest corporate taxes and the lowest taxes for the rich, since it tends to attract businesses^[3,4]. But wealth inequality also increases with less corporate/progressive taxes. So countries have the choice between more wealth inequality or less businesses. Since countries are completely dependent upon businesses for less unemployment and economic growth, the choice tends to be in favor of the right-wing argument. This is one of the main reasons why global wealth inequality continues to increase.

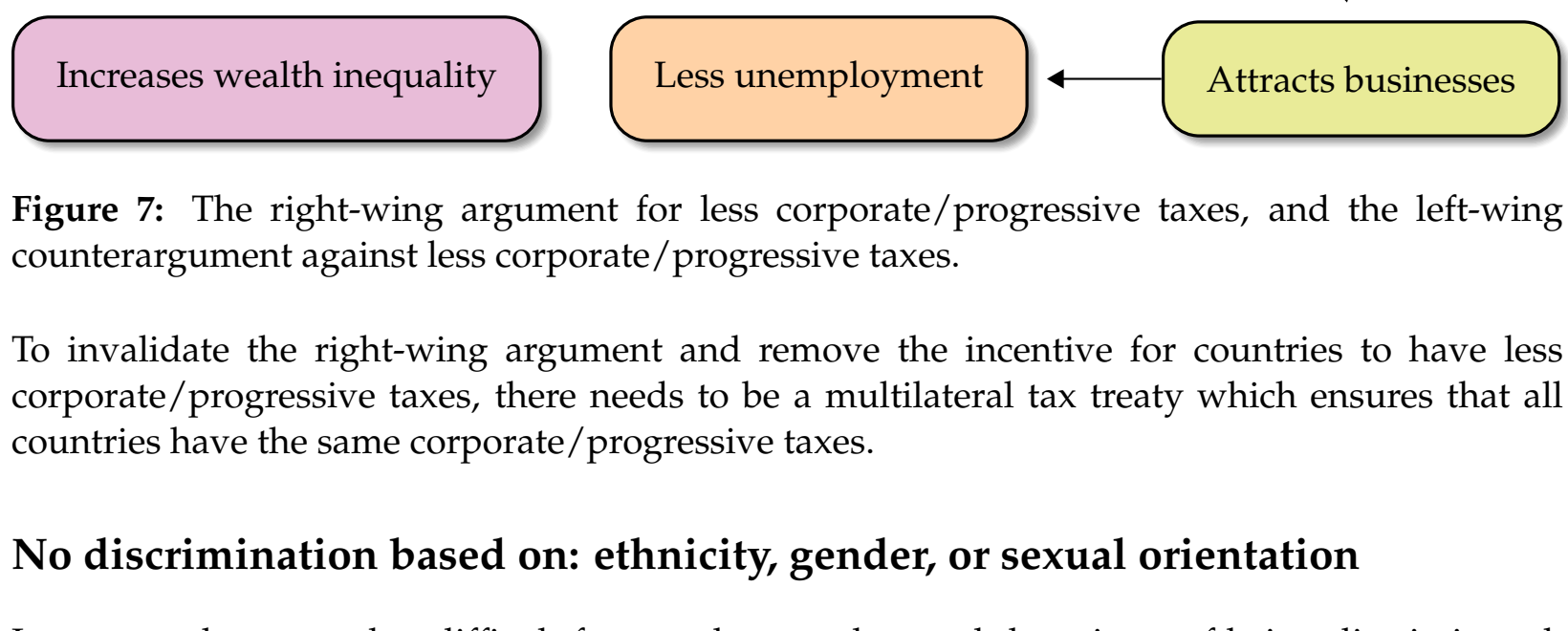


Figure 7: The right-wing argument for less corporate/progressive taxes, and the left-wing counterargument against less corporate/progressive taxes.

To invalidate the right-wing argument and remove the incentive for countries to have less corporate/progressive taxes, there needs to be a multilateral tax treaty which ensures that all countries have the same corporate/progressive taxes.

No discrimination based on: ethnicity, gender, or sexual orientation

It seems to be somewhat difficult for people to understand the misery of being discriminated, unless they have experienced it themselves. However, discrimination tends to be detrimental for everyone in a society. Discriminated ethnicities will for example often rebel against and terrorize their suppressors. In the worst cases, discrimination has led to ethnic cleansing and genocide. There is a long history of the discrimination against black people in the United States and Latin America. As of 2016, homosexual intercourse has death penalty in Yemen, Saudi-Arabia, Mauritania, Sudan, Iran, Pakistan, and Afghanistan^[5]. While most of these countries also have much less rights for women. One of the biggest achievements of modern western democracies, is equal rights for people of different ethnicity, gender, and sexual orientation (Figure 8). We believe these civil rights must be implemented globally.

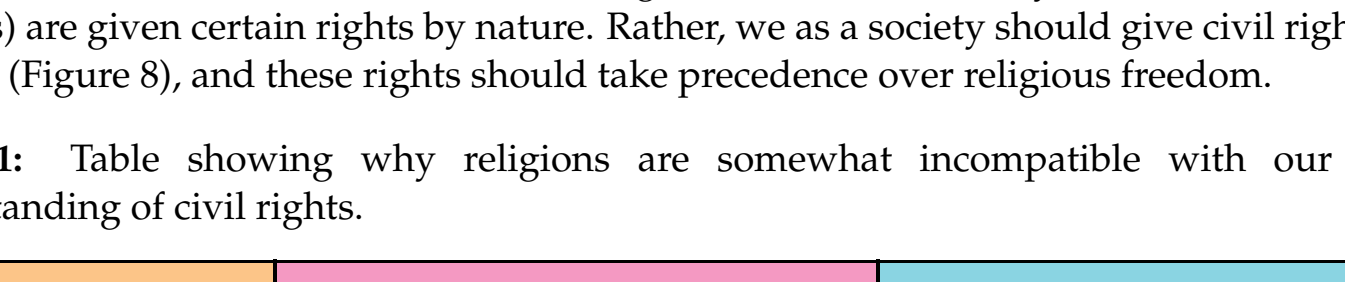


Figure 8: Our modern understanding of civil rights in western democracies.

Religions are somewhat incompatible with our modern understanding of civil rights

Article 18 of the human rights declaration says that everybody should be free to believe in whatever religion they want, but the religions themselves are somewhat incompatible with modern ideas of civil rights (Table 1). The idea that certain rights are natural or inalienable with modern religious undertones, since there is nothing in science which says that humans (or other animals) are given certain rights by nature. Rather, we as a society should give civil rights to our citizens (Figure 8), and these rights should take precedence over religious freedom.

Table 1: Table showing why religions are somewhat incompatible with our modern understanding of civil rights.

	Women's rights	Homosexuality
Judaism and Christianity	Although traditionally considered inferior to men, today most Jews and Christians believe in equal rights for men and women.	Homosexuality is often considered sinful among conservatives, but homosexuality is legal in Israel and most Christian countries.
Islam	Women are worth half as much as men according to the Quran, and most Islamic countries have less rights for women than for men.	Homosexuality is illegal in many Muslim countries, and some even have death penalty for homosexuality.
Hinduism	Varies due to the pluralistic nature of Hinduism. However, women in India face numerous problems, including victimization when raped and forced prostitution of young girls.	Varies due to the pluralistic nature of Hinduism. However, sexual activity between people of the same gender is forbidden in India, and is punishable by lifetime imprisonment.
Buddhism	Women are often considered to be spiritually inferior to men.	Early texts do not mention homosexuality. Buddhist countries tend to be the most liberal for homosexuals in Asia.
Modern civil rights	Equal rights for men and women.	Equal rights for homosexuals.

In addition to discrimination against women and homosexuals, the Hindu caste system discriminates people according to which caste they are born into. This is also completely unfair, since all people should have equal rights and opportunities from birth. Religious groups also often discriminate people adhering to other religions.

Children of mixed heritage have less recessive genetic disorders

Marriage of first cousins is common in many middle eastern countries today, and cultural prejudices against marrying foreigners is common in many countries all around the world. However, to children of mixed heritage are actually generally more healthy. If both of your parents are carriers of a recessive genetic disorder, you have a 1/4 (25%) likelihood of getting the recessive disorder (Figure 9).

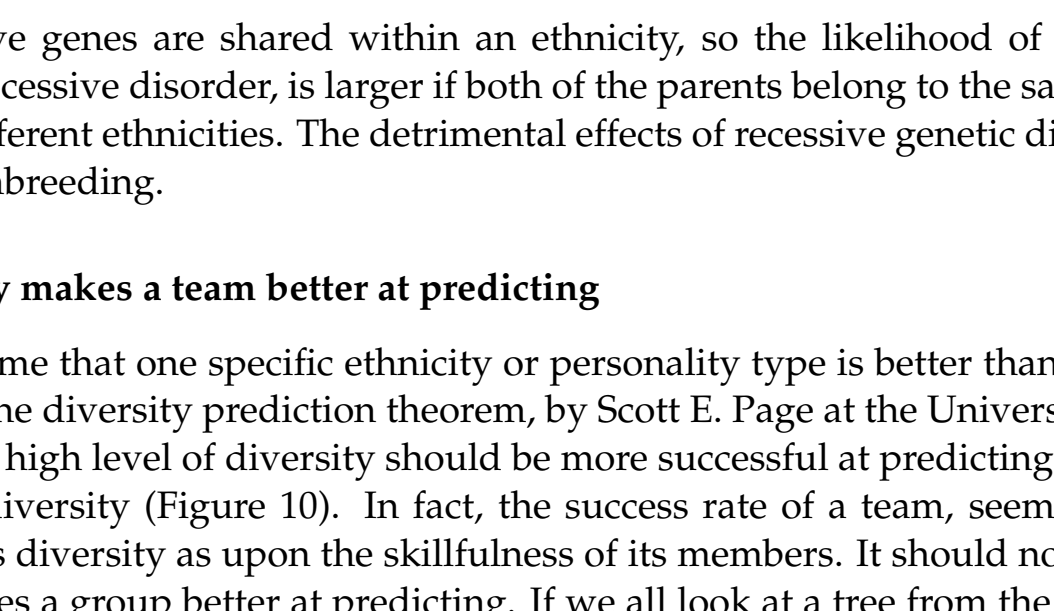


Figure 9: Showing that there is 1/4 (25%) chance that a child will get a recessive disorder from its parents, if both of the parents are carriers of a recessive disease.

Many recessive genes are shared within an ethnicity, so the likelihood of both parents being carriers of a recessive disorder, is larger if both of the parents belong to the same ethnicity than if they are of different ethnicities. The detrimental effects of recessive genetic disorders can be seen clearly with inbreeding.

How diversity makes a team better at predicting

We often assume that one specific ethnicity or personality type is better than the rest. However, according to the diversity prediction theorem, by Scott E. Page at the University of Michigan^[6,7], groups with a high level of diversity should be more successful at predicting than groups with a low level of diversity (Figure 10). In fact, the success rate of a team, seems to depend just as much upon its diversity as upon the skillfulness of its members. It should not be surprising that diversity makes a group better at predicting. If we all look at a tree from the same angle, we see much less of the tree than if we look at it from different angles. In general, we should get more information from having more points of view. This can be formulated as a mathematical theorem, which describes how diversity influences a group's ability to predict.

$$(C - X)^2 = \frac{1}{n} \left[\sum_{i=1}^n (x_i - X)^2 \right] - \frac{1}{n} \left[\sum_{i=1}^n (x_i - C)^2 \right]$$

The team's square error = The mean square error - The diversity of the team

Figure 10: The diversity prediction theorem, formulated by Scott E. Page at the University of Michigan. A more detailed explanation of the theorem can be found here (PDF, HTML). The theorem has huge implications for how one might choose to put together a team.

Bibliography

[1] Credit Suisse Research Institute, "The global wealth report 2016." <https://www.credit-suisse.com/us/en/about-us/research/research-institute/news-and-vidoes/articles/news-and-expertise/2016/11/en/the-global-wealth-report-2016.html>.

[2] H. Pyle, *The Adventures of Robin Hood*. Sterling, 2005.

[3] R. B. Davies and K. C. Vadlamannati, "A race to the bottom in labor standards? an empirical investigation," *Journal of Development Economics*, vol. 103, pp. 1-14, 2013.

[4] OECD, "Harmful tax competition - an emerging global issue." <https://www.oecd.org/tax/transparency/44430243.pdf>, 1998.

[5] Aengus Carroll, "State sponsored homophobia report." http://ilga.org/downloads/02_ILGA_State_Sponsored_Homophobia_2016_ENG_WEB_150516.pdf.

[6] S. E. Page, "Where diversity comes from and why it matters?," *European Journal of Social Psychology*, vol. 44, p. 267-279, 2014.

[7] R. Batchelor and P. Dua, "Forecaster diversity and the benefits of combining forecasts," *Management Science*, vol. 41, pp. 68-75, 1995.

INCENTIVES FOR A HEALTHY POPULATION

Published at: <http://www.archania.org>

September 20, 2017

The nourishment we give to our children is important for how their bodies develop, while the entertainment we expose our children to is important for how their minds develop. Healthy nourishment is important for children to develop healthy bodies, while educational entertainment is helpful for children to develop clever minds. There is however unhealthy food in most supermarkets, and there is lots of noneducational entertainment on the Internet. Just like unhealthy food often tastes better, noneducational entertainment is also often more fun. This is because it requires more effort to make food both tasty and healthy, rather than to just make it tasty. In a similar fashion, it requires more effort to make entertainment both fun and educational, rather than to just make it fun. If children can choose themselves, they are likely to choose food that tastes good and entertainment that is fun, without taking into consideration how healthy or educational it is. And as long as there is lots of tasty unhealthy food and fun noneducational entertainment available, children are more likely to choose that.

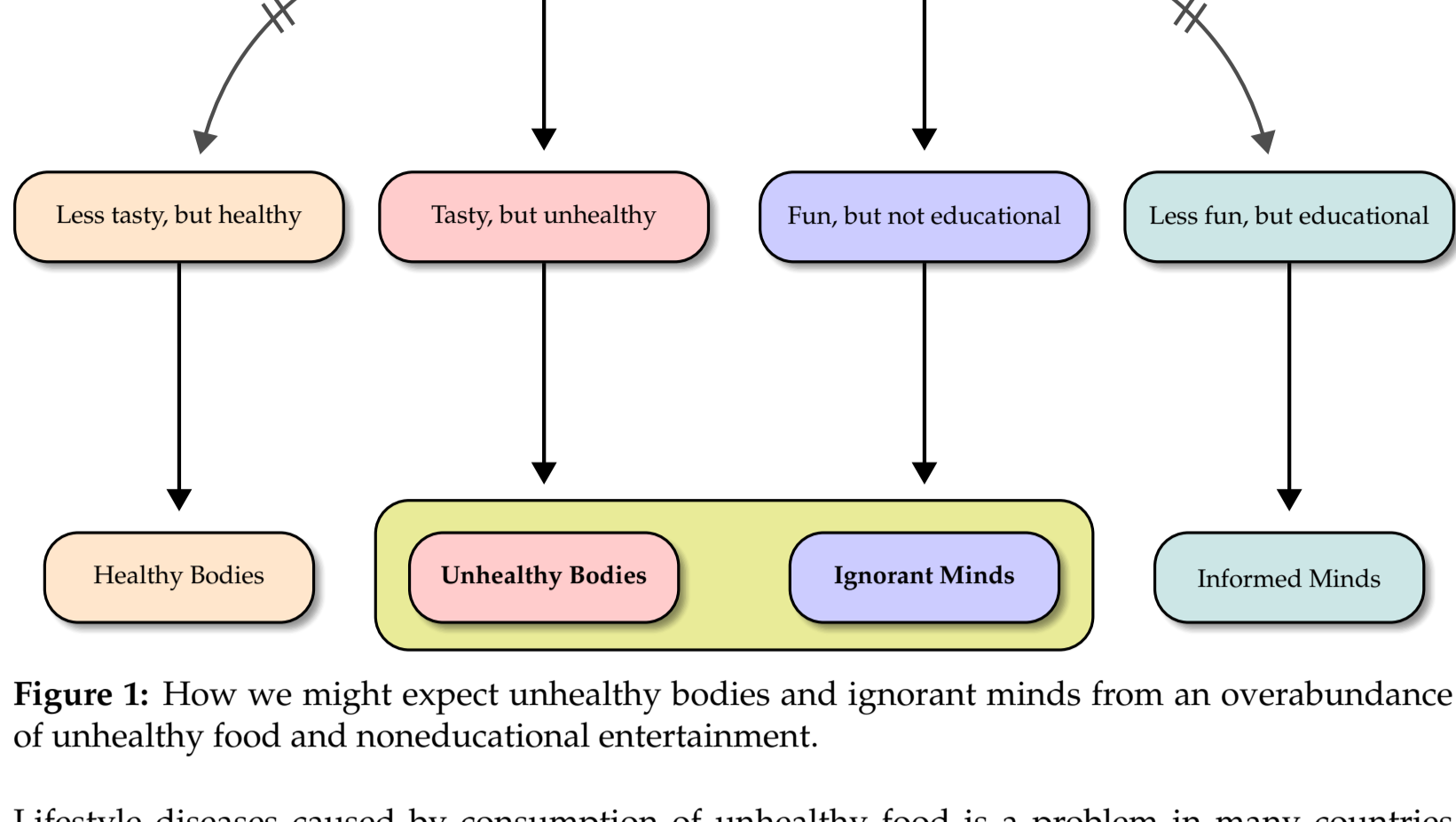


Figure 1: How we might expect unhealthy bodies and ignorant minds from an overabundance of unhealthy food and noneducational entertainment.

Lifestyle diseases caused by consumption of unhealthy food is a problem in many countries today. As people usually prefer to buy cheap groceries rather than more expensive groceries, unhealthy food should be taxed heavily while more healthy food should be subsidized. This policy will make people prefer to buy the healthy food rather than the unhealthy food, and improve the diet in our society while decreasing the number of lifestyle diseases. As lifestyle diseases also are expensive to our society, this policy will also make our society save substantial amounts of money. Any product that is hazardous to health should be taxed at least so much that it covers the expenses of the diseases caused by the product. The glycemic index is a measure of how fast different types of food increase blood sugar level (Figure 2). Foods that have a high glycemic index increase blood sugar level rapidly, while foods that have a low glycemic index increase blood sugar level slowly. A high intake foods that rapidly increase blood sugar has been linked to obesity, coronary heart disease, age-related macular degeneration, and diabetes type 2. The number of these lifestyle diseases can be reduced by having taxes on foods with a high glycemic index, while subsidizing foods with a low glycemic index.



Figure 2: Glycemic index for common foods. Foods with a high glycemic index should be taxed, while foods with a low glycemic index should be subsidized.

Consumable fat is usually divided into saturated, unsaturated and trans fat. Trans fats are rare in nature, but became common for human consumption after the 1950's, when we started to produce margarine by hydrogenating unsaturated fat. Trans fat has been found to be hazardous to human health in numerous of ways^[1], but has been primarily linked to coronary heart disease. Since we have strong indications that trans fats are hazardous to human health, trans fats should be taxed heavily. Saturated fats are found mostly in meat, while unsaturated fats are found mostly in vegetables. Saturated fats have traditionally been regarded as hazardous to human health, while unsaturated fats have been regarded as beneficial to human health. Today this is a highly controversial topic. Vegetables are however beneficial to human health for other reasons, as they contain a high concentration of fibres, vitamins, minerals and antioxidants^[2]. We can also get about 10 times more calories per acre from plants than from farm animals^[3], as a lot of energy is lost in the metabolism of farm animals. This means that we can feed about 10 times more vegetarians than carnivores from the same amount of land. These are good reasons to subsidize vegetables.

Ending the war on recreational drugs

According to the microeconomic model of supply and demand^[4], the price of a product goes up if the product becomes less available while the demand for the product stays the same. So the irony of drug prohibition is that the more money we spend on enforcing laws to decrease the availability of drugs, the more money criminals can earn on selling drugs as long as the demand for drugs stays the same^[5]. The American war on drugs has cost trillions of US dollars since it was implemented, while the amount of drug abuse has increased^[6]. The war on drugs has also contributed to a 500% increase in the number of people incarcerated^[7]. A report from 2011 by The Global Commission on Drug Policy^[8] regarded the war on drugs as a complete failure, and recommended to end criminalization of drug usage.

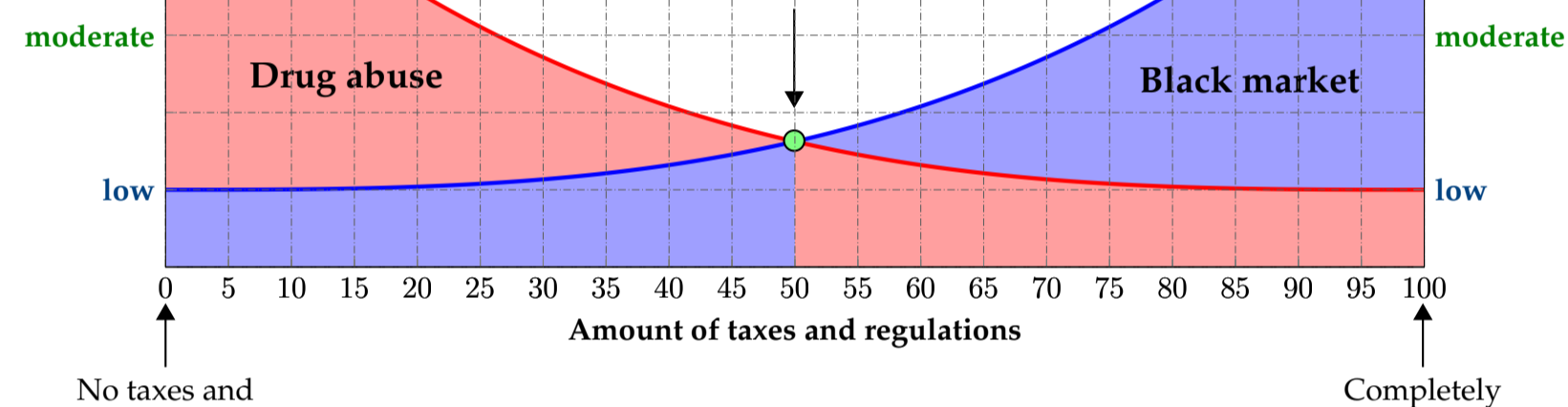


Figure 3: Showing the predicted optimal level of taxes and regulations, as drug abuse is believed to increase with less taxes and regulations, while the black market is believed to increase with more taxes and regulations.

In a society where recreational drugs are legal there should be an optimal level of taxes and regulations on the drugs (Figure 3). Black market activity can be just as detrimental to our society as drug abuse, and if there are too much taxes and regulations there will be an incentive to sell drugs on the black market. It is however somewhat risky to sell drugs on the black market, so if there are not too much taxes and regulations the sale of drugs can be kept mainly within the legal system. If drugs are legal we can also require that they are manufactured according to the same standards as today's pharmaceutical drugs, and we can require that they are sold with labels informing consumers about what they contain and about potential dangers. Drugs in the black market often contain harmful impurities, and they do not have any labels informing consumers about what they contain and about potential dangers. Recreational drugs can be taxed and regulated according to how harmful they are from scientific point of view (Figure 4).

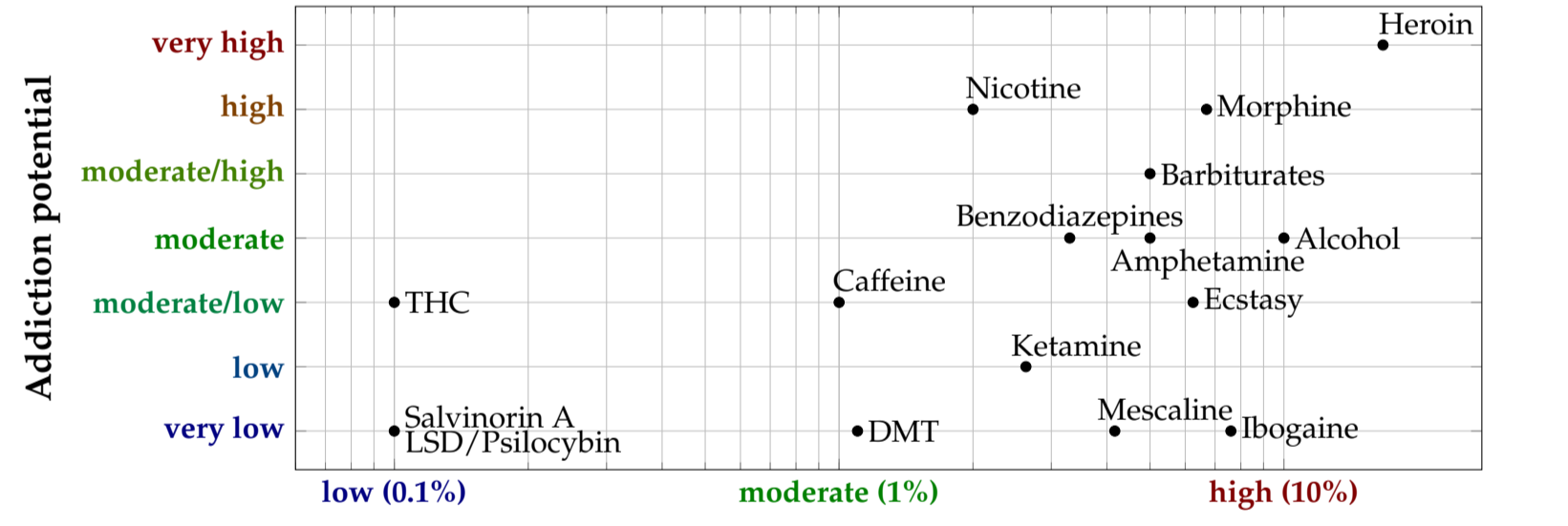


Figure 4: Diagram showing overdose potential (active dose/lethal dose) and addiction potential for different drugs.

In a report from 2006 by the UK Science and Technology Select Committee^[9], the legal drugs alcohol and tobacco were found to be more harmful than many illegal drugs; such as marijuana, LSD, ecstasy, and magic mushrooms. The drugs were categorized according to physical harm, dependence and social harms. Another even more detailed report from 2010 by the Independent Scientific Committee on Drugs^[10] draw similar conclusions. An article from 2006 about the toxicity of recreational drugs^[11] found the overdose potential of ethanol to be approximately a hundred times higher than the illegal drugs marijuana, LSD and magic mushrooms.

Drug addiction and κ -opioid agonists like Ibogaine

Some drugs even have anti-addictive properties. Tabernanthe iboga is a plant traditionally used by people belonging to the Bwiti faith in mid-west Africa^[12]. Addiction is believed to be controlled by a system of neurological pathways in the brain, called the reward-system^[13]. Ibogaine, which is the active alkaloid of the Tabernanthe iboga plant, has been shown to stimulate the κ -opioid receptor^[14]. Stimulation of the κ -opioid receptor has been shown to restore normal functioning of the reward-system in an addicted brain, and thereby curing addiction^[15]. Ibogaine does this so well that a single addition often is enough to completely eliminate the withdrawal effects from a heroin addiction.

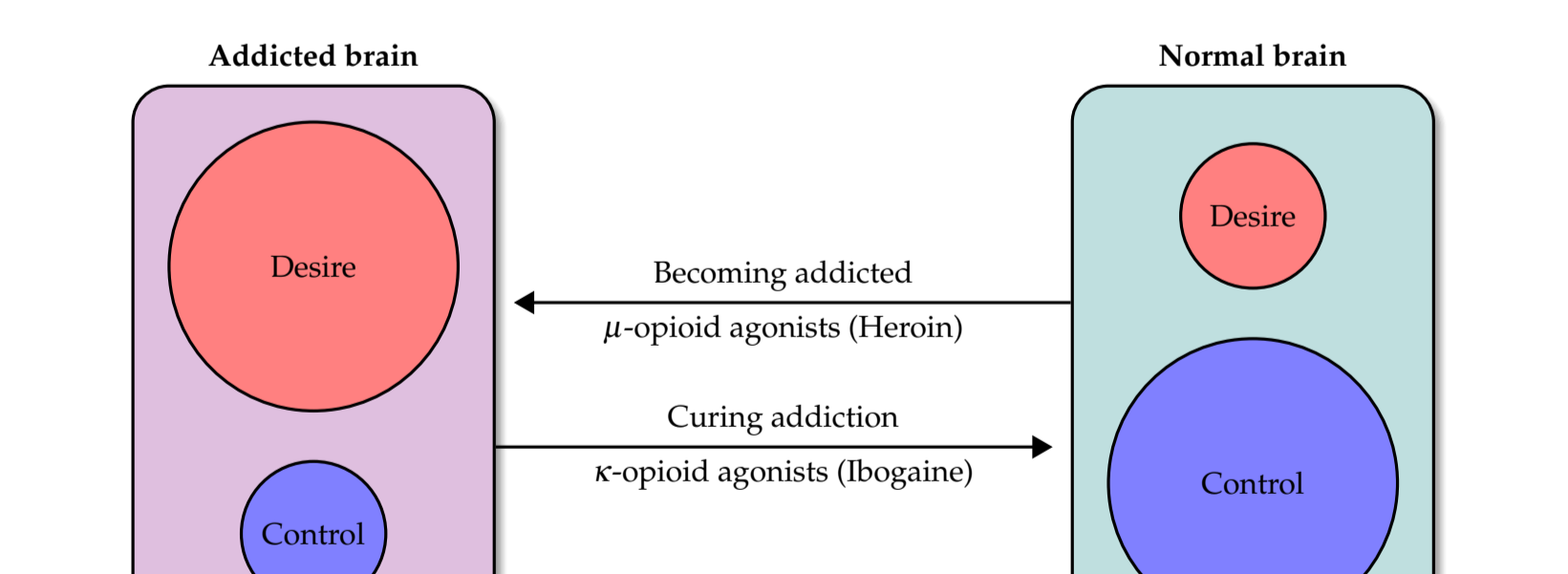


Figure 5: How κ -opioid agonists like Ibogaine are believed to restore normal functioning of the reward-system in an addicted brain, by decreasing the desire for drugs and increasing self-control mechanisms.

Drug addicts might however start using drugs again after they have been treated with Ibogaine, unless they get help to reintegrate into society. They have often been unemployed for many years, and often have a social network consisting only of other drug addicts. To completely cure them, they need to get work and establish a new social network consisting of healthy individuals. So drug addicts should go into a 1 year reintegration program, after they have been treated with Ibogaine (Figure 6).

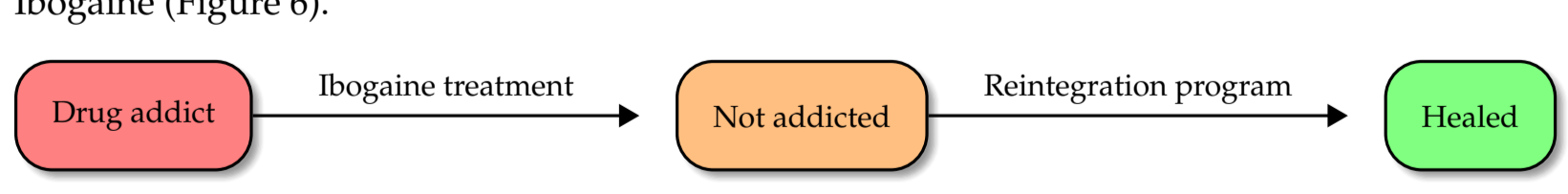


Figure 6: The process of curing drug addiction also requires reintegration into society.

Bibliography

- [1] T. F. Lüscher, et al., "Esc/eas guidelines for the management of dyslipidaemias," *European Heart Journal*, pp. 1769–1818, 2011.
- [2] M. Segasothy and P. Phillips, "Vegetarian diet: panacea for modern lifestyle diseases?," *QJ Med*, vol. 92, p. 531–544, 1999.
- [3] H. J. Marlow, W. K. Hayes, S. Soret, R. L. Carter, E. R. Schwab, and J. Sabate, "Diet and the environment: does what you eat matter?," *The American Journal of Clinical Nutrition*, vol. 89, pp. 1699–1703, 2009.
- [4] A. Smith, *The Wealth of Nations*. W. Strahan and T. Cadell, London, 1776.
- [5] M. Friedman, "Why drugs should be legalized." <https://www.youtube.com/watch?v=nLsCCOLZxkY>.
- [6] J. A. Miron and K. Waldo, "The budgetary impact of ending drug prohibition." <https://object.cato.org/sites/cato.org/files/pubs/pdf/DrugProhibitionWP.pdf>, 2010.
- [7] International Centre for Prison Studies, "World prison population list (tenth edition)." http://www.prisonstudies.org/sites/default/files/resources/downloads/wpp1_10.pdf, 2013.
- [8] Global Commission on Drug Policy, "War on drugs: Report of the global commission on drug policy." http://www.globalcommissionondrugs.org/wp-content/uploads/2012/03/GCDP_WaronDrugs_EN.pdf, 2011.
- [9] UK Science and Technology Select Committee, "Drug classification: making a hash of it?," <http://www.publications.parliament.uk/pa/cm200506/cmselect/cmsctech/1031/1031.pdf>, 2006.
- [10] D. J. e. a. Nutt, "Drug harms in the uk: a multicriteria decision analysis," *The Lancet*, vol. 376, pp. 1558–1565, 2010.
- [11] R. Gable, "The toxicity of recreational drugs." <http://www.americanscientist.org/issues/pub/the-toxicity-of-recreational-drugs/1>, 2006.
- [12] G. Samorini, "The bwiti religion and the psychoactive plant tabernanthe iboga (equatorial africa)," *Integration*, vol. 5, pp. 105–114, 1995.
- [13] X. Noel, D. Brevers, and A. Bechara, "A neurocognitive approach to understanding the neurobiology of addiction," *Current Opinion in Neurobiology*, vol. 23, pp. 632–638, 2013.
- [14] S. D. Glick and I. M. Maisonneuve, "Mechanisms of antiaddictive actions of ibogaine," *Annals of the New York Academy of Sciences*, vol. 844, no. 1, pp. 214–226, 1998.
- [15] K. Hasebe, K. Kawai, T. Suzuki, K. Kawamura, T. Tanaka, M. Narita, H. Nagase, and T. Suzuki, "Possible pharmacotherapy of the opioid κ -receptor agonist for drug dependence," *Annals of the New York Academy of Sciences*, vol. 1025, no. 1, pp. 404–413, 2004.

CRITERIA FOR A HEALTHY DEMOCRACY

Published at: <http://www.archania.org>

August 12, 2017

One of the most important criteria for a healthy democracy, is for the general population to have some level of trust in the government. Without any such a trust, the general population will tend to work against whatever the government is trying to achieve, and the society will frequently turn into a battleground between the government and the general population. However, in such societies there is usually a reason why the general population is distrustful of the government. A government that steals from and lies to the general population, will of course have problems earning any trust from the general population. A government that completely ignores demands from the general population will also have a hard time earning trust^[1]. In order to earn trust from the general population, the government needs to be respectful, honest and responsive to the demands of the general population.

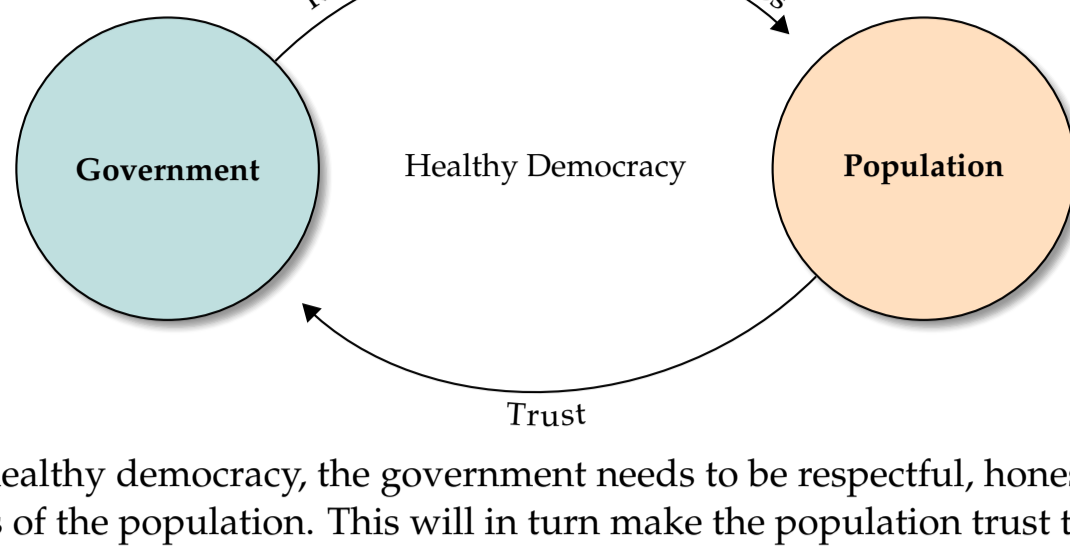


Figure 1: In a healthy democracy, the government needs to be respectful, honest and responsive to the demands of the population. This will in turn make the population trust the government.

Democracies are dysfunctional without freedom of the press

In nations where there is very little freedom of the press, people are easily brainwashed by the media, which does not write anything contradicting the government. So people are likely to re-elect a corrupt government, simply because they are unaware of all the corruption in the government. Freedom of the press is also important, to provide negative feedback to the government (Figure 2). Without negative feedback, our understanding tend to grow into conceptual bubbles that lose touch with reality, as portrayed in the Danish fairy tale about the Emperor's new clothes^[2]. This is probably one of the main reasons why western democracies have tended to become more developed than authoritarian regimes.

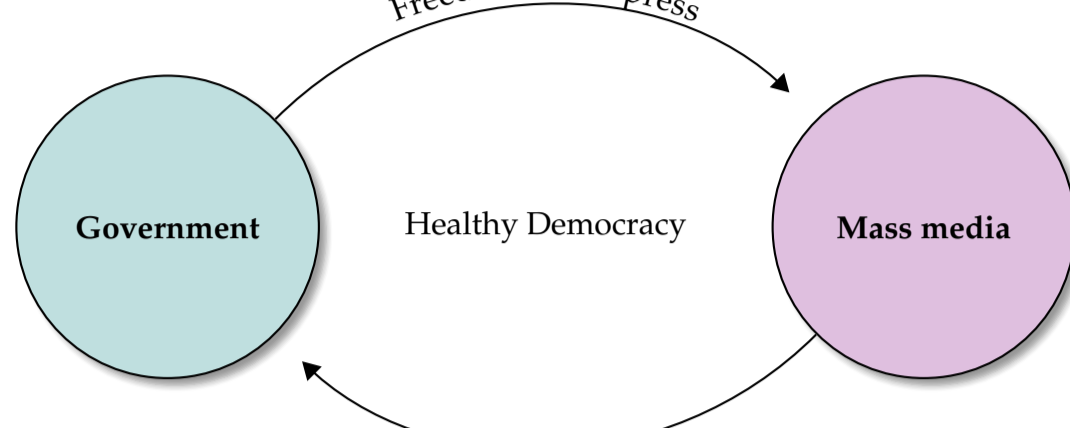


Figure 2: How mass media provides negative feedback to the government in a healthy democracy.

Without freedom of speech, people also tend to become more anxious, which reduces life-quality. In Eastern Germany during the cold war, the Stasi used mass surveillance to induce a chronic state of anxiety in the population. This seems completely counterproductive for a government that works to promote a healthy society.

Political advertisements are detrimental to the health of a democracy

Political advertisements are detrimental to a healthy democracy, since the audience isn't exposed to counterarguments, and since they tend to oversimplify political matters. Political advertisements also increases the influence of money in politics, since wealthy parties can afford much more advertisements than less wealthy parties. In order for the population to get better informed about what they should vote for, there needs to be high quality political debates, rather than political advertisements.

Investigative journalism should get subsidized

The more attention news media gets from people, the more money they earn on commercials. And since sensational news tends to attract most attention, many news sources seek out sensational news. On the other hand, investigative journalism is expensive to perform, but does not necessarily get as much attention as sensational news. So in order to get more investigative journalism, the government should subsidize it. It is however very important that news sources do not get subsidized just because they write favorably about the government, since negative feedback is one of the essential criteria for a healthy democracy (Figure 2). Rather, investigative journalism should be economically rewarded for revealing corruption in the government.

There is more room for corruption in more centralized societies

Global oversight might be important to establish certain ground rules about environmental protection and civil rights, or to prevent harmful tax competition and military buildup between countries. However, for many other societal issues, it seems appropriate to make decisions more locally. A national government might have more insight into domestic issues than a world government. It might also be able to react more rapidly and dynamically to national circumstances. A high degree of centralization also tends to make people feel alienated from society, and this can be detrimental to the health of a society. So many societal decisions should be taken locally (Figure 3) just to make people more involved in society and make them feel less alienated.

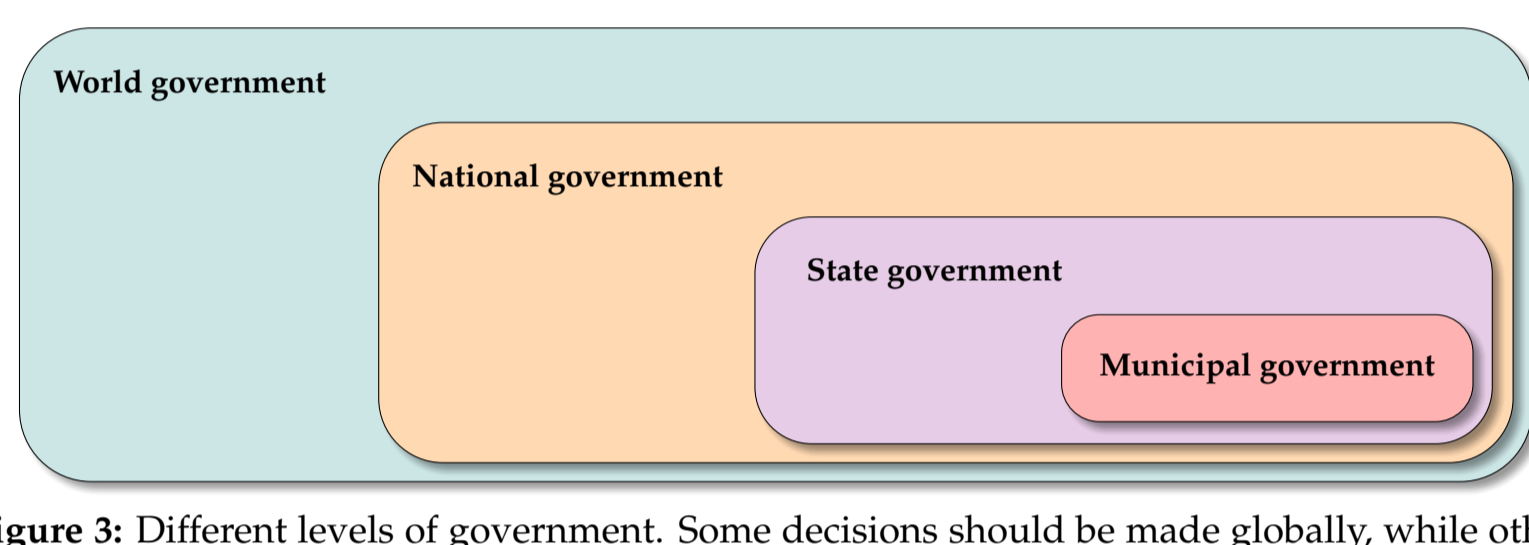


Figure 3: Different levels of government. Some decisions should be made globally, while others more locally.

Electing people that are going to represent us in other elections is generally not a good idea, since this creates room for corruption (Figure 4, Figure 5). One example would be a system where the population is involved in electing the leader of the world government, but is not involved in electing the leaders of lower governing bodies; such as the president of their national government, the governor of their state, and the mayor of their municipality. In such a system, people will also tend to be distrustful of the lower governing bodies, since they aren't involved in electing the leaders of the lower governing bodies.

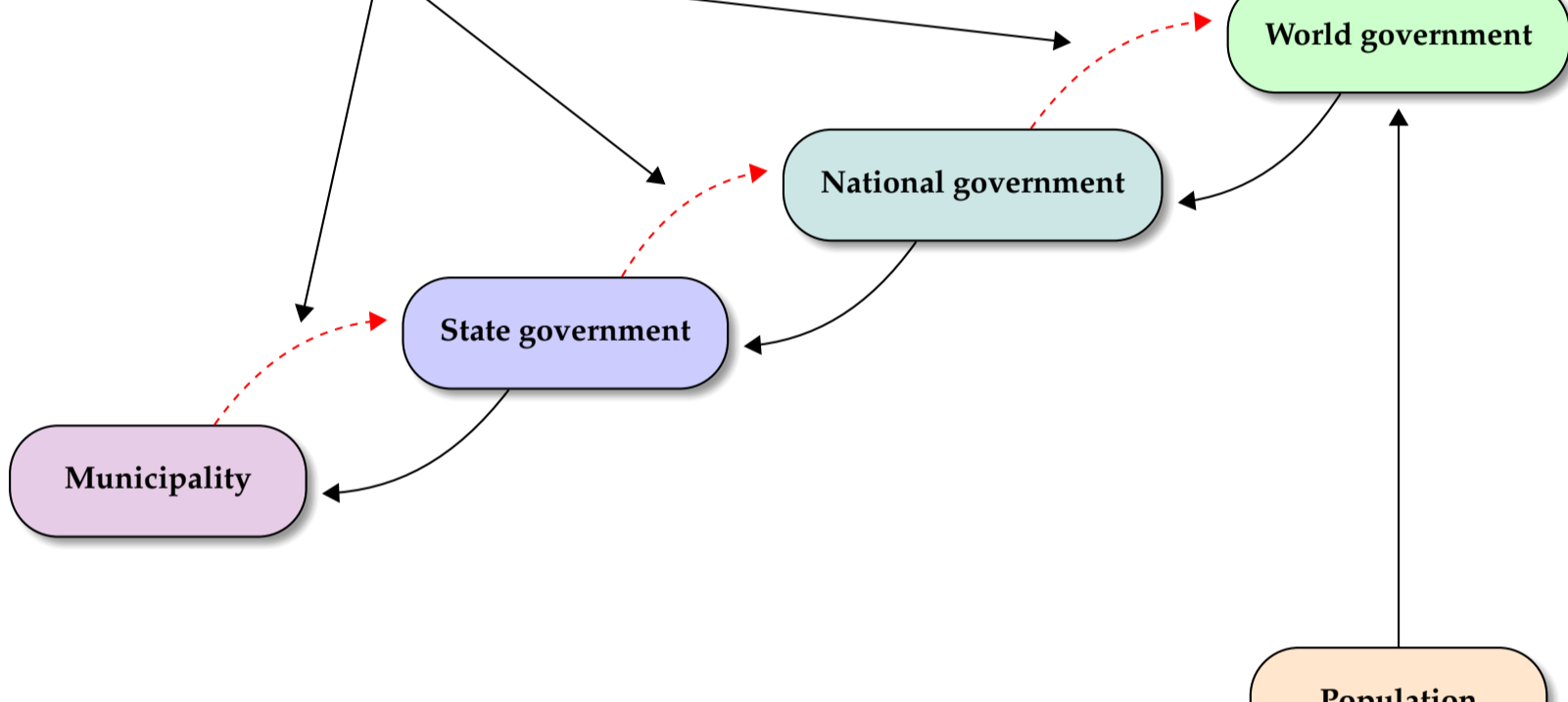


Figure 4: A scenario where the population votes to elect the leader of the world, but cannot vote directly to decide who is going to be the president of their country, the governor of their state, or the mayor in their municipality.

The same would be the case for a system where the population is involved in electing the mayor of their municipality, but not in the election of leaders for higher governing bodies; such as the governor of their state, the president of their national government, or the leader of the world government. Such a system will also create distrust between the population and higher governing bodies, since they aren't involved in the process of electing the leaders of the higher governing bodies.

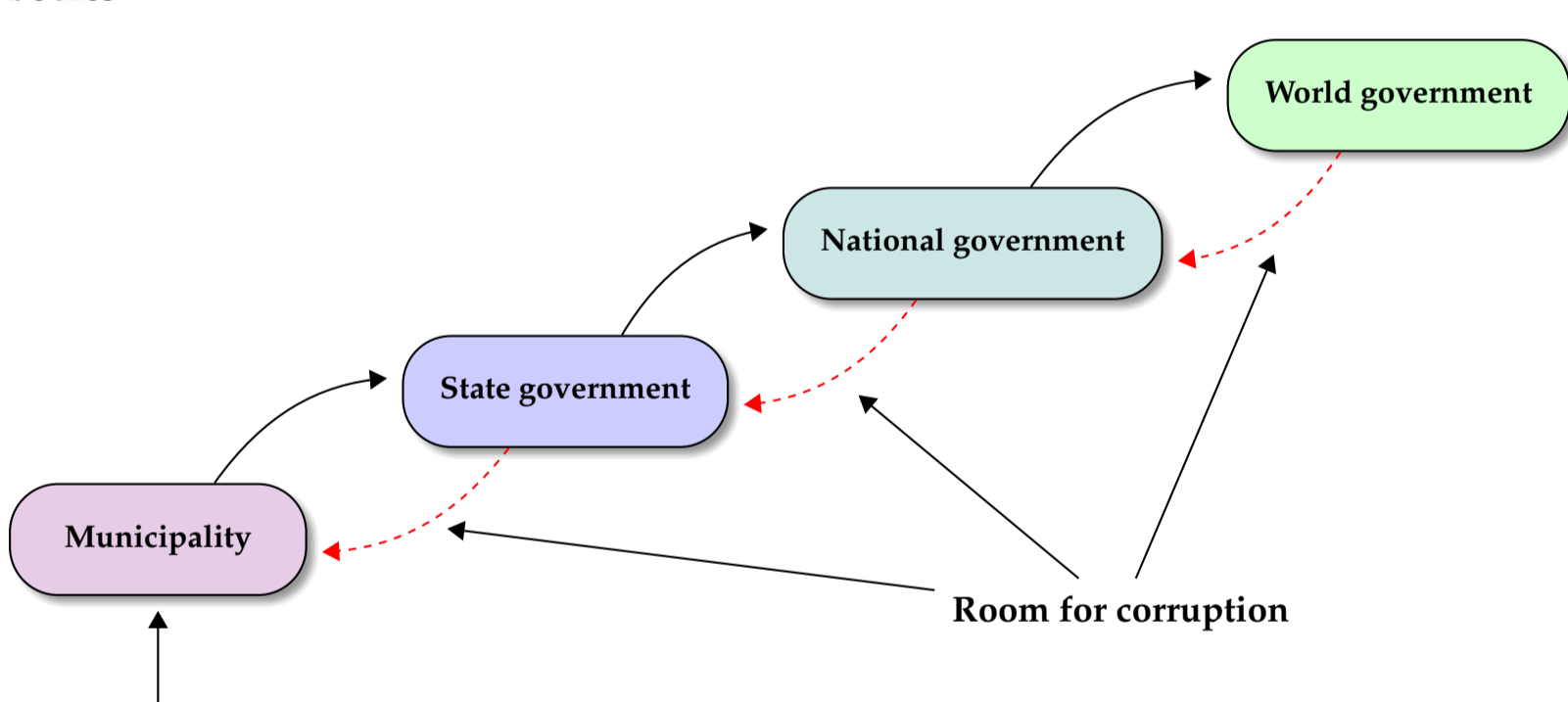


Figure 5: A scenario where the population votes to elect the mayor in their municipality, but cannot vote directly to decide who is going to be the governor of their state, the president of their country, or the leader of the world.

In order to minimize any room for corruption, the population should be involved in electing the leaders of all their governing bodies. This also creates more trust between the population and the governing bodies, since they are involved in the process of electing the leaders of all their governing bodies.

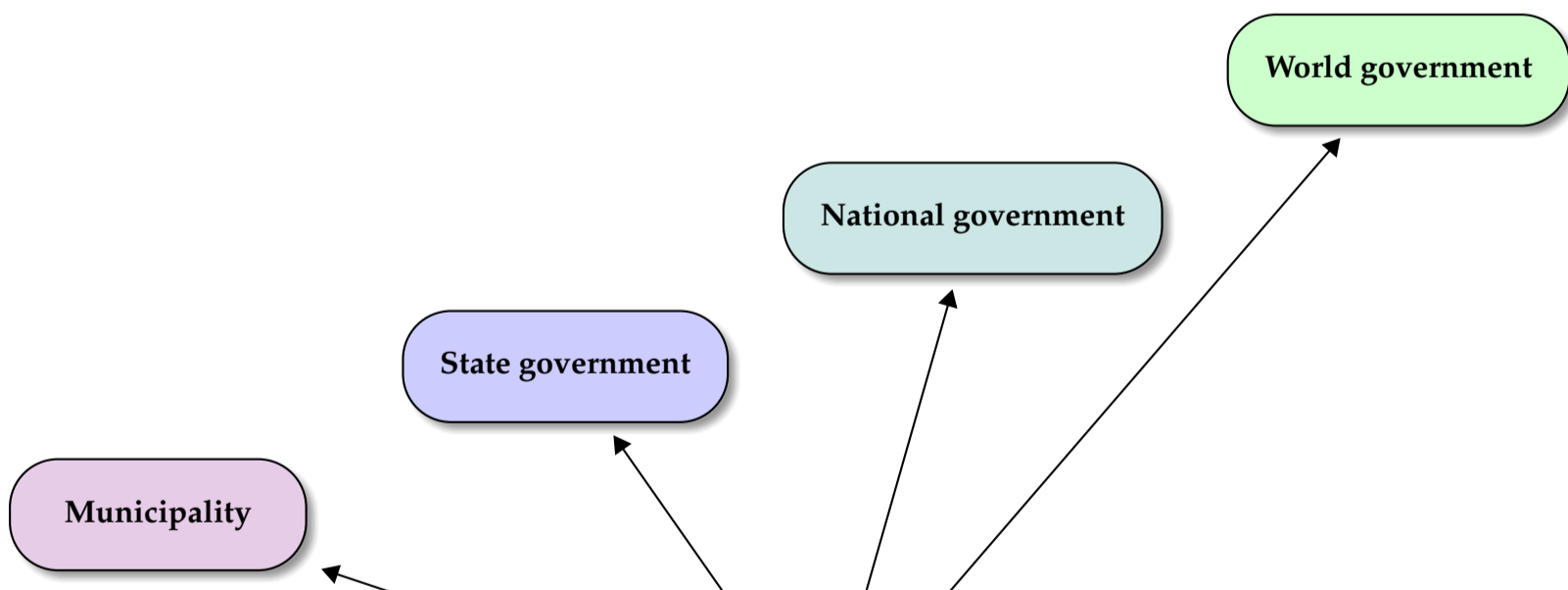


Figure 6: A scenario where the population votes to elect the leaders of all their governing bodies.

Popularity does not always correlate well with ability to rule

One of the weaknesses with western democracies, is that popularity does not always correlate well with ability to rule a society (Figure 7). The most popular individuals are elected to rulers, but not necessarily the people with most insight. Celebrities tend to be more popular than professors today, but usually also have much less insight. The favoring of celebrities have occurred several times in the United States, with people like Ronald Reagan and Donald Trump elected to president. Democracies are however well synchronized with the general population, and this prevents tension between the government and the general population. Direct democracies might therefore be ideal systems for societies where everybody has a high level of education and understanding. If however the general population does not have a sufficiently high level of understanding, they might vote for ill-founded short-term policies rather than for well-informed long-term policies.



Figure 7: How popularity and ability to rule a society might differ.

A meritocracy^[3] is a system where people with merit rule. The definition of merit might be somewhat ambiguous, but a basic mathematical, scientific and economic understanding and some historical and geographical knowledge are easily measurable qualities that we should require from our presidents and the people working in the government (Figure 8). If the president candidates and the people appointed to work in the government were required to take a few tests, we would be much better protected against ignorant and uninformed presidents and government officials, like Ronald Reagan, Sarah Palin, Rodrigo Duterte and Donald Trump. The election of an ignorant narcissistic demagogue can potentially destroy a democracy.

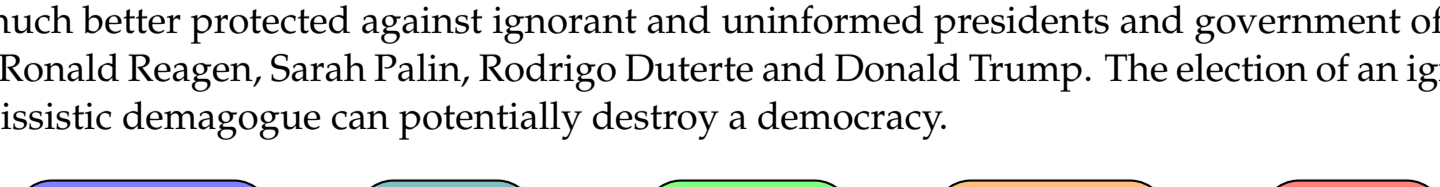


Figure 8: Topics that president candidates and government officials should have a basic understanding of.

Bibliography

- [1] M. S. Lewis-Beck, W. Tang, and N. F. Martini, "A chinese popularity function," *Political Research Quarterly*, vol. 67, pp. 16–25, apr 2013.
- [2] H. C. Andersen, *The Emperors New Clothes*. HMH Books for Young Readers, 2004.
- [3] S. G. McCloskey, *Meritocracy : A Revolution Of The Mind: A Beginner's Guide Book*. Celtic New Dawn Press, 2016.

CONCLUDING REMARKS

Published at: <http://www.archania.org>

September 19, 2017

After the first world war, the League of Nations was founded to maintain world peace. However, it was not very successful at this, because 20 years after its inauguration the second world war started. Due to the failure of the League of Nations, it was renamed and reorganized into United Nations after the second world war. Although the United Nations has achieved some success, there are some serious issues which prevents it from functioning optimally:

1. Electing people to represent us in other elections generates room for corruption

Since the world population is not directly involved in electing the people working for the United Nations, there is room for corruption between the national governments and the United Nations. In a system where the world population is directly involved in electing the people working for the world government, there will be much less room for corruption, and the world government will be much more in tune with the world population.

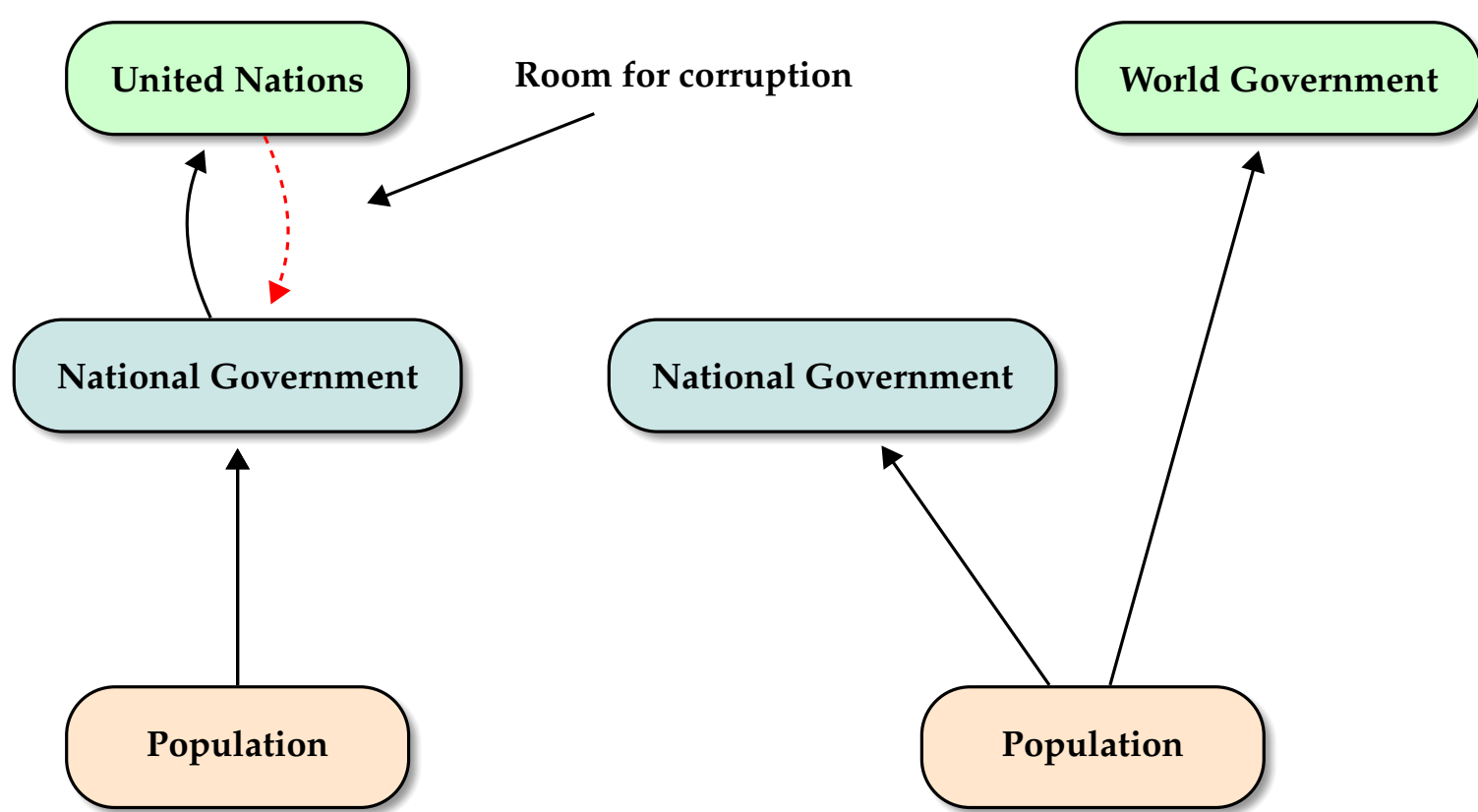


Figure 1: How there will be less room for corruption if the world population is directly involved in electing the people working for the world government.

1. Permanent veto rights in the Security Council are undemocratic and prevents reform.

Giving certain countries permanent veto rights in the United Nations Security Council reflects a static and undemocratic world view. Some of the authoritarian regimes with veto rights have also prevented the United Nations from engaging to stop genocides and ethnic cleansing. The United Nations would have been much more democratic and functional without any veto rights. However, the countries with permanent veto rights can use their veto rights to prevent any reform that takes away their veto right, so it is highly unlikely that such a reform will ever happen.

2. Peacekeepers from the United Nations are not allowed to engage in offensive operations.

This is the primary reason why the League of Nations failed, and why there has been many wars and genocides during the last century. In 1994 UN failed to prevent the Rwandan genocide, and in 1995 UN failed to prevent the Srebrenica massacre. If the biggest and most powerful army in the world belonged to the UN, any country that did not conform with UN law would be disciplined by the UN army. The UN could also command all world leaders to get rid of nuclear weapons, and set a maximum size for national armies. This would reduce the global military expenditure.

We propose a new progressive world democracy, where the world population is directly involved in electing the people working for the world government, and where peacekeepers are allowed to engage in offensive operations. The aim of this world government is not just to maintain world peace, but also to reduce global wealth inequality and to prevent an ecological collapse. With the proposed world government our civilization is expected to be in a lower energy level, since there will be less friction between countries then and therefore less global military expenditure (Figure 2). There is however a huge energy barrier consisting mostly of nationalistic beliefs, between the current multinational world and the proposed world government. We need to overcome this energy barrier to get a world government.

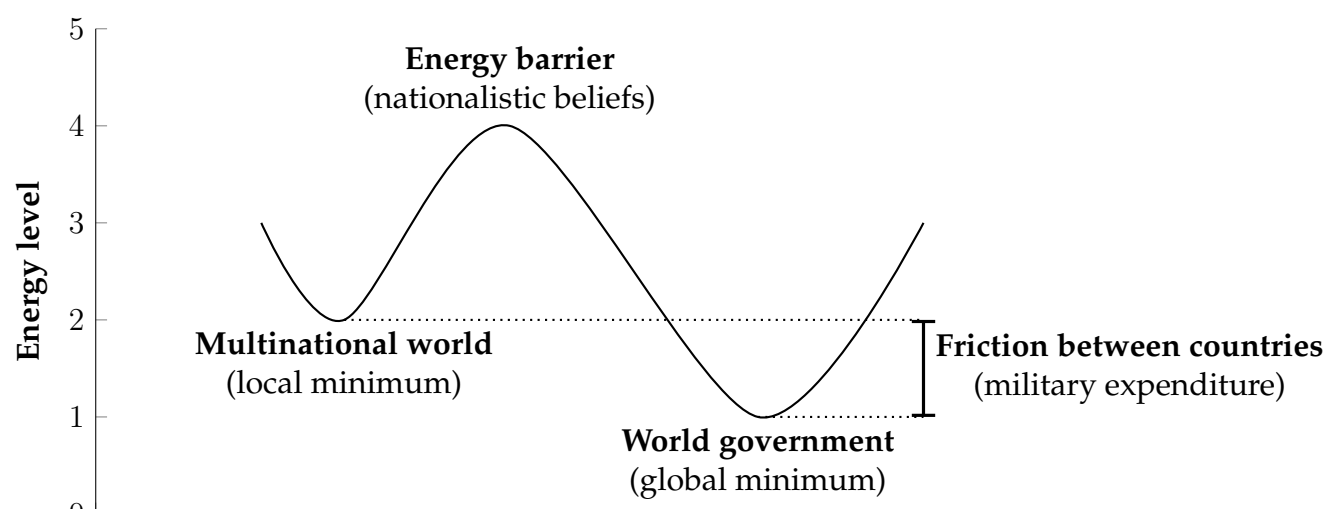


Figure 2: How the current multinational world is in a local minimum which is expected to be on a higher energy level than the proposed world government.

The global demographic transition

The world population is currently undergoing a demographic transition towards a more mature world population. In 1950 most of the world population were children, while we have much more adults today. In the future we are expecting to have even more old people.^[1]

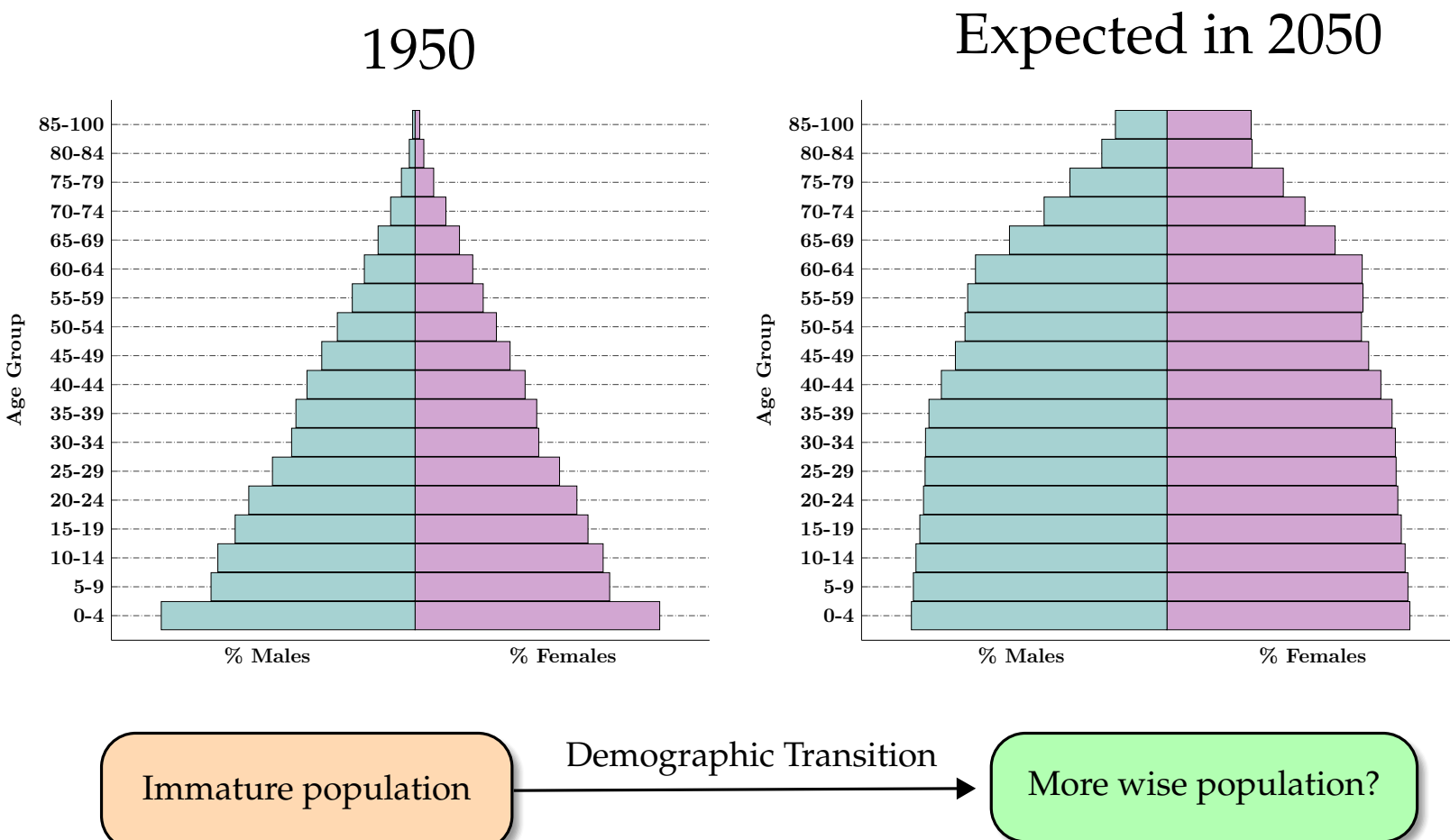


Figure 3: The demographic transition towards maybe a more wise world population.

Even though really old people tend to need care, they usually also have more life experiences, and can therefore have more wisdom and understanding than children. Childish conversations are presumably much more prevalent in societies that are dominated by children than in societies that are dominated by adults. We might also expect societies to be less organized if they are dominated by children. So the future might not look so bleak after all, and a more mature world population might be more interested in promoting a progressive world democracy.

The holocene calendar and a modern approach to holidays and celebrations

Even though the human species has existed for several hundred thousand years, the first agrarian civilizations started to emerge about 10 000 years ago. The paleontologist Cesare Emiliani therefore proposed to add 10 000 years to the Gregorian calendar^[2]. This seems like a good idea, since most of human history would be included in the positive integers of such a calendar, and that might have a unifying effect on the cultures and societies of today. Many holidays are celebrated solely because of social conformity to traditional norms. Celebrations could however be used to strengthen our relationship to our modern understanding of mathematics, science, history and civil rights (Figure 4). These topics could be celebrated at the solstices and equinoxes to get them in equal distance from each other, so that all the periods without celebrations are equally long.

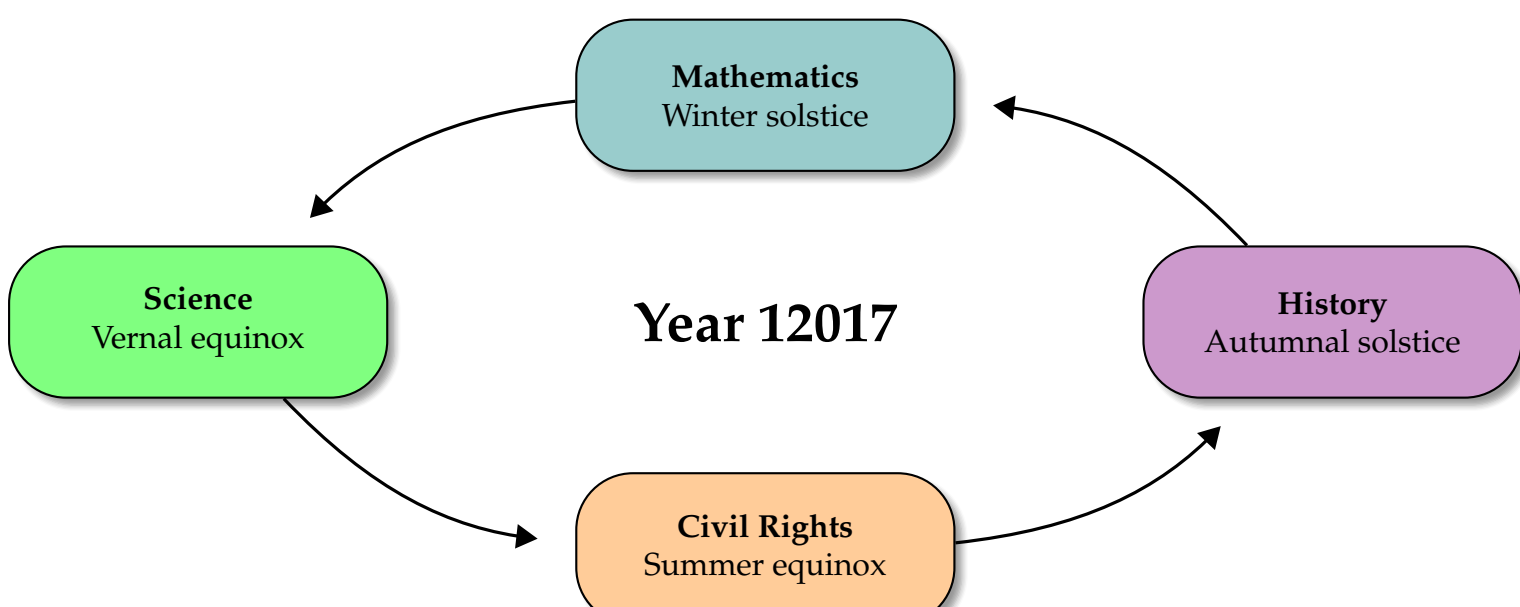


Figure 4: A proposal for celebrations that might be better suited for today.

Bibliography

[1] United Nations, "World population prospects." <https://esa.un.org/unpd/wpp/DataQuery/>.
 [2] C. Emiliani, "Calendar reform," *Nature*, vol. 366, p. 716, dec 1993.