The Threats to Society (v1.0) Aleph (alephp@tuta.io)

ABSTRACT

Whether it is due to political struggles, wars in distant lands, economic turmoil, or other kinds of danger, we as a society are used to seeing the rise and fall of threats in the public eye almost daily.

However, many of these threats end up unresolved by the time they fade into obscurity, either because the topic doesn't gain enough traction to generate an impactful response, or due to a satiation of the topic because of reiterated and continuous coverage.

We have seen such examples as the Taylor Oil Spill, which since 2004 has meant the leak of ~500 barrels of oil per day into the Gulf of Mexico,¹ the killing of innocent prisoners of conscience² in China since the 2000's to fuel a booming organ transplant industry³; and the Fukushima Daiichi nuclear disaster in 2011, which has resulted in a continuous leakage of radioactive material into the sea to this day.⁴

While the majority of these threats are endemic, others involve our society at a worldwide scale and have repercussions in the daily lives of most people, either directly or indirectly. This paper focuses on a subset of the most pressing of these issues.

POPULATION

Modern humans appeared around 200,000 years ago,⁵ but it's only since 1800 that our population has skyrocketed from 1 billion to almost 8 billion today. Projections show we can expect to reach 11 billion people before 2100, although the growth rate will slow down to 0.1%.^{6,7,8}

While this means population will possibly stabilize in the far future, the effects of overpopulation can easily be felt today. Increasingly worrying issues are inevitably arising every day around the world, such as water scarcity and conflict, overdrafting, urbanization, population density, industrialization, land degradation, waste disposal, and a myriad of socio-economic problems.

PRIVACY

In a world that is increasingly interconnected, corporations and governments have taken advantage of the massive exchange of information happening around us. This often leads to negative consequences for the public.

https://en.wikipedia.org/wiki/Taylor_oil_spill

² https://en.wikipedia.org/wiki/Prisoner_of_conscience

³ https://en.wikipedia.org/wiki/Organ_harvesting_from_Falun_Gong_practitioners_in_China

⁴ https://en.wikipedia.org/wiki/Fukushima_Daiichi_nuclear_disaster

⁵ https://www.universetoday.com/38125/how-long-have-humans-been-on-earth

⁶ http://www.worldometers.info/world-population

⁷ https://ourworldindata.org/peak-child

⁸ https://ourworldindata.org/world-population-growth

1. GOVERNMENTS

In 2016, the following countries were labeled as having 'endemic surveillance societies', with governments in these countries lacking serious privacy enforcement, protection, and safeguards, while enforcing surveillance, communication interception, data-sharing and retention, and civilian monitoring:⁹

- 1. United States
- 2. Thailand
- 3. Taiwan
- 4. United Kingdom
- 5. Singapore
- 6. China
- 7. Russia
- 8. Malaysia

2. THIRD PARTIES

Today, most products and services gather and sell personal data, especially if they are free: "if you aren't paying for it, you're not the customer; you're the product being sold". 10

Examples include:

- Social media: Twitter, Facebook, Instagram, Snapchat, Google+, Reddit¹¹
- Email: Gmail, Outlook, Yahoo
- Phone apps: Tinder, Grindr, Candy Crush, Clash of Clans, Pokemon Go
- Chat: Discord, Skype, Hangouts, Messenger
- Marketplace: Amazon, Craigslist, Ebay
- Search engine: Google, Bing, Yahoo
- Music: Spotify, Soundcloud, Shazam, Pandora
- Mobile & internet provider: AT&T, Verizon, Sprint, Comcast¹²
- Transportation: Uber, Cabify, Lyft
- Other: OS's (e.g Windows), browser add-ons, web apps

Privacy-first apps aren't exempt from this either: when installed, a majority of cell phone VPN applications request permissions they don't need, and log outgoing connections despite claiming not to do so. ^{13,14} Paid products aren't any safer: 7 in 10 paid smartphone apps collect and sell private information. ¹⁵

3. DATA BREACHES

⁹ https://www.privacyinternational.org/sites/default/files/2017-12/global_surveillance_0.pdf

¹⁰ https://www.metafilter.com/95152/Userdriven-discontent#32560467

¹¹https://www.indiatoday.in/technology/news/story/facebook-confirms-that-it-tracks-how-you-move-mou se-on-the-computer-screen-1258189-2018-06-12

¹² https://www.zdnet.com/google-amp/article/us-cell-carriers-selling-access-to-real-time-location-data

13</sup> https://www.zdnet.com/article/some-android-vpn-apps-request-access-to-sensitive-permissions-they-do
nt-need

¹⁴ https://restoreprivacy.com/vpn-logs-lies

¹⁵https://www.scientificamerican.com/article/7-in-10-smartphone-apps-share-your-data-with-third-party-services

Alongside companies and governments hoarding information for longer periods of time is the increasing occurrence of information leaks, either due to hacking, poor security, inside jobs, accidental publishing, or loss of devices and media. Excluding accidental publishing, information leaks have increased over the years in number and magnitude: 16

2003 - 2005: 3 leaks
2006 - 2008: 31 leaks
2009 - 2011: 67 leaks
2012 - 2014: 76 leaks
2015 - 2018: 120 leaks

Moreover, as storage technology advances and corporations decide to gather more data for longer, the amount of records being compromised in each leak have increased to gargantuan proportions. For example, in July 2017 Equifax's suffered a breach where hackers accessed ~150 million records of citizen's data, including full names, Social Security numbers, birth dates, addresses, driver's license numbers, and credit card credentials.¹⁷

Unfortunately, on average, a majority of leaks are never disclosed or discovered, meaning the numbers shown here could pale in comparison to the actual number of events.

MENTAL ILLNESS

25% of the world will at some point be affected by a mental disorder, ¹⁸ with 1 in 6 people suffering from one right now. ¹⁹ While the vast majority of the mentally ill could recover a normal lifestyle with the right treatment, ²⁰ 70% receive none. ²¹

Mental illness is more prevalent than cancer, diabetes and heart disease, ²² and it arises due to a number of biological (genetic, infection, injury), psychological (trauma, neglect, abuse), and environmental (social, contextual) factors. While often a combination of these three are responsible, environmental factors are especially critical in mental illness, being the source of around 50% of cases. ²³ Some of these factors include: ^{24,25}

- Low income, work satisfaction and conditions (especially unemployment)
- Poor standards of living (especially homelessness)
- Significant life changes (e.g. death of loved ones, divorce)
- Unexpected complications (e.g. healthcare, loans, bills)
- Dysfunctional family life

¹⁶ http://www.informationisbeautiful.net/visualizations/worlds-biggest-data-breaches-hacks/

¹⁷ https://en.wikipedia.org/wiki/Equifax

¹⁸ http://www.who.int/whr/2001/media_centre/press_release/en

http://www.nbcnews.com/id/5111202/ns/health-mental_health/t/global-study-finds-mental-illness-widespread/

²⁰ https://www.medicinenet.com/mental_illness/index.htm

²¹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3698814

²² http://www.comphc.org/yakima-valley-mental-health-blog-detail.php?blog_id=5

²³ https://www.healthline.com/health/depression/genetic#genetics

²⁴https://www.goodtherapy.org/blog/blog/wp-content/uploads/2016/01/mental-health-outcomes-2016-in fographic-goodtherapy.org_jpg

²⁵ http://www.who.int/mediacentre/factsheets/fs396/en/

- Violent environment
- Substance abuse
- Poor education
- Poor nutrition
- Poor social protection and community support
- Harsh social and cultural expectations

Income is particularly crucial, with those at the bottom of the socioeconomic ladder being up to 7 times more prone to having mental illness. The growing economic inequality in the world has been, among other factors, one of the reasons why worldwide suicide rates have gone up 60% in the last 45 years.

The mentally ill also are poorly portrayed in the media, being shown stereotypically as people with violent and unpredictable behaviour. It is also commonly thought that there is a correlation between mental illness and violence. However, research has shown that the mentally ill are often victims rather than perpetrators of violence. To put this into perspective, studies show that less than 5% of shootings are committed by people with a diagnosable mental illness. Additionally, many famous and respected people have had mental illness, including Isaac Newton, Ludwig van Beethoven, Abraham Lincoln, Van Gogh, Winston Churchill, Sylvia Plath, Ernest Hemingway, and John Nash, among many others. As a series of the mental illness and violence.

Mental disorders can affect a person's life heavily. For example, they can lead to:

- **Education:** Lower GPA, social integration, ability and desire to complete homework, attention span and concentration, and an increase in absences, difficulty with academic work, and school suspensions. 32,33
- Workplace: Lower motivation and productivity, poor decision-making and relationship with coworkers and clients, and an increase in sickness related absences.³⁴
- Family Life: Increase in family chronic stress and embarrassment over illness, fear of developing mental illness of their own, resentment over having an atypical family life and jealousy over attention given to the mentally ill.
- **Love Life:** Increased partner stress, tension and instability of relationship, blame over relationship problems, and likelihood of partner developing mental illness.³⁵

COPING MECHANISMS

²⁶ https://www.cdc.gov/nchs/data/databriefs/db203.pdf

²⁷ http://news.gallup.com/poll/102883/strong-relationship-between-income-mental-health.aspx

²⁸ http://www.who.int/mediacentre/news/releases/2010/mental_disabilities_20100916/en

²⁹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1525086

³⁰ http://behavioralscientist.org/myth-mental-illness-causes-mass-shootings

³¹https://web.archive.org/web/20140217222151/http://gsappweb.rutgers.edu/centers/stigma/people.ph

³² https://www.flgov.com/wp-content/uploads/childadvocacy/mental-health-and-academic-achievement-2 -24-12 pdf

³³ http://www-personal.umich.edu/~daneis/papers/MHacademics.pdf

³⁴ https://www.who.int/mental_health/media/en/712.pdf

³⁵https://www.psychologytoday.com/blog/fulfillment-any-age/201602/how-being-depressed-can-affect-your-relationships

Few opportunities are given in our daily lives to vent frustrations and feelings without the fear of being judged or having to deal with the consequences of sharing those thoughts. Because of this, many people engage in denial, blaming themselves or others, and displaying destructive or addictive behavior.

While there are effective aids to stress and pressure (e.g. social or professional support, mindfulness, self-help, meditation, and prayer), most people are likely to engage in unhealthy behavior foremost, which has led to:

- 1 in 3 people being obese³⁶ (obesity is very rarely genetic³⁷)
- 1 in 3 being workaholics³⁸
- 1 in 3 drinking alcohol (of them, 1 in 3 having alcohol-use disorders)³⁹
- 1 in 4 smoking tobacco⁴⁰
- 1 in 6 having a mental disorder⁴¹
- 1 in 6 engaging in self-harm⁴²
- 1 in 10 having an eating disorder⁴³
- 1 in 10 being addicted to pornography⁴⁴
- 1 in 16 being addicted to sex⁴⁵
- 1 in 16 being compulsive buyers⁴⁶
- 1 in 16 eating fast food daily (1 in 3 eating at least twice a week)⁴⁷
- 1 in 20 using hard drugs. Of them, 1 in 10 having drug-use disorders⁴⁸
- 1 in 33 using homeopathic medicine (no more effective than placebos⁴⁹)⁵⁰
- 1 in 66 being problem gamblers⁵¹
- 1 in 100 being involved in cults⁵²
- 1 in 300 attempting suicide every year (of them, 1 in 10 being successful)⁵³

EATING HABITS

In a world where obesity has tripled since 1975 and cardiovascular disease has become the number one cause of death, a proper diet is indispensable to remain healthy. 54,55 The

³⁶ https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity

³⁷ https://www.healthline.com/health/obesity-when-it-genetic

³⁸ https://brandongaille.com/21-significant-workaholic-statistics

³⁹ http://www.who.int/substance_abuse/publications/globalstatusreportalcohol2004_introduction.pdfl

⁴⁰ https://www.ncbi.nlm.nih.gov/pubmed/25963869

⁴¹ http://www.nbcnews.com/id/5111202/ns/health-mental_health/t/global-study-finds-mental-illness-wide spread/

⁴² https://www.healthyplace.com/abuse/self-injury/self-injury-self-harm-statistics-and-facts

⁴³ https://www.mirror-mirror.org/eating-disorders-statistics.htm

⁴⁴ https://www.addictionhope.com/sexual-addiction

⁴⁵ https://www.recoveryranch.com/resources/sex-addiction-and-intimacy-disorders/sex-addiction-america-common/

⁴⁶ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1805733

⁴⁷ https://www.statisticbrain.com/fast-food-statistics/

⁴⁸ http://www.unodc.org/wdr2017/field/Booklet_1_EXSUM.pdf

⁴⁹ https://www.smithsonianmag.com/smart-news/1800-studies-later-scientists-conclude-homeopathy-doesnt-work-180954534/

⁵⁰ https://www.hri-research.org/resources/essentialevidence/use-of-homeopathy-across-the-world/

https://www.ncbi.nlm.nih.gov/pubmed/25963869

⁵² https://www.icsahome.com/elibrary/fags

⁵³ http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/

⁵⁴ http://www.who.int/features/factfiles/obesity/en/

⁵⁵ http://www.who.int/mediacentre/factsheets/fs310/en/

World Health Organization (WHO) has suggested cutting consumption of sugar to less than 25g per day, ⁵⁶ salt to less than 5g per day, ⁵⁷ and fat to less than 60g per day in addition to avoiding saturated and trans fats in favor of unsaturated fats. ⁵⁸

However, many issues surround the traditional western diet:

- **1. Addiction:** Sugar, salt, and fat all have addictive properties similar to those of cigarettes or hard drugs. Among other things, this has resulted in American toddlers regularly surpassing the adult sugar consumption dose.
- 2. **Withdrawal:** Symptoms associated with a lowered intake of these three ingredients include:
 - a. **Sugar:** Headaches, sugar cravings, anxiety, depression, moodiness, tiredness and muscular aches.
 - b. **Salt:** Salty taste in the mouth, cramps, high blood pressure, lethargy, drowsiness and excessive urination. In extreme cases, hypernatremia (electrolyte imbalance) and fits.
 - c. **Fat:** Deficiencies of vitamins A, D, E and K, dryness of skin and hair, itching, weakness of bones and night blindness.
- **3. Perception:** Corporations regularly make use of advertisement, small print and attractive logos in order to get away with using an unhealthy quantities of sugar, salt, and fat in their products. Processed foods can have up to 20,000% more sodium than unprocessed counterparts (e.g., instant oatmeal vs quick cook oatmeal)⁶³, and 75% of packaged foods in the US have added sugar (a 16 oz Coke bottle has double the recommended daily sugar intake⁶⁴).⁶⁵
- 4. **Deception:** Companies obscure ingredient lists with the use of alternative terminology in order to show their products as healthy or 'light'. Sugar (sucrose) has fifty-six names by which it may appear, while salt (sodium) has twenty-one. Subsidized studies by corporations in the 60's and 70's have "cast doubt about the hazards of sugar in Coronary Heart Disease (CHD)," presenting it as far less dangerous than it really is to the public.
- 5. **Nutrition:** Soil depletion has resulted in vegetables and fruits today having significantly reduced nutritious value than they had decades ago. ⁷⁰

⁵⁶ http://apps.who.int/iris/bitstream/10665/149782/1/9789241549028_eng.pdf

⁵⁷ http://www.who.int/mediacentre/factsheets/fs393/en

⁵⁸ http://healthyeating.sfgate.com/many-fat-grams-per-day-4137.html

⁵⁹ http://www.dailymail.co.uk/health/article-2013703/Why-salt-addictive-It-stimulates-brain-cells-just-like-cigarettes-hard-drugs.html

⁶⁰ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2235907/

⁶¹ http://journals.lww.com/co-clinicalnutrition/Abstract/2013/07000/Sugar_addiction___pushing_the_drug_sugar_analogy.11.aspx

^{62/}https://qz.com/1302201/american-toddlers-are-eating-more-sugar-than-the-amount-recommended-for-adults

⁶³ http://www.familyhealthonline.ca/fho/nutrition/NU_holdTheSalt_FHa09.asp

⁶⁴ https://i.gvazo.com/ea43a151825f43b639d3e9283d3e9a18.png

⁶⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3490437/pdf/nihms393016.pdf

 $[\]frac{66}{\text{https://www.womenshealthmag.com/sites/womenshealthmag.com/files/2014/11/03/sugar-names_0.p.}{\text{ng}}$

⁶⁷ https://www.dhhs.nh.gov/dphs/nhp/documents/sugar.pdf

⁶⁸ https://sodiumbreakup.heart.org/21_ingredients_that_mean_sodium_to_watch_on_the_label

⁶⁹ https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2548255

⁷⁰ https://www.scientificamerican.com/article/soil-depletion-and-nutrition-loss/

6. Availability: Stores place products in such a way that healthy alternatives tend to be in the minority and with vastly higher prices than unhealthier, cheaper alternatives. This gap in prices has also been widening, with fresh fruits and vegetables growing more expensive while sodas and processed foods become cheaper.⁷¹

CULTS

Today more than four thousand distinct religions exist, with 85% of the world considering themselves believers to some degree. It is no surprise then that deceptive cults and sects trying to take advantage of these numbers have appeared over the years.

Two out of three new members of cults are young people induced to join in periods of personal crisis, such as broken romance, death of loved ones, or failure to get a job or enter a college of choice.⁷²

Most people who join cults:

- Have a desire to belong
- Lack self-confidence
- Are idealists
- Are unassertive (difficulty saying no or expressing doubt/criticism)
- Are gullible (low capacity to question and be critical)
- Are impatient and have low tolerance for ambiguity
- Feel alienated and dissatisfied with the status quo (cultural disillusionment)
- Are susceptible to trance-like states (including hallucinogenic drug experiences)
- Long for spiritual meaning
- Are ignorant of the dangers of manipulative individuals

Moreover, because modern cults and sects are persistent and often deceptive in their recruiting, new members usually have no knowledge of what eventually will be expected of them in the long-term.

Some of the internal mechanics these groups have adopted to retain and abuse their members include:

- The concept of hell, a place of eternal suffering
- The encouragement of submission to and dependence on higher powers
- The use of a power hierarchy, in which the few have power over the many
- The use of followers for military purposes
- The use of resources to generate political and economic power
- The use of brainwashing and punishment techniques to trap followers
- The manipulation of followers for personal gain, often sexual or financial
- The incentive of tribalism, inciting isolation and confrontation of other beliefs
- The incentive of harmful beliefs (flagellation, sexual restriction, liberty restriction)

⁷¹ http://rhondasteed.com/salad-costs-vs-burger-costs

⁷² http://www.apologeticsindex.org/265-who-joins-cults-and-why

While the line between religion and cults/sects can at times be blurry, specific organizations have been widely recognized as being in the latter group by governments and the general public:⁷³

- 1. The Watchtower Society (usually known as "Jehovah's Witnesses")
- 2. The Church of Scientology
- 3. The Ku Klux Klan
- 4. The Westboro Baptist Church
- 5. Heaven's Gate
- 6. Peoples Temple
- 7. The Räelian Movement
- 8. Aum Shinrikyo

We can expand as an example on the widely known cult of Scientology, where witnesses and ex-scientologists have spoken up about the practices that happen inside the organization. These include extortion, brainwashing, tax evasion, harassment of "enemies" of the church, disconnection of members from loved ones, beatings (many ending in death, attempts to censor negative search engine results of their organization, and creation of confinement facilities like "The Hole", where dozens of senior executives have been imprisoned for years and to this day. In 1993, the organization was also granted tax-exemption status in the U.S after conducting espionage, harassment, bogus lawsuits, and intimidation of IRS officials.

Because of the consequences cults can face after becoming widely known, they tend to engage in heavy public relations campaigns in order to present their organizations behind a veil of appeal and philanthropy. The Church of Scientology, for example, sponsors charity programs and spends hundreds of thousands of dollars in lobbying expenditures every year.⁷⁸

FRATERNITIES & SORORITIES

Fraternities and sororities (also known as Greek letter organizations, or GLOs) are social organizations at colleges and universities. They admit undergraduates as new members and give them lifetime memberships, and are most prominent in the United States, Canada, France, Germany, and the Philippines. Currently over 80% of Supreme Court justices and executives of the top 500 American corporations belong to GLOs.

While they vary in the way they operate, most practice heavy secrecy, single-sex membership, housing of undergraduates at private residences, usage of identification symbols like greek letters, passwords, badges, and hand signs, and selection of new members via heavy vetting and probation (known as rushing and pledging). Joining a GLO has been proven to be extremely beneficial to a person's career and well being, including:

⁷³ https://jonestown.sdsu.edu/?page_id=30812

⁷⁴ http://content.time.com/time/magazine/article/0%2C9171%2C972865%2C00.html

⁷⁵ http://www.sptimes.com/2004/05/29/Tampabay/Scientologists_settle.shtml

⁷⁶ http://www.tampabay.com/news/scientology/scientology-defectors-describe-violence-humiliation-in-the -hole/1270047

⁷⁷ https://www.cs.cmu.edu/~dst/Cowen/essays/nytimes.html

⁷⁸ https://www.opensecrets.org/lobby/clientsum.php?id=D000048670&year=2017

⁷⁹ http://www.uwgreek.com/frat/home.html

- 20% higher university graduation rates⁸⁰
- Instruction in etiquette, dress, and manners
- Increased happiness, and diminished feelings of loneliness and depression
- Higher chance of family and friends being accepted in the same GLO

Once outside university network opportunities expand greatly, with graduates being known to exchange secret handshakes with executives from their own GLO to get better treatment and competitive positions⁸¹

Despite the philanthropic activities displayed however, the public perception of GLO's is generally negative, and many worrying facts have surfaced over the years that have ended in the permanent closure of many of these organizations:

- 4 out of 5 members are binge drinkers⁸²
- Members are three times more likely to commit rape⁸³
- Members of racial minorities experience microaggressions, harmful stereotypes, and fewer opportunities to use the networking system
- A minority of GLOs surrounded by controversies conducting themselves in a cult-like fashion, hidden by a veil of heavy secrecy and well-paid legal aid
- Hazing-related deaths occurring at least once per year, ⁸⁵ despite hazing being forbidden in many countries and states in the U.S. (Common types of hazing include sleep deprivation, paddling, spanking, use of stress positions, forced runs, busy work and mind games, and in rare instances branding, enemas, forced eating of spoiled food, and urination on pledges.)

ENVIRONMENT

Worldwide:

- 95% of population live in areas exceeding WHO guidelines for healthy air.
- 88% of oceans are polluted with trash.
- 80% of Earth's forests have been destroyed.⁸⁸
- 50% of wildlife has disappeared over the last 40 years.
- 50% of coral in the Great Barrier Reef has died in the last 2 years.
- 33% of Earth's natural resources have been consumed in the past 30 years.

⁸⁰ http://www.businessinsider.com/dont-ban-fraternities-2014-1#ixzz3NBjLlLkC

⁸¹ https://www.bloomberg.com/news/2013-12-23/secret-handshakes-greet-frat-brothers-on-wall-street.html

⁸² https://www.addictioncenter.com/college/drinking-drug-abuse-greek-life/

 $[\]frac{83}{\text{http://www.d.umn.edu/cla/faculty/jhamlin/3925/4925HomeComputer/Rape\%20myths/Prospective\%20}}{\text{Analysis.pdf}}$

⁸⁴ https://www.jstor.org/stable/10.1525/sp.2010.57.4.653?seg=1#page_scan_tab_contents

⁸⁵ http://www.zencollegelife.com/15-frightening-facts-about-sororities-and-fraternities/

⁸⁶ https://www.stateofglobalair.org/sites/default/files/soga-2018-report.pdf

⁸⁷ http://www.collective-evolution.com/2014/07/07/new-study-finds-88-percent-of-earths-ocean-surface-now-polluted-with-plastic-trash/

⁸⁸ http://greenactionnews.net/blog/2014/10/05/80-of-earths-forests-have-been-destroyed-who-is-clear-cut ting-the-most

⁸⁹ https://www.theguardian.com/environment/2014/sep/29/earth-lost-50-wildlife-in-40-years-wwf

⁹⁰ https://www.nature.com/articles/s41586-018-0041-2

⁹¹ http://storvofstuff.org//wp-content/uploads/movies/scripts/StorvofStuff_FactSheet.pdf

- 33% of Earth's lands are deserts, and 38% are at risk of desertification.
- 33% of population is exposed to household air pollution.
- Over 10,000 nuclear warheads are still active around the world.
- 33 nuclear accidents have happened since 1952.
- The average temperature has increased by 1°C since 1975.
- More natural disasters have happened in the last five years than from 1900 to 1970.
- Despite over 100,000 synthetic chemicals being commercialized today, only a small fraction have been tested for human health impacts.

WEALTH INEQUALITY

Worldwide distribution of wealth has significantly shifted over the last 50 years:99

- The bottom 10% saw their debt increase from nothing to ~\$1000 on average.
- The middle 80% saw their wealth increase by a factor of 2.
- The top 10% saw their wealth increase by a factor of 5.
- The top 1% saw their wealth increase by a factor of 7.

This inequality has grown to such gargantuan proportions that today 26 people have 50% of the world's wealth, while half of all adults in the world on average have less than \$2,300 total.

The reasons for this disparity are many, but we can name a few:

1. Wage gap

Executive compensation has increased almost 1000% in the last 40 years, with CEO's currently earning 270 times more than the average worker; in other words, they earn in two days what the average worker does in a year. Their type of compensation has also shifted from direct cash to company stocks (from 5% to 30%), which increases in value alongside company success, and allows for side-benefits like having shareholder decision power.

At the other end, increases in salary of the average workers have far been outstripped by rises in the cost of living. With a disappearing middle class, the breach between the

⁹² https://www.sciencedaily.com/releases/2010/02/100209183133.htm

⁹³ https://www.stateofglobalair.org/sites/default/files/soga-2018-report.pdf

⁹⁴ https://ourworldindata.org/nuclear-weapons

⁹⁵ https://docs.google.com/spreadsheets/d/1j7_05tUdnUCrHCYTplWKWavHjUW6zclw3WlgyLf5syA/edit?hl=en&hl=en#gid=1

⁹⁶ https://climate.nasa.gov/

⁹⁷ https://ourworldindata.org/grapher/number-of-natural-disaster-events

⁹⁸ http://storyofstuff.org//wp-content/uploads/movies/scripts/StoryofStuff_FactSheet.pdf

⁹⁹ http://apps.urban.org/features/wealth-inequality-charts/

https://www.theguardian.com/business/2019/jan/21/world-26-richest-people-own-as-much-as-poorest -50-per-cent-oxfam-report

 $[\]frac{101}{\text{https://qz.com/848181/half-of-all-adults-in-the-world-have-less-than-2300-in-wealth-credit-suisse-global-wealth-report-indicates/}$

¹⁰² http://fortune.com/2017/07/20/ceo-pay-ratio-2016/

¹⁰³ http://www.nber.org/papers/w23384.pdf

 $[\]frac{104}{\text{http://www.dailymail.co.uk/news/article-2324804/Millions-left-worse-wages-increase-just-0-4-cost-livin}}{\text{g-soars.html}}$

upper and lower classes keeps widening, making it harder both for wealthy people to lose their wealth, and poor people to escape poverty. ¹⁰⁶ In fact, the latter are in such a dire position that 20 years of 'nothing going wrong' are needed for them to escape above the poverty line. ¹⁰⁷

2. Wage theft

Wage theft is currently a bigger problem than robbery¹⁰⁸. Studies targeting low-wage industry workers have shown that¹⁰⁹:

- 12% had their tips stolen by their employer.
- 26% were paid less than minimum wage.
- 57% weren't given mandatory documentation of their earnings and deductions.
- 70% had their meal break shortened, interrupted, worked during it, or didn't have one at all.
- 70% weren't paid for off-the-clock work.
- 76% of overtime workers were underpaid or not paid at all for the extra time.

The US is also the only developed country without paid maternity leave. ¹¹⁰ Workers without paid sick leave have also been shown to be likely to have income below the poverty line. ¹¹¹

3. Education

College tuition has increased over 1100% in the last thirty years, twice as fast as income. While community colleges offer cheaper alternatives, they are discriminated among professionals as being of lower quality. Moreover, 2 out of 3 "entry-level" jobs today require at least three years of experience, making college degrees less relevant in comparison to having professional associations and connections.

Materials have increased in price as well. While recreational books have slowly become cheaper, educational books have on the contrary increased over 400% in price since 2004, its market being monopolized by five textbook companies. Today, 30% of students need aid to purchase textbooks. 114,115,116

4. Unions

105 https://reason.com/archives/2016/01/19/cost-of-living-vs-wage-stagnation-in-the

¹⁰⁶ https://www.aei.org/publication/yes-americas-middle-class-has-been-disappearing-into-higher-income-

¹⁰⁷ https://www.theatlantic.com/amp/article/524610/?single_page=true

¹⁰⁸ https://www.epi.org/publication/wage-theft-bigger-problem-forms-theft-workers

http://www.nelp.org/content/uploads/2015/03/BrokenLawsReport2009.pdf

https://www.oecd.org/els/soc/PF2_1_Parental_leave_systems.pdf

¹¹¹ https://www.fau.edu/newsdesk/articles/sick-leave-poverty-study.php

https://www.usnews.com/education/articles/2014/08/04/how-employers-view-an-associate-degree https://talent.works/blog/2018/03/28/the-science-of-the-job-search-part-iii-61-of-entry-level-jobs-require-3-years-of-experience/

https://www.aeseducation.com/blog/infographic-the-skyrocketing-cost-of-textbooks-for-schools-stude

 $^{^{115}}$ https://studentpirgs.org/sites/student/files/reports/Access%20Denied%20-%20Final%20Report.pdf 116 https://www.reddit.com/r/dataisbeautiful/comments/ay4zoh/price_changes_in_textbooks_versus_recreational/ehy9qb3/

Unions around the world have been steadily decreasing in density over the last 50 years, with the biggest cause being union busting - employers and governments preventing workers from joining and organizing them. This has had an increasingly negative impact for workers, with studies showing a robust link between union decline and the rise of inequality, as unions otherwise would allow for better wages and benefits, lower employee turnover, better workplace safety, and job security. Its, 118,119

5. Job Availability

The current infrastructure of society demands a steady amount of workers to take care of undesirable, dangerous, or poorly paid jobs like sewer inspection, plumbing, coal mining, and crime scene cleaning, among others. This has the implication that guidance, encouragement, and high-tier education can only push a minority of people to get pleasant and well-paid jobs, this minority often being composed of the wealthy, as young people who get financial support are proven to have greater career success. Moreover, wealthy parents have been shown to be involved in corruption networks, where bribes are given to test proctors in order for their children to pass entrance exams and be admitted into elite universities like Yale or Harvard. 121

6. Inflation

\$10 in 1950 had the same buying power as \$100 today. ¹²² Inflation has made it so that uninvested money will slowly lose value over time, deprecating a person's total purchasing power, greatly affecting the poor more than the rich.

BENEFITS OF WEALTH

- 1. **Savings:** Wealthy people save as much as 40% of their income, compared to 5% of the average citizen. As part of the premium treatment they often receive at banks and companies, the wealthy also have a solid financial safety net as well as significant passive interest in their saving accounts.¹²³
- 2. **Investment:** Investing in stocks, bonds, or funds can give massive returns for the wealthy, who have more capital to use and are able to pay for the advice of professional firms and experts, who help minimize risk and maximize earnings (for example, in the case of highly volatile cryptocurrencies).
- Edge technologies: The wealthy can invest in technologies that require a significant upfront cost, but allow for significant savings in the long-term (renewable energy, electric cars, geothermal heating, low energy-consuming hardware, etc).
- 4. **Bulk purchasing:** Purchasing large quantities of a product allows for 'bulk' benefits, like lower unit price and long-term savings in exchange for considerable

¹¹⁷ http://dbacon.igc.org/Unions/02ubust0.htm

¹¹⁸ https://waronwant.org/media/nine-reasons-why-unions-are-important

https://news.illinois.edu/view/6367/685245

¹²⁰ https://news.ncsu.edu/2018/05/parental-support-career-success/

¹²¹https://www.forbes.com/sites/eriksherman/2019/03/12/wealthy-people-paying-for-their-kids-to-get-into-college-isnt-the-big-problem/

https://data.bls.gov/cgi-bin/cpicalc.pl?cost1=100.00&year1=201801&year2=195001

¹²³ https://www.financialsamurai.com/the-average-savings-rates-by-income-wealth-class

- spending in the present. By paying at current prices, unexpected situations like shortages or sudden price increases are also avoided. 124
- 5. Knowledge: Wealthy people are able to afford quality education for themselves and their children, wider cultural understanding while traveling around the world. as well as access to information on demand, assuring better opportunities in life.
- **6. Connections:** Networks and relationships between wealthy people can open many doors to unique opportunities, like little-known investments or business proposals.
- 7. Immunity: The wealthy are often able to 'bend' or outright break the law, having a lower probability of being arrested, of being prosecuted if arrested, of being found guilty if prosecuted, and of being given a prison sentence if found guilty. 125
- 8. Living Conditions: Considerable wealth allows access cutting edge/the latest in medical care, procedures, diet, professional advice, and fulfillment of a vast majority of desires.
- 9. Time Savings: Private jets, premium treatment, VIP passes; having enough money to subsist comfortably, the wealthy tend to prioritize time, sacrificing disposable money in exchange for quality time with family, friends, or engaging in personal hobbies. Normal jobs also become marginal or outright unnecessary, allowing the wealthy to take vacations on demand, worry less, and have more time to pursue their dreams.
- 10. Health & Happiness: Contrary to the popular belief that money can't buy happiness, the wealthy are happier, healthier, and live longer than the average person. 126,127,128

INFORMATION CONTROL

In 1983, 50 companies owned 90% of American media; while today this number has dropped to five:129

- 1. Walt Disney
- 2. Comcast
- 3. AT&T
- 4. Fox Corporation
- 5. National Amusements (which holds ~80% of Class A stock of both Viacom and CBS Corporation)¹³⁰

This centralization of power has resulted in a severe loss of diversity in viewpoints. media integrity, and editorial independence. Letting the people that control these companies manipulate or withhold information from the public influences the audience's views on politics, economy, and culture. 131 Furthermore, studies show reading news

¹²⁴ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2742431

https://pdfs.semanticscholar.org/5156/99b3bacf2a82ff98522675ccb3ec0ea16d6d.pdf

¹²⁶https://www.psychologytodav.com/us/blog/between-you-and-me/201712/can-money-buy-you-happine

SS https://edition.cnn.com/2011/10/31/health/happiness-linked-longer-life/index.html

¹²⁸ http://richhabits.net/its-good-to-be-rich-advantages-of-being-rich

¹²⁹ http://fortune.com/longform/media-company-ownership-consolidation

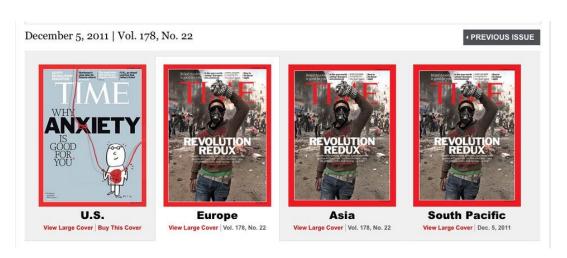
¹³⁰ https://en.wikipedia.org/wiki/National_Amusements#Sale_of_theaters_and_subsidiary_stock

¹³¹ http://users.ipfw.edu/tankel/pdf/mccombsagendasetting.pdf

gradually leads to fear, aggression, and hinders one's ability to think critically, 132 thus making media an effective tool of control.

A clear manifestation of selective withholding of information can be seen in disaster reporting, where between 1968 and 2002, volcano eruptions were covered if even a single death occurred, while in comparison food shortages were not covered unless they caused at least 38,000 casualties. 133

A more direct example can be seen in editions of Time magazine, where political information has several times been purposely withheld from the U.S. public in contrast to the rest of the world:¹³⁴



But information control also extends to search engines. Despite there being over 2 billion websites online, ¹³⁵ the average user visits no more than 100 per month. As new sites are usually found via search engines like Google or Bing, ¹³⁶ users unknowingly give these companies power to determine the level of visibility pages get.

One issue with this related to the results of a search: Over 50% of users click on the first result they get, and 90% don't go past the first page. This makes placement critical, and pushing a result to the third page or further can effectively starve a website of traffic. Furthermore, search engines change results dynamically based on user preferences and previous searches, in order to hand-pick advertisement and promoted content. Perhaps worst of all, Google accesses users' computers and cell phone microphones to listen in conversations, both to sell that data afterwards, and to detect what type of ads a person is interested in.

Another problem is related to the autocomplete mechanic while typing. Studies show that Google has often rigged its autocomplete feature to promote some results and hide

¹³² https://www.theguardian.com/media/2013/apr/12/news-is-bad-rolf-dobelli

¹³³ https://ourworldindata.org/how-many-deaths-make-a-natural-disaster-newsworthy

¹³⁴http://www.businessinsider.com/these-time-magazine-covers-explain-why-americans-know-nothing-about-the-world-2011-11

¹³⁵ http://www.internetlivestats.com/total-number-of-websites

¹³⁶ https://www.creditloan.com/blog/how-the-world-spends-its-time-online

https://www.receptional.com/1st-position-in-google-receives-53-of-clicks

¹³⁸https://www.utwente.nl/nl/bms/cw/bestanden/Using%20the%20Internet-%20Skill%20related%20problems.pdf

¹³⁹ https://www.youtube.com/watch?v=zBnDWSvaQ11

others. More than 25% of elections worldwide have had votes changed due search engine manipulation, in what is known as the "Search Engine Manipulation Effect".

PROPAGANDA

Today, two out of three adults get their news from social media. Because user-created content is hard to fact-check, this has given room for organizations, governments, and individuals to push propaganda cheaply and efficiently. Two students carried this into practice in 2013 by using "fake accounts and upvotes bought for under \$200" to get made up content to reddit's front page.

The following is an example of steps taken by propagandists:

- 1. Purchase an account for a popular site (e.g. reddit, Hacker News, Twitter, Youtube, Facebook). These are easily found online, with reddit accounts with 10,000 karma going for \$200.¹⁴⁵
- 2. Log in in the purchased account and phrase the title of your submission to fit the view you intend to push. 3 out of 5 links on social media are never clicked, 146 so the title is far more important than the actual content.
- 3. To make your link more popular, purchase fake followers, subscribers, views, upvotes, likes, reblogs, retweets, or comments, depending on the platform.
- 4. Finally, purchase downvotes or dislikes to discredit competition's content, or file bogus claims of copyright infringement to ban competitor's accounts, even if there was no infringement at all.

Wikipedia is an especially popular (and alarming) vector for propaganda, as it is the 5th most visited site in the world and is considered a prime source of reliable information by the vast majority of people. Companies and governments have been known to pay prolific editors to create, edit and delete pages from the site; in particular, to remove damaging information, bury evidence of past controversies, or erase criticism. Examples include Facebook and NBC, which have been repeatedly shown to pay editors to purge their pages of negative associations, and entrepreneurs, who pay to have profile pages created and embellished for them by authoritative editors.

But that's only part of the issue: Today, 8 out of 10 articles are written by just 1 percent of editors, which means these users have enormous power over the way millions perceive topics and make decisions. This has caused untold damage to the medical

¹⁴⁰https://www.theguardian.com/technology/2016/dec/16/google-autocomplete-rightwing-bias-algorithm-political-propaganda

https://sputniknews.com/us/201609121045214398-google-clinton-manipulation-election/

¹⁴² http://www.pnas.org/content/112/33/E4512

¹⁴³ http://www.journalism.org/2017/09/07/news-use-across-social-media-platforms-2017/pi_17-08-23_socialmediaupdate_0-01

¹⁴⁴ https://www.youtube.com/watch?v=FxNvUWN3vYk

¹⁴⁵ https://upvotes.club/buy-reddit-accounts/

¹⁴⁶ https://hal.inria.fr/hal-01281190/document

¹⁴⁷ https://www.alexa.com/topsites

 $[\]frac{148}{\text{https://www.huffingtonpost.ca/entry/wikipedia-paid-editing-pr-facebook-nbc-axios_n_5c63321be4b03d}{\text{e}942967225}$

¹⁴⁹ https://www.entrepreneur.com/article/296187

¹⁵⁰ https://motherboard.vice.com/en_us/article/7x47bb/wikipedia-editors-elite-diversity-foundation

treatment industry, as doctors have to keep watch over Wikipedia pages to avoid paid editors from pushing fake narratives and potentially changing the opinion of investors and the destination of millions of dollars for research. 151

Other public records show for example that the CIA has edited out references to torture from their own Wikipedia pages, and various United States Congressional staff have removed undesirable information from their own biographies (e.g., broken campaign promises), added favorable information or positive attributes, and edited in negative information to opponents' biographies. A particularly notable case involved edits from the U.S. Senate, where whistleblower Edward Snowden's description was changed from "dissident" to "traitor" in his page, during the 2013 global surveillance disclosures.

CENSORSHIP

A 2018 report by watchdog organization Freedom House reads as follows: "Deliberately falsified or misleading content is a genuine problem, but some governments are using [the problem] as a pretext to consolidate their control over information. In the past year, at least 17 countries approved or proposed laws that would restrict online media in the name of fighting "fake news" and online manipulation." ¹⁵⁵ Perhaps most notably are the New Zealand laws regarding the March 2019 mosque mass shooting, where the government has threatened with up to 10 years of imprisonment for possession of the manifesto or shooting video. ¹⁵⁶ An 18 year old currently faces up to 28 years in prison for sharing the video online. ¹⁵⁷ Heavy censorship laws have also been put in place recently in Russia and China. ^{158,159}

This slow spread of censorship has become widespread online, where companies deny registration, close, or even delete accounts of users who are controversial or become source of bad publicity, citing ambiguous or open-ended interpretations of rules as reason for closure, or at times giving none whatsoever.

An example of this includes Paypal, where users who registered while being minors have been banned decades later, while in their 30s. Google Play is another clear case, in which veteran creators publishing on the platform for over a decade have had their accounts banned, but have been given no reason by the company nor the possibility of an appeal. 161

https://www.theatlantic.com/business/archive/2015/08/wikipedia-editors-for-pay/393926/

https://www.ibtimes.co.uk/cia-torture-report-us-government-computers-editing-out-torture-references-wikipedia-page-1479135

¹⁵³ https://arstechnica.com/uncategorized/2006/01/6079-2/

 $[\]frac{154}{\text{https://www.dailymail.co.uk/news/article-2384188/Edward-Snowdens-Wikipedia-page-edited-dissident-traitor-US-Senate.html}$

¹⁵⁵ https://freedomhouse.org/report/freedom-net/freedom-net-2018/rise-digital-authoritarianism

¹⁵⁶ https://www.businessinsider.my/new-zealand-bans-christchurch-shooter-manifesto-livestream-2019-3/

https://gizmodo.com/18-year-old-arrested-in-new-zealand-for-sharing-terrori-1833402190

¹⁵⁸ https://arstechnica.com/tech-policy/2019/03/russia-makes-it-illegal-to-insult-officials-or-publish-fake-news/

¹⁵⁹ https://apnews.com/1540f1133267485db356db1e58db985b

¹⁶⁰ https://hackernoon.com/paypal-is-still-one-of-the-worst-online-examples-of-customer-service-42f3c13f

¹⁶¹ https://android.jlelse.eu/google-just-terminated-our-start-up-google-play-publisher-account-on-christma s-day-5cb69a454da0

More often than not however, corporations will "gang up" on users who could be a source of negative publicity, should other people see the tampering of their account as unreasonable. This is done by simultaneously shutting down the user's accounts on many platforms as to avoid any one of them being pointed as the sole culprit of the action. A notable example of such events is Gab, a reddit-like social network that in October 2018 was banned from Paypal, Stripe, Joyent, Medium, and Shopify for having unwittingly hosted (although later banned) a user who had anti-semitic remarks in its profile. However, no other platform suffered the same fate, despite the criminal also having multiple Twitter accounts which which he threatened politicians and journalists.

More surprising is the fact that this event was a catalyst for such dramatic response,

despite the fact that mainstream social networks routinely host criminals and have a long history of criticism (in the case of Facebook, there is a whole Wikipedia page dedicated solely to it 163). There is evidence however that big corporations actively try to suppress and eliminate competition via unethical means. 164

Twitter has also been in the eye of other controversies. In 2017, Donald Trump's account was temporarily deleted. The culprit was found to be a customer support employee who triggered the deletion without the need for authorization from a superior. While the action was quickly reverted and an apology posted, similar events happening to non-VIP users for apparently no reason have become commonplace today, with one such event seeing the mass shutdown of over 1500 accounts using an 'NPC avatar', irrespective of the type or amount of content shared on the accounts. More recently, Twitter was found to have also started shadowbanning users, alarmingly those in particular posting politically relevant and impactful data, like evidence of Russian interference in American elections.

LOBBYING & REVOLVING DOOR

To lobby is to seek to influence a politician or public official on an issue. While lobbying can be of advantage to individuals, nonprofit organizations, and advocacy groups trying to defend the public interest, it is today primary a system abused by corporations, which spend 340% more than public interest groups and unions combined. Studies show spending on lobbying is a "spectacular investment yielding blistering returns" as high as 22,000%.

Lobbying groups can influence topics as diverse as tax exemption, encryption, fake news, or immigration regulation, and yield enormous power in the world of politics. Bank

https://www.theverge.com/2018/11/5/18049132/gab-social-network-online-synagogue-shooting-deplatforming-return-godaddy-paypal-stripe-ban

https://en.wikipedia.org/wiki/Criticism_of_Facebook

¹⁶⁴ https://www.sueddeutsche.de/digital/facebook-zuckerberg-datenschutz-1.4242037

¹⁶⁵ https://twitter.com/TwitterGov/status/926238960594178048

https://www.bbc.com/news/blogs-trending-45888176

¹⁶⁷ https://en.wikipedia.org/wiki/Shadow_banning

https://www.zerohedge.com/news/2019-03-18/twitter-admits-shadowbanning-lisa-page-tweet-federalist-co-founder-keep-people-safe

 $[\]frac{169}{https://www.theatlantic.com/business/archive/2015/04/how-corporate-lobbyists-conquered-americandemocracy/390822/$

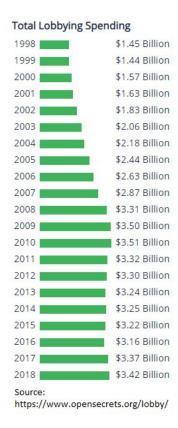
 $[\]frac{170}{https://www.washingtonpost.com/blogs/ezra-klein/post/the-outsized-returns-from-lobbying/2011/10/10/glQADSNEaL_blog.html?utm_term=.404ef8fa2006$

¹⁷¹ http://journals.sagepub.com/doi/abs/10.1177/0149206310392233

¹⁷² https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1375082

lobbyists have drafted financial bills almost in their entirety, ¹⁷³ and Facebook lobbyists have threatened to pull investment projects from Europe and Canada if their demands were not met. ¹⁷⁴

The topic of lobbying today is tightly correlated to that of the "revolving door" of personnel from Congress to private lobbying organizations, where their influence and connections become powerful tools. In the 1970s, less than 5% of retiring senators went on to become lobbyists, while today almost 50% do. Part of the reason are the extremely lucrative job offers they get, sometimes including a salary fifteen times higher. Quoting former lobbyist Jack Abramoff: "I would say to [a member of Congress], 'When you're done working on the Hill, we'd very much like you to consider coming to work for us.' The moment I said that, we owned them. And what does that mean? Every request from our office, every request of our clients, everything that we want, they're gonna do."



CORPORATIONS

In 1955, General Motors was at the top of the Fortune's Global 500 - a list of the largest companies in the world - with a revenue of almost 10 billion dollars. Today, Walmart is king with over 500 billion; that's more than the joint revenue of every single company

¹⁷³ https://dealbook.nytimes.com/2013/05/23/banks-lobbyists-help-in-drafting-financial-bills/

¹⁷⁴https://www.theguardian.com/technology/2019/mar/02/facebook-global-lobbying-campaign-against-d ata-privacy-laws-investment

¹⁷⁵ https://www.vox.com/2016/1/15/10775788/revolving-door-lobbying

¹⁷⁶ https://www.republicreport.org/2012/make-it-rain-revolving-door/

¹⁷⁷⁷ http://thinkprogress.org/jack-abramoff-explains-how-he-owned-members-of-congress-and-their-staff-8e
2dff027c9b

¹⁷⁸ http://archive.fortune.com/magazines/fortune/fortune500_archive/full/1955/

¹⁷⁹ http://fortune.com/global500/

in 1955. In fact, many of these corporations are so big that they surpass the revenue of entire countries. 180

One of the many reasons these corporations have grown so much is due to extreme leniency shown by authorities, resulting in minor or no punishment after discovery of law breaking. Serious cases of corruption and money laundering have resulted in authorities going as far as to insist on fining companies rather than prosecuting, and the trend has been worsening. From 1992 to 2004, the Justice Department reached 25 agreements with corporations ending in non-prosecutions, while during the following 8 years it reached almost 250. One of the most prominent examples of this is perhaps the worldwide financial crisis of 2007–2008, for which only a single person was convicted and did two and a half years of sentence.

An extension of this issue relates to the so called "too big to fail" companies, which are seen as crucial to the economy and thus will be supported by the government in case of failure. These protective policies allow companies to seek to profit by them, deliberately taking high risk positions and engaging in aggressive activities knowing they have a safety net. Despite insistence by experts (including nobel-prize winners, professors, and heads of banks, among others) that such institutions should be broken up, little to no action has been taken by most governments 184,185

Part of the reason companies today behave in such a manipulative and profit-centered manner is perhaps due to the fact that one in five CEOs are clinical psychopaths, alongside people in upper level management positions who consistently are shown to display dark triad traits. This means a sizeable amount of people in power positions are manipulative, self-centered, and feel little to no remorse for their actions, thus setting the tone of corporate culture and ideology in the companies they lead.

MERGERS AND ACQUISITIONS

The results of merger and acquisition (M&A) projects can carry massive benefits:

- Increase in presence, growth, and reputation
- Bigger ownership of the industry's market share
- Reduction of market entry barriers
- Diversification of products and services
- Access to intellectual property (e.g. patents), research, and quality staff
- Reduction of costs via shared budgets and resources
- Removal of duplicated facilities/steps in production

¹⁸⁰ http://www.globaljustice.org.uk/sites/default/files/files/resources/corporations_vs_governments_final.pdf

¹⁸¹ https://www.theguardian.com/business/2012/dec/11/hsbc-fine-prosecution-money-laundering

¹⁸² https://www.propublica.org/article/the-rise-of-corporate-impunity

https://www.forbes.com/sites/tedkaufman/2013/07/29/why-doj-deemed-bank-execs-too-big-to-jail/https://ritholtz.com/2013/03/top-economists-and-financial-experts-say-we-must-break-up-the-giant-banks

¹⁸⁵ https://www.documentcloud.org/documents/1150099-uhlmann-paper.html

¹⁸⁶ https://en.wikipedia.org/wiki/Dark_triad

¹⁸⁷ https://link.springer.com/article/10.1007/s10551-010-0450-0

https://www.telegraph.co.uk/news/2016/09/13/1-in-5-ceos-are-psychopaths-australian-study-finds/

This process is happening today at a record pace, with the last two years being the highest in history in number of deals and high-dollar deals, and Google, Amazon, Apple, Facebook, and Microsoft alone having acquired over 500 companies in the last decade. These and other titanic corporations are targeting high-valuation companies as well as up-and-coming startups in order to expand and acquire cutting edge technology.

80% of startups fail before their first year, ¹⁹² and from those that remain, 50% consider being acquired their long-term goal. ¹⁹³ This gap between a large number of small companies aiming to be acquired and a select number of massive companies feeding off competition are impacting consumers due to the resulting higher prices and lack of product and service diversity, all characteristics of monopolization. ¹⁹⁴

MARKETING

Over the last few centuries marketing strategies have radically changed the way companies interact with the public.

- Rebranding: In the face of negative reputation or fading interest from consumers, many companies choose to invest in rebranding campaigns instead of in research or improvement of their products. Rebranding often results in higher share prices (as high as an eightfold increase), and can be a tool used to avoid copyright infringement.
- Product size: 2500 goods have become smaller in the last five years while maintaining the same prices, as research show products can be slowly shrunk without customers noticing or complaining.
- Video advertisement: Artificial intelligence has taken over decision making of titles and content in video communities like Youtube, where the use of clickbait and content that is nonsensical, violent, or sexual is reinforced due to the amount of views it gets. "Elsagate" has become a prominent example of this controversy, where kids are being manipulated into watching hours of advertisements, violence, sexually suggestive content, and criminal acts.

20

https://thehustle.co/2017-biggest-mergers-and-acquisitions/

¹⁹⁰ https://www.ft.com/content/b7e67ba4-c28f-11e8-95b1-d36dfef1b89a

https://www.marketwatch.com/story/americas-most-successful-companies-are-killing-the-economy-20 17-05-24

¹⁹² https://eu.usatoday.com/story/money/business/small-business-central/2017/05/21/what-percentage-of-businesses-fail-in-their-first-year/101260716/

¹⁹³https://www.svb.com/uploadedFiles/Content/Trends_and_Insights/Reports/Startup_Outlook_Report/US%20Startup%20Outlook%20Report%202017.pdf

¹⁹⁴ https://www.bbc.com/news/business-34666150

¹⁹⁵ https://www.campaignlive.co.uk/article/changing-brand-names-risk-worthy-reward/1407839

¹⁹⁶ https://www.researchgate.net/publication/271104927_Re-Branding_and_Its_Effects_on_Consumer_Perceptions_A_Case_Study_of_a_Zimbabwean_Bank

https://www.marijuanaventure.com/infringing-copyright-rebrand-now/

¹⁹⁹⁸ https://www.theglobeandmail.com/business/article-valeant-to-change-its-name-to-bausch-health-repor

¹⁹⁹ https://en.wikipedia.org/wiki/Just-noticeable_difference

²⁰⁰ https://www.thesun.co.uk/money/4086520/shrinkflation-products-smaller/

²⁰¹¹ https://www.thesun.co.uk/tech/3992617/youtube-video-makers-secretly-manipulating-your-kids-by-showing-them-adverts-sick-inappropriate-content-and-criminal-acts-experts-claim/

²⁰² https://en.wikipedia.org/wiki/Elsagate

- Public Perception: Many companies have manipulated the market to inflate prices as they see fit. Examples include the De Beers cartel, which has monopolized the world trade of diamonds since 1888, inflating prices by over 50% and creating the belief diamonds are important in marriage, and Luxottica, an eyewear company that owns the vast majority of popular brands worldwide (including Prada, Armani, Burberry, Ray-Ban, Persol, Oakley, and many others), and is known to inflate prices by at times 1000%.
- Medicine development: Due to the fact research of vaccines and treatment for certain diseases is not commercially profitable, medical companies often disregard them in favor of those that generate the most profit, even if they are of minor impact or benign. These "Neglected Tropical Diseases" (NTD) include dengue, yellow fever, rabies, leprosy, and syphilis, among many others.
- Information handling: Marketing teams today are forgers and protectors of companies' reputations, regularly hiding bad news and featuring good news. An example of these extremes involved Walt Disney employees in 2015, when over two hundred were forced to train their replacements before being laid off, with the threat of severance compensation being withheld if they refused. To this day, little to no attention has ever been brought to the topic. In contrast, a year later McDonalds raised the minimum wage of their employees to \$15 an hour, and received massive backlash from the public.
- Microtransactions: Because 0.1% of users generate 50% of revenue from in-app purchases, studios purposely ignore user feedback and maintain broken mechanics and systems, hoping this minimal fraction of users are willing to spend money to get past the poorly-made parts of the service. Lootboxes in gaming have become a particularly easy source of income for companies, as studies show they are linked to problem gambling, making users addicted and prone to repeatedly spending money to try their luck. This is especially true for kids, with cases such as that of an 11 year-old who spent \$7,500 on in-app purchases.
- Customer service: Automated voice menus, being put on hold, authorization
 escalations, and other hassles are created and enforced on purpose in customer
 service centers to deter users from escalating complaints or insisting on
 terminating a service. These added hassles results in higher profits, explaining

²⁰³ <u>https://blog.hubspot.com/marketing/diamond-de-beers-marketing-campaign</u>

²⁰⁴ http://diamondssuck.com/

²⁰⁵ https://en.wikipedia.org/wiki/Luxottica

²⁰⁰⁶ https://www.forbes.com/sites/anaswanson/2014/09/10/meet-the-four-eyed-eight-tentacled-monopoly-that-is-making-your-glasses-so-expensive/#7c89d2576b66

²⁰⁷ https://en.wikipedia.org/wiki/Neglected_tropical_diseases

^{208/}https://arstechnica.com/tech-policy/2018/04/curing-disease-not-a-sustainable-business-model-goldman-sachs-analysts-say/

²⁰⁹ https://theundercoverrecruiter.com/mcdonalds-vs-disney-effect/

²¹⁰ https://www.reuters.com/article/us-usa-wages-protest/hundreds-protest-over-minimum-wage-at-mcdonalds-stockholder-meeting-idUSKBN18K2EB

²¹¹ https://www.intelligenteconomist.com/economics-of-microtransactions/

²¹² https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0206767

²¹³ http://www.escapistmagazine.com/news/view/132582-Most-Freemium-Revenue-Comes-From-Less-Than-1-of-Gamers

²¹⁴https://gamervw.com/2018/12/04/the-controversy-with-loot-boxes-how-children-become-addicted-to-microtransactions

part of the correlation between some of the most hated companies by consumers being also also among the most profitable. 215,216

PLANNED OBSOLESCENCE

Planned obsolescence refers to the design of a product with an artificial limited time of use, in order for it to become obsolete so the consumer has to purchase it again. Two ways exist to create planned obsolescence:

- 1. **By function:** Either by adding breakable parts, lowering their quality, or making items disposable (e.g., coffee cups).
- 2. **By perception:** By making items undesirable despite them being still functional (e.g., clothing fashion).

A clear case of obsolescence was seen with the Phoebus cartel, which in the 1920s started fixing the useful life of incandescent light bulbs to control their sale and manufacture. Today, 50% of typical incandescent light bulbs still fail after ~2 months of use, in comparison to those before the change in design which could last years or even decades. An old design lightbulb in California for example has been continuously on since 1901. 18

Studies have shown that planned obsolescence is widespread and worsening: The average lifespan of electronics has been falling steadily over time. Also falling is the long-term usage of home products; today, consumers trash 99% of products within 6 months of purchase.

²¹⁵ https://www.bloomberg.com/news/articles/2013-12-17/proof-that-it-pays-to-be-americas-most-hated-c ompanies

²¹⁶ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2832927

²¹⁷ https://www.newyorker.com/business/currency/the-l-e-d-quandary-why-theres-no-such-thing-as-built-to-last

https://bits.blogs.nytimes.com/2009/02/11/how-long-did-you-say-that-bulb-will-last

²¹⁹https://www.theguardian.com/environment/2015/mar/03/lifespan-of-consumer-electronics-is-getting-s horter-study-finds

²²⁰ https://medium.com/@ryanfinlay/they-used-to-last-50-years-c3383ff28a8e

<u>and_statistics/world_waste_facts</u>