

MONEY AND POLITICS

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INTRODUCTION¹

In former times, and also today, many countries that call themselves democracies are actually oligarchies, controlled by the richest members of society. This is because, notoriously, the votes of politicians can be bought. It would be highly desirable to sever the connection between money and politics, but the task of doing so is very difficult.

Today, the Scandinavian countries, Denmark, Norway, Sweden, Finland and Iceland, are nearer to being true democracies than most other countries in the world. This is because the contrast between rich and poor people is far less than in most other nations. The Scandinavian countries have very high and steeply progressive income taxes.

In Scandinavian countries, the rich are so heavily taxed that it is difficult to become extremely rich. Nor can one be very poor. Extreme poverty has been eliminated by Scandinavian social safety nets. This is, of course, a form of socialism, but one should be aware that the Scandinavian nations have market economies, with large private sectors.

In his book with Kate Pickett entitled *The spirit level*, the British social epidemiologist Richard G. Wilkinson has presented facts showing that societies with more equal distribution of incomes have better health, fewer social problems such as violence, drug abuse, teenage births, mental illness, obesity, and others, and are more cohesive than ones in which the gap between the rich and poor is greater.

Furthermore, when the contrast between rich and poor is very great, economies do not function well. The poor do not have the money needed to buy back the output of their societies, while the rich are too few in numbers to do so.

An overwhelmingly important reason for getting money out of politics is the climate crisis that we face today. If politicians continue to use money as a guide in making decisions, we will lose the battle to save human society and the biosphere from the catastrophic long term effects of climate change,

What will happen if we lose the battle to save the earth? Then most of the world will become uninhabitable, starting with tropical countries, low-lying countries such as Bangladesh and the Netherlands, and all coastal cities. In the long term, almost all of the earth's surface will become uninhabitable, and the global population of humans will become correspondingly reduced.

¹This book makes use of book chapters and articles that I have previously published, but much new material has been added.

There is a danger that the struggle for habitable space will result in deadly conflicts.

Meanwhile, if we fail to win the battle against climate catastrophe, vast numbers of animals and plants, unable to migrate to more habitable regions, will become extinct.

These are reasons why all of us must work with dedication to get money out of politics.

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Chapter 1

ECONOMICS WITHOUT ETHICS

“Like him who perverts the revenues of some pious foundation to profane purposes, he pays the wages of idleness with those funds which the frugality of his forefathers had, as it were, consecrated to the maintenance of industry.”

Adam Smith (describing an industrialist who fails to reinvest his profits)

“That population cannot increase without the means of subsistence is a proposition so evident that it needs no illustration. That population does invariably increase, where there are means of subsistence, the history of every people who have ever existed will abundantly prove. And that the superior power cannot be checked without producing misery and vice, the ample portion of these two bitter ingredients in the cup of human life, and the continuation of the physical causes that seem to have produced them, bear all too convincing a testimony”

Thomas Robert Malthus

1.1 Introduction

The history of the epoch that immediately preceded the modern era can cast much light on the challenges facing us today, so we will begin by reviewing it. Until the start of the Industrial Revolution in the 18th and 19th centuries, human society maintained a more or less sustainable relationship with nature. However, with the beginning of the industrial era, traditional ways of life, containing both ethical and environmental elements, were replaced by the money-centered, growth-oriented life of today, from which these vital elements are missing.

1.2 Should greed be our guide?

According to the great classical economist Adam Smith (1723-1790), self-interest (even greed) is a sufficient guide to human economic actions. The passage of time has shown that Smith was right in many respects. The free market, which he advocated, has turned out to be the optimum prescription for economic growth. However, history has also shown that there is something horribly wrong or incomplete about the idea that individual self-interest alone, uninfluenced by ethical and ecological considerations, and totally free from governmental intervention, can be the main motivating force of a happy and just society. There has also proved to be something terribly wrong with the concept of unlimited economic growth. Here is what actually happened:

1.3 Industrialism in 18th and 19th centuries

Highland Clearances and Enclosure Acts

In pre-industrial Europe, peasant farmers held a low but nevertheless secure position, protected by a web of traditional rights and duties. Their low dirt-floored and thatched cottages were humble but safe refuges. If a peasant owned a cow, it could be pastured on common land.

With the invention of the steam engine and the introduction of spinning and weaving machines towards the end of the 18th Century, the pattern changed, at first in England, and afterwards in other European countries. Land-owners in Scotland and Northern England realized that sheep were more profitable to have on the land than “crofters” (i.e., small tenant farmers), and families that had farmed land for generations were violently driven from their homes with almost no warning. The cottages were afterwards burned to prevent the return of their owners.

The following account of the Highland Clearances has been left by Donald McLeod, a crofter in the district of Sutherland: “The consternation and confusion were extreme. Little or no time was given for the removal of persons or property; the people striving to remove the sick or helpless before the fire should reach them; next struggling to save the most valuable of their effects. The cries of the women and children; the roaring of

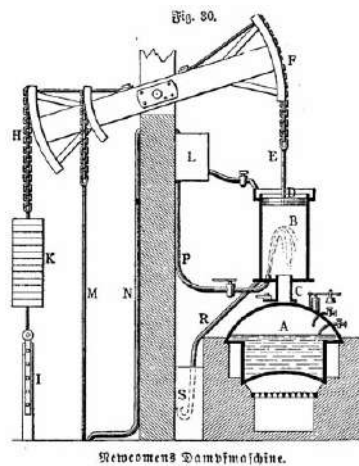


Figure 1.1: **Newcomen's steam engine** , (from Hmlopedia)

the affrighted cattle, hunted at the same time by the yelling dogs of the shepherds amid the smoke and fire, altogether presented a scene that completely baffles description - it required to be seen to be believed... The conflagration lasted for six days, until the whole of the dwellings were reduced to ashes and smoking ruins."

Between 1750 and 1860, the English Parliament passed a large number of "Enclosure Acts", abolishing the rights of small farmers to pasture their animals on common land that was not under cultivation. The fabric of traditional rights and duties that once had protected the lives of small tenant farmers was torn to pieces. Driven from the land, poor families flocked to the towns and cities, hoping for employment in the textile mills that seemed to be springing up everywhere.

Working conditions in 19th century England

According to the new rules by which industrial society began to be governed, traditions were forgotten and replaced by purely economic laws. Labor was viewed as a commodity, like coal or grain, and wages were paid according to the laws of supply and demand, without regard for the needs of the workers. Wages fell to starvation levels, hours of work increased, and working conditions deteriorated.

John Fielden's book, "The Curse of the Factory System" was written in 1836, and it describes the condition of young children working in the cotton mills. "The small nimble fingers of children being by far the most in request, the custom instantly sprang up of procuring 'apprentices' from the different parish workhouses of London, Birmingham and elsewhere... Overseers were appointed to see to the works, whose interest it was to work the children to the utmost, because their pay was in proportion to the quantity of pay that they could exact."

"Cruelty was, of course, the consequence; and there is abundant evidence on record to show that in many of the manufacturing districts, the most heart-rending cruelties were



Figure 1.2: A watercolor painting by Vincent van Gogh showing wives of Belgian miners carrying bags of coal. (Public domain)



Figure 1.3: London during the industrial revolution (Public domain)

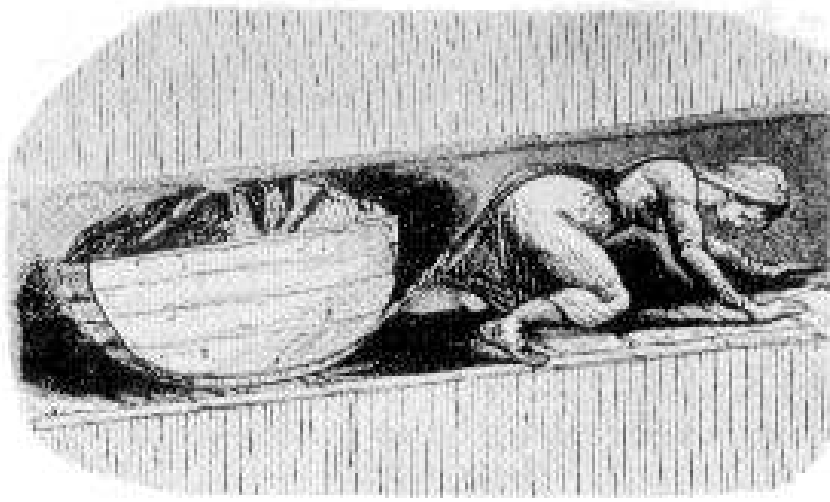


Figure 1.4: **A girl pulling a coaltub through the narrow space left by removal of coal from a seam.** (Public domain)

practiced on the unoffending and friendless creatures... that they were flogged, fettered and tortured in the most exquisite refinements of cruelty, that they were in many cases starved to the bone while flogged to their work, and that they were even in some instances driven to commit suicide... The profits of manufacture were enormous, but this only whetted the appetite that it should have satisfied.”

Dr. Peter Gaskell, writing in 1833, described the condition of the English mill workers as follows:

“The vast deterioration in personal form which has been brought about in the manufacturing population during the last thirty years... is singularly impressive, and fills the mind with contemplations of a very painful character... Their complexion is sallow and pallid, with a peculiar flatness of feature caused by the want of a proper quantity of adipose substance to cushion out the cheeks. Their stature is low - the average height of men being five feet, six inches... Great numbers of the girls and women walk lamely or awkwardly... Many of the men have but little beard, and that in patches of a few hairs... (They have) a spiritless and dejected air, a sprawling and wide action of the legs...”

“Rising at or before daybreak, between four and five o’clock the year round, they swallow a hasty meal or hurry to the mill without taking any food whatever... At twelve o’clock the engine stops, and an hour is given for dinner... Again they are closely immured from one o’clock till eight or nine, with the exception of twenty minutes, this being allowed for tea. During the whole of this long period, they are actively and unremittingly engaged in a crowded room at an elevated temperature.”

Dr. Gaskell described the housing of the workers as follows:

“One of the circumstances in which they are especially defective is that of drainage and water-closets. Whole ranges of these houses are either totally undrained, or very partially... The whole of the washings and filth from these consequently are thrown into

the front or back street, which, often being unpaved and cut into deep ruts, allows them to collect into stinking and stagnant pools; while fifty, or even more than that number, having only a single convenience common to them all, it is in a very short time choked with excrementous matter. No alternative is left to the inhabitants but adding this to the already defiled street."

"It frequently happens that one tenement is held by several families... The demoralizing effects of this utter absence of domestic privacy must be seen before they can be thoroughly appreciated. By laying bare all the wants and actions of the sexes, it strips them of outward regard for decency - modesty is annihilated - the father and the mother, the brother and the sister, the male and female lodger, do not scruple to commit acts in front of each other which even the savage keeps hid from his fellows."

1.4 Adam Smith's invisible hand is at our throats

The invisible hand

As everyone knows, Adam Smith invented the theory that individual self-interest is, and ought to be, the main motivating force of human economic activity, and that this, in effect, serves the wider social interest. He put forward a detailed description of this concept in an immense book, “The Wealth of Nations” (1776).

Adam Smith (1723-1790) had been Professor of Logic at the University of Glasgow, but in 1764 he withdrew from his position at the university to become the tutor of the young Duke of Buccleuch. In those days a Grand Tour of Europe was considered to be an important part of the education of a young nobleman, and Smith accompanied Buccleuch to the Continent. To while away the occasional dull intervals of the tour, Adam Smith began to write an enormous book on economics which he finally completed twelve years later. He began his “Inquiry into the Nature and Causes of the Wealth of Nations” by praising division of labor. As an example of its benefits, he cited a pin factory, where ten men, each a specialist in his own set of operations, could produce 48,000 pins in a day. In the most complex civilizations, Smith stated, division of labor has the greatest utility.

The second factor in prosperity, Adam Smith maintained, is a competitive market, free from monopolies and entirely free from governmental interference. In such a system, he tells us, the natural forces of competition are able to organize even the most complex economic operations, and are able also to maximize productivity. He expressed this idea in the following words:

“As every individual, therefore, endeavors as much as he can, both to employ his capital in support of domestic industry, and so to direct that industry that its produce may be of greatest value, each individual necessarily labours to render the annual revenue of the Society as great as he can.”

“He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of greatest value, he intends only his own gain; and he is in this, as in many other cases, led by an invisible hand to promote an end that was no part of his intention. Nor is it always the worse for Society that it was no part of it. By pursuing his own interest, he frequently promotes that of Society more effectively than when he really intends to promote it.”

For example, a baker does not bake bread out of an unselfish desire to help his fellow humans; he does so in order to earn money; but if he were not performing a useful service, he would not be paid. Thus the “invisible hand” guides him to do something useful. Free competition also regulates prices: If the baker charges too much, he will be undersold. Finally, if there are too many bakers, the trade will become so unprofitable that some bakers will be forced into other trades. Thus highly complex operations are automatically regulated by the mechanisms of the free market. “Observe the accommodation of the most common artificer or day labourer in a civilized and thriving country”, Smith continues, “and



Figure 1.5: **Adam Smith (1723-1790)** (Public domain)

you will perceive that the number of people of whose industry a part, though but a small part, has been employed in securing him this accommodation, exceeds all computation. The woolen coat, which covers the day-labourer, as coarse and rough as it may seem, is the joint labour of a great multitude of workmen. The shepherd, the sorter of wool, the wool-comber, the carder, the dyer, the scribbler, the spinner, the weaver, the fuller, the dresser, with many others, must all join their different arts to complete even the most homely production. How many merchants and carriers, besides, must have been employed... how much commerce and navigation... how many ship-builders, sailors, sail-makers, rope-makers...”

Reinvestment and growth

An important feature of Adam Smith’s economic model is that it is by no means static. The virtuous manufacturer does not purchase pearl necklaces for his wife; he reinvests his profits, buying more machinery or building new factories. An industrialist who ignores the commandment to reinvest is “...like him who perverts the revenues of some pious foundation

to profane purposes; he pays the wages of idleness with those funds which the fragility of his forefathers had, as it were, consecrated to the maintenance of industry.”

The expansion of the system will not be slowed, Smith maintained, by shortages of labor, because “...the demand for men, like that for any other commodity, necessarily regulates the production of men.” Smith did not mean that more births would occur if the demand for workers became greater. He meant that if wages began to rise above the lowest level needed to maintain life, more children of the workers would survive. In those days, the rates of infant and child mortality were horrendous, particularly among the half-starved poor. “It is not uncommon”, Smith wrote, “in the Highlands of Scotland, for a mother who has borne twenty children not to have two alive.”

Adam Smith’s ideas were enthusiastically adopted by the rising class of manufacturers and by their representatives in government. The reverence shown to him can be illustrated by an event that occurred when he visited England’s Prime Minister, William Pitt, and his Cabinet. The whole gathering stood up when Smith entered. “Pray be seated, gentlemen”, Smith said. “Not until you first are seated Sir”, Pitt replied, “for we are all your scholars.”

History has shown that Adam Smith was right in many respects. The free market is indeed a dynamo that produces economic growth, and it is capable of organizing even the most complex economic endeavors. Through Adam Smith’s “invisible hand”, self interest is capable of guiding the economy so that it will maximize the production of wealth. However, history has also shown the shortcomings of a market that is totally free of governmental regulation.

The landowners of Scotland were unquestionably following self-interest as they burned the cottages of their crofters; and self-interest motivated overseers as they whipped half-starved child workers in England’s mills. Adam Smith’s “invisible hand” no doubt guided their actions in such a way as to maximize production. But whether a happy and just society was created in this way is questionable. Certainly it was a society with large areas of unhappiness and injustice. Self-interest alone was not enough. A society following purely economic laws - a society where selfishness is exalted as the mainspring for action - lacks both the ethical and ecological dimensions needed for social justice, widespread happiness, and sustainability¹.

Suggestions for further reading

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¹In fact, Adam Smith himself would have accepted this criticism of his enthronement of self-interest as the central principle of society. He believed that his “invisible hand” would not work for the betterment of society except within the context of a certain amount of governmental regulation. His modern Neoliberal admirers, however, forget this aspect of Smith’s philosophy, and maintain that market forces alone can achieve a desirable result.

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Chapter 2

MONEY AND SUPPORT FOR HITLER

2.1 Money motivated the English upper class

Why did prominent members of the British upper class allow Germany to rearm during the period between World Wars I and II? Why did they support the rise of Hitler? The answer is simple. A revolution had occurred in Russia in 1917. It was feared that a similar revolution might occur elsewhere in Europe, and even in England, taking away the privileges of the upper class. Germany and Hitler were regarded as bulwarks against the dreaded specter of Communism or Socialism.

Thus excessive love of money motivated actions that later very nearly led to the conquest of England by Hitler's Nazis.

2.2 Krupp, Thyssen and Germany's steel industry

The Krupp family business, known as Friedrich Krupp AG, was the largest company in Europe at the beginning of the 20th century. It was important to weapons development and production in both world wars. One of the most powerful dynasties in European history, for 400 years Krupp flourished as the premier weapons manufacturer for Germany. From the Thirty Years' War until the end of the Second World War, they produced everything from battleships, U-boats, tanks, howitzers, guns, utilities, and hundreds of other commodities.

The Thyssen family similarly profited from the arms races prior to World War I and World War II. August Thyssen (1842-1925) founded a large iron and steel company in the Ruhr district of Germany, and was succeeded by his son Fritz Thyssen, who greatly aided Hitler's rise to power.



Figure 2.1: Map of European colonies in Africa in 1914, just before the First World War. Source: www.createdebate.com

2.3 Colonialism and the outbreak of the First World War

The First World War broke out approximately 100 years ago, and much thought has been given to the causes of this tragic event, whose consequences continue to cast a dark shadow over the human future. When the war ended four years later, ten million young men had been killed and twenty million wounded, of whom six million were crippled for life. The war had cost 350,000,000,000 1919 dollars. This was a calculable cost; but the cost in human suffering and brutalization of values was incalculable.

It hardly mattered whose fault the catastrophe had been. Perhaps the Austrian government had been more to blame than any other. But blame for the war certainly did not rest with the Austrian people nor with the young Austrians who had been forced to fight. However, the tragedy of the First World War was that it created long-lasting hatred between the nations involved; and in this way it led, only twenty years later, to an even more catastrophic global war, during the course of which nuclear weapons were developed.

Most scholars believe that competing colonial ambitions played an important role in setting the stage for the First World War. A second factor was an armaments race between European countries, and the huge profits gained by arms manufacturers. Even at that time, the Military-industrial complex was firmly established; and today it continues to be the greatest source of war, together with neocolonialism.¹

¹<http://alphahistory.com/worldwar1/imperialism/>
<http://www.flowofhistory.com/units/etc/19/26>
<http://alphahistory.com/worldwar1/militarism/>



Figure 2.2: Prescott Bush, the father of George H.W. Bush and grandfather of George W. Bush, supported Hitler's rise to power with large financial contributions to the Nazi Party. The photo shows them together. Source: topinfo-post.com

2.4 Prescott Bush and Hitler

Prescott Sheldon Bush (1895-1972), the father of George H.W. Bush and grandfather of George W. Bush, actively supported the revival of Germany's armament's industry in the 1930's, as well as supplying large amounts of money to Adolf Hitler's Nazi Party.²

An article in *The Guardian*³, Ben Aris and Dubcab Campbell write that "George Bush's grandfather, the late US senator Prescott Bush, was a director and shareholder of companies that profited from their involvement with the financial backers of Nazi Germany.

"The Guardian has obtained confirmation from newly discovered files in the US National Archives that a firm of which Prescott Bush was a director was involved with the financial architects of Nazism.

"His business dealings, which continued until his company's assets were seized in 1942 under the Trading with the Enemy Act, has led more than 60 years later to a civil action for damages being brought in Germany against the Bush family by two former slave laborers at Auschwitz and to a hum of pre-election controversy.

"The debate over Prescott Bush's behavior has been bubbling under the surface for some time. There has been a steady Internet chatter about the "Bush/Nazi" connection,

²<https://www.youtube.com/watch?v=TnHnjmCYjy4>
<https://www.youtube.com/watch?v=7BZCfbrXKs4>
<https://www.youtube.com/watch?v=7BZCfbrXKs4>
<http://www.georgewalkerbush.net/bushfamilyfundedhitler.htm>
<http://www.theguardian.com/world/2004/sep/25/usa.secondworldwar>
³September 25, 2004

much of it inaccurate and unfair. But the new documents, many of which were only declassified last year, show that even after America had entered the war and when there was already significant information about the Nazis' plans and policies, he worked for and profited from companies closely involved with the very German businesses that financed Hitler's rise to power. It has also been suggested that the money he made from these dealings helped to establish the Bush family fortune and set up its political dynasty.

"Bush was also on the board of at least one of the companies that formed part of a multinational network of front companies to allow [Fritz] Thyssen to move assets around the world.

"Thyssen owned the largest steel and coal company in Germany and grew rich from Hitler's efforts to re-arm between the two world wars. One of the pillars in Thyssen's international corporate web, UBC, worked exclusively for, and was owned by, a Thyssen-controlled bank in the Netherlands. More tantalizing are Bush's links to the Consolidated Silesian Steel Company (CSSC), based in mineral rich Silesia on the German-Polish border. During the war, the company made use of Nazi slave labor from the concentration camps, including Auschwitz. The ownership of CSSC changed hands several times in the 1930s, but documents from the US National Archive declassified last year link Bush to CSSC, although it is not clear if he and UBC were still involved in the company when Thyssen's American assets were seized in 1942."

2.5 Fritz Thyssen supports Hitler's rise to power

"In 1923, Thyssen met former General Erich Ludendorff, who advised him to attend a speech given by Adolf Hitler, leader of the Nazi Party. Thyssen was impressed by Hitler and his bitter opposition to the Treaty of Versailles, and began to make large donations to the party, including 100,000 gold marks in 1923 to Ludendorff. In this he was unusual among German business leaders, as most were traditional conservatives who regarded the Nazis with suspicion. Thyssen's principal motive in supporting the National Socialists was his great fear of communism; he had little confidence that the various German anticommunist factions would prevent a Soviet-style revolution in Germany unless the popular appeal of communism among the lower classes was co-opted by an anticommunist alternative. Postwar investigators found that he had donated 650,000 Reichsmarks to right-wing parties, mostly to the Nazis, although Thyssen himself claimed to have donated 1 million marks to the Nazi Party. Thyssen remained a member of the German National People's Party until 1932, and did not join the Nazi Party (National Socialist German Workers' Party) until 1933.

"In November, 1932, Thyssen and Hjalmar Schacht were the main organizers of a letter to President Paul von Hindenburg urging him to appoint Hitler as Chancellor. Thyssen also persuaded the Association of German Industrialists to donate 3 million Reichsmarks to the Nazi Party (National Socialist German Workers' Party) for the March, 1933 Reichstag election. As a reward, he was elected a Nazi member of the Reichstag and appointed to the Council of State of Prussia, the largest German state (both purely honorary positions).

“Thyssen welcomed the suppression of the Communist Party, the Social Democrats and the trade unions. In 1934 he was one of the business leaders who persuaded Hitler to suppress the SA, leading to the “Night of the Long Knives”. Thyssen accepted the exclusion of Jews from German business and professional life by the Nazis, and dismissed his own Jewish employees. But as a Catholic, he objected to the increasing repression of the Roman Catholic Church, which gathered pace after 1935: in 1937 he sent a letter to Hitler, protesting the persecution of Christians in Germany.[4] The breaking point for Thyssen was the violent pogrom against the Jews in November 1938, known as Kristallnacht, which caused him to resign from the Council of State. By 1939 he was also bitterly criticizing the regime’s economic policies, which were subordinating everything to rearmament in preparation for war.”

2.6 Unity Mitford and Hitler

Unity Valkyrie Freeman-Mitford (1914-1948) was one of the two Mitford sisters who became notorious for their advocacy of fascism and anti-semitism. Unity’s sister Diana left her husband to have an affair with Sir Oswald Mosley, leader of the British Union of Fascists, whom she later married.

Mosley’s son, Nicholas, stated that: “Unity became a very extrovert member of the party, which was her way ... She joined my father’s party and she used to turn up, she used to go around in a black shirt uniform, and she used to turn up at communist meetings and she used to do the fascist salute and heckle the speaker. That was the sort of person she was”. He adds that although his father admired Unity’s commitment, Mosley felt “She wasn’t doing him any good, because she was making an exhibition of herself.”

The two sisters, Unity and Diana, travelled to Germany to attend the Nuremberg Rally as part of a delegation from the British Union of Fascists. Unity said later “The first time I saw him I knew there was no one I would rather meet.” According to her biographer, Anne de Courcy, “The Nuremberg rally had a profound effect on both Diana and Unity [...] Unity was already, as it were, convinced about Hitler, but this turned conviction into worship. From then on she wanted to be near Hitler as much as possible”

In 1934, Unity returned to Germany, where she enrolled in a language school in Munich, near to the Nazi headquarters. A biographer, Pryce Jones commented that “She set her mind on getting Hitler, and she discovered that Hitler’s movements could be ascertained. It’s one of the extraordinary things about Hitler’s daily life that he was so available to the public. You knew which café he’d be in, you knew which restaurant he’d be in, which hotel, and he would just go and meet people over sticky buns and cakes, and it was possible to meet him like that. And he was in the habit of eating in the Osteria Bavaria in Munich and she started sitting in the Osteria Bavaria every day. So he would have to come into the front part of the restaurant where there was this English girl.”

After ten months of this stalking, Hitler finally invited Unity over to his table. They talked for 30 minutes, and Hitler paid her bill. In a letter to her father, Unity wrote, “It



Figure 2.3: **David Bertram Ogilvy Freeman-Mitford, 2nd Baron Redesdale (1878-1958), with his family in 1928. He was a fascist and anti-semite, like his daughters, Unity and Diana.**

was the most wonderful and beautiful [day] of my life. I am so happy that I wouldn't mind a bit, dying. I'd suppose I am the luckiest girl in the world. For me he is the greatest man of all time".

For his part, Hitler was fascinated with this young blond English girl whose middle name was Valkyrie, and who seemed to be curiously connected to German culture. In fact, Unity's grandfather, Algernon Freeman-Mitford, had been a friend of Hitler's idol, Richard Wagner. Unity and Hitler became close. She became part of his inner circle, and he used their friendship to make Eva Braun jealous.



Figure 2.4: Unity Mitford and Hitler. When Britain declared war on Germany in September 1939, a distraught Unity went to the Englischer Garten park in Munich (the English Garden) and shot herself in the head.

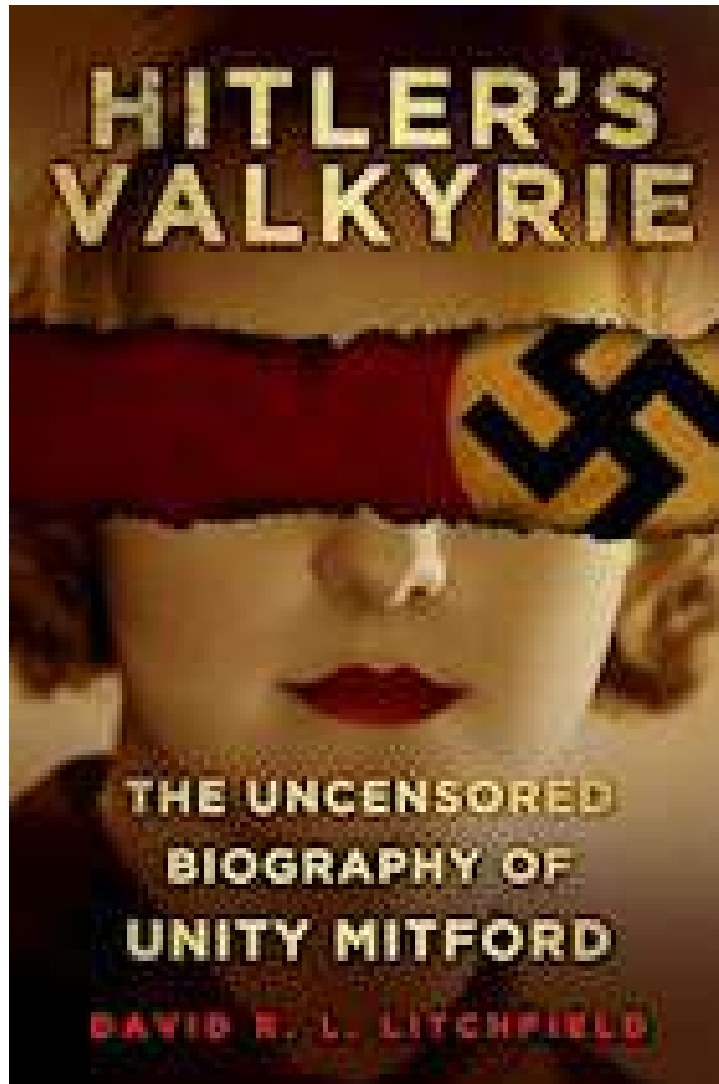


Figure 2.5: A book about the relationship between Unity and Hitler. Upon her return to Britain - with a bullet remaining lodged in her brain - Unity was vilified as an enemy of the state and the Home Office faced calls to have her interned.



Figure 2.6: Unity's sister Diana married Sir Oswald Mosley, leader of the British Union of Fascists.



Figure 2.7: Unity "was right in the inner circle of Nazi leadership" according to her biographer, David Pryce-Jones.

2.7 The British Union of Fascists

Some prominent members and supporters of the British Union of Fascists

- William Edward David Allen MP was the Unionist Member of Parliament for Belfast West.
- John Beckett MP was the Labour Member of Parliament for Peckham.
- Frank Bossard was a British Spy
- Patrick Boyle, 8th Earl of Glasgow was a member of the House of Lords
- Sir Malcolm Campbell was a racing motorist and motoring journalist.
- A. K. Chesterton was a journalist
- Lady Cynthia Curzon (known as 'Cimmie') was the second daughter of George Curzon, Lord Curzon of Kedleston, and the wife of Sir Oswald Mosley until her death in 1933.
- Robert Forgan MP was the Labour Member of Parliament for West Renfrewshire.
- Major General John Frederick Charles Fuller was a military historian and strategist.
- Billy Fullerton, leader of the Billy Boys gang from Glasgow.
- Arthur Gilligan was the Captain of the England cricket team
- Sir Reginald Goodall was a noted English conductor.
- Group Captain Sir Louis Leisler Greig was a British naval surgeon, courtier and intimate of King George VI.
- Harold Sidney Harmsworth, 1st Viscount Rothermere was the owner of the Daily Mail and a member of the House of Lords.
- Josslyn Hay, 22nd Earl of Erroll was a member of the House of Lords
- William Joyce, later nicknamed Lord Haw-Haw
- David Freeman-Mitford, 2nd Baron Redesdale, in addition to his wife, Lady Redesdale, and two of his daughters:
- Diana Mitford (Lady Mosley, after marriage to Sir Oswald Mosley in 1936)
- The Hon. Unity Mitford
- St John Philby was an explorer, and father of Kim Philby.
- Sir Alliott Verdon Roe was a pilot and businessman
- Edward Frederick Langley Russell, 2nd Baron Russell of Liverpool was a member of the House of Lords
- Lady Russell
- Edward Russell, 26th Baron de Clifford was a member of the House of Lords
- Hastings Russell, 12th Duke of Bedford was a member of the House of Lords
- Frank Cyril Tiarks was the Director of the Bank of England.
- Sir Frederick Toone was the manager of the England Cricket team



Figure 2.8: Sir Oswald Mosley, leader of the British Union of Fascists.



Figure 2.9: Italy's *Duce* Benito Mussolini (left) with Leader Oswald Mosley (right) during Mosley's visit to Italy in 1936.

2.8 Hitler and the Duke and Duchess of Windsor

The Windsors visit Germany in 1937

After marrying the twice-divorced American, Wally Simpson, Edward VIII had abdicated from his position as King of England. He and his new wife were afterwards known as the Duke and Duchess of Windsor. Edward's new wife was never accepted by British society, and Edward was anxious that she should experience the deference shown to the wife of royalty on an official visit. He therefore accepted an invitation to visit Germany, ostensibly to visit factories and examine the conditions of the workers.

According to Deborah Cadbury, "Adolf Hitler and his foreign minister, Joachim von Ribbentrop, savoured the prospect of a tour of Nazi Germany by Britain's ex-king. Of all the pieces moving swiftly across the chessboard of European diplomacy, the former king turning up in the heart of Berlin was an unexpected bonus."

According to Wikipedia, "The couple were chaperoned in Germany by Robert Ley, and they visited many factories - some producing materiel as part of the arms race - being greeted by the British national anthem and Nazi salutes, which were often returned by the Duke. They also dined regularly with high ranking Nazis such as Goebbels, Göring, von Ribbentrop, Speer, and, the highlight of their tour, Hitler in Berchtesgaden. There, he and the Duke had a long discussion, although it is uncertain precisely what they talked about as the minutes to their meeting were later lost. At the same time, the Duchess took

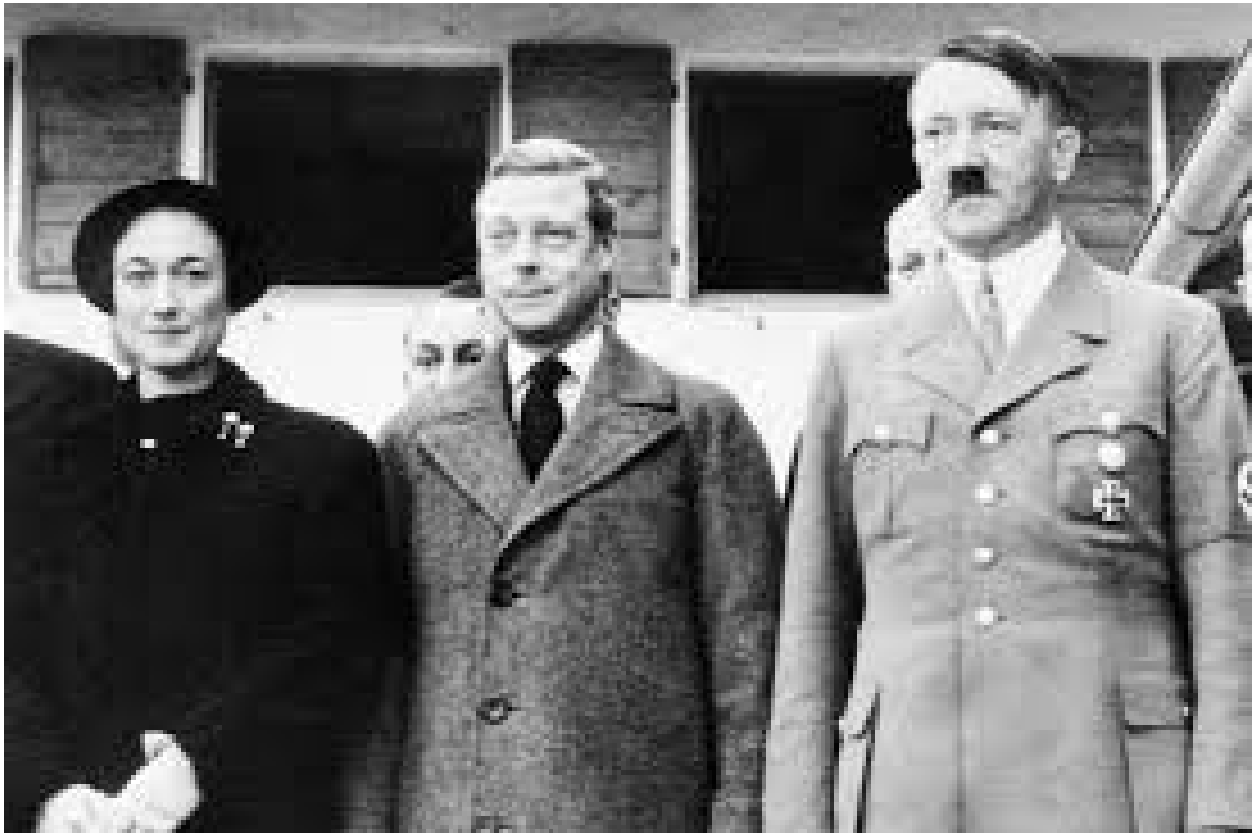


Figure 2.10: Hitler received the Duke and Duchess of Windsor with all the ceremony that would have been due to royalty.

high tea with Hitler's deputy, Rudolf Hess. Hitler was openly sympathetic to the Windsors while the British Government, for its part, was helpless to affect the course of events, particularly as it had forbidden its diplomatic staff in Germany to have any high-level interaction with the couple. Popular opinion of the couple soon declined, and the second leg of the Windsors' tour to America was cancelled."

Meeting with Hitler

The high point of the Windsor's tour was a meeting with Adolf Hitler in his Bavarian retreat, which was known as the Berghof. According to a contemporary witness, "The Duchess was visibly impressed with the Führer's personality, and he apparently indicated that they had become fast friends by giving her an affectionate farewell. [Hitler] took both their hands in his saying a long goodbye, after which he stiffened to a rigid Nazi salute that the Duke returned."



Figure 2.11: In fact, Hitler hoped to make the Windsors into a pro-Nazi King and Queen of England.

2.9 Hitler: A bulwark for the Establishment

Here are some quotations from an essay by Ian Keneth Buckley entitled *Australia's Foreign Wars, Origins, Costs, Future? 8. Supporting Germany's Rearmament & the Steady Slide to WWII*. Reading these quotations from the carefully researched essay, we can see clearly why so many prominent figures in England's "Establishment" made the fatal mistake of supporting German rearmament, despite the provisions of the Treaty of Versailles, and despite Winston Churchill's many warnings.

Hitler and a rearmed Germany were seen as bulwarks against the real threat: a more equal distribution of wealth. A communist revolution had taken place in Russia. It was feared that this revolution might spread to Germany or even to England. Hitler was known to be a fervent opponent of communism. He was known to use strong measures to suppress and ban the Communist Party, and he was known to have plans to increase German "lebensraum" by attacking Russia. Therefore, since communism was seen to be the great enemy, it was logical for the British Establishment to support the rearmament of Germany.

Understanding Appeasement: What drove British Policy?

To better understand the motivation behind the British governments' policy of so-called 'appeasement', in fact their 'accommodation' to and often frank encouragement of Germany's rearmament and foreign policy aims under Hitler, we need to go back to the early post-WWI scene. In Russia, long decades of domestic oppression capped by the terrible sufferings endured during the Great War, had culminated in the revolution of 1917 and, as related above, capitulation to Germany. Fighting on the Eastern front stopped, allowing Germany to transfer many divisions to the Western Front and for a while the possibility of a German victory seemed all too real. With all combatants close to exhaustion, it was a close call, but when the United States took sides in 1917 and entered the battle lines in force in mid 1918, the balance tipped in favour of the Allies. Only then was it possible for the European 'victors' finally to proudly proclaim not only that Germany had 'started the war' but that it, with its allies, had 'lost' it.

However, as we have seen, since all sides (other than the USA and Japan) had suffered such extreme human carnage, vast material wastage and debt, the greater reality was that all had lost, - millions of families bereaved, millions maimed in body and mind, all survivors exhausted, all prime combatant countries' economies ruined. Understandably, then, there was a very widespread dissatisfaction with the old ways of doing things which led most people not only to seek, but to *expect* genuine reforms. That brought great fear in high places - fear of any disturbance to the old ways, the 'old order', fear that revolution (which had already occurred in Russia and was all too close in Germany) might,

like a virus, infect other Western Powers - even France and Britain. This fear, already very strong at the war's end, was further aggravated by the failure to deal with the old social and economic inequalities, especially when these led to total collapse of the market economies, to the Great Depression with its massive unemployment and hardship in the midst of plenty. And the societal response to these greatly worsened conditions simply heightened the fears of the overly privileged to the point of obsession.

In the early days after World War I and Russia's revolution, the most urgent concern was for the German situation. Might not the defeated, suffering, demoralised Germans opt for a more egalitarian, a 'socialist' solution to their predicament? For Lloyd George, who had been Britain's Prime Minister for most of the war and was its chief representative at the 1919 Paris Peace Conference, that concern overshadowed all others. We see this in his *'Fontainebleu Memorandum'* presented to Peace Conference delegates. In this he seemed at first to recognise that the defeated nations must not be saddled with inequalities and injustices which would only make for a further World War - perhaps 'a mere 30 years on'. All sounded pure wisdom, the sort of common sense that could guarantee the security of one's own country along with that of others. However, the motivation behind Lloyd George's Conference message was anything but pure. For soon we learn *"But there is a consideration in favour of long-sighted peace which influences me even more than the desire to leave no causes justifying a fresh outbreak 30 years hence.There is a deep sense not only of discontent, but of anger and revolt amongst the workmen against pre-war conditions. The whole existing order is questioned by the mass of the population from one end of Europe to the other."*

In particular he was concerned that such conditions in the defeated Germany could, following the Russian example, make it 'go Bolshevik'. And even more alarming, that Britain and France could go the same way. So his prime worry, his overriding concern (which persisted throughout the 1920s and '30s) was not the avoidance of conditions certain to lead to a 'fresh outbreak', a future European war, but the threat to his concept of the 'long-sighted peace', the long-revered 'traditional arrangements' for the creation and (mal)distribution of wealth, both nationally and internationally.

Thus, while in his *Memorandum*, Lloyd George wrote that *"...we will open to her (i.e., Germany) the raw materials and markets of the world on equal terms with ourselves, and will do everything possible to enable the German peoples to get upon their legs again. We cannot both cripple her and expect her to pay."* he at the same time had no plans to carry out the moves essential for that pacific future. Obviously these would have included: (i) the sharing of responsibility for the war's origin, (ii) limiting German reparations

to invasion-caused material damage, (iii) accepting German exports as Reparations payments, (iv) implementing universal arms limitation; (v) honouring the pledges for the self-determination of peoples; and (vi) instituting fair dealing in economic affairs both at home and abroad. But in the event, these were either absent or severely constrained by the over-riding urge to maintain the 'Old Order' as it was before the war.

That of course meant upholding the 'normal' divide between rich and poor, both nationally and internationally (including the application of the Versailles' Treaty's 'guilt', 'economic' and 'Reparations' Clauses on Germany), maintaining and extending Britain's colonial possessions, and thwarting moves towards overcoming its entrenched poverty at home, what Churchill referred to as "the social problem" - let alone instituting any degree of 'communism', 'socialism' or 'egalitarianism'. Indeed, it was to mean perpetuating all sorts of inequalities and injustices which all too soon were to lead to the Great Depression and then a Second World War, not 30 but a mere 20 years after the First. And since the principal concern of the powerful voices within Britain was the avoidance of risk to any significant redistribution of wealth, that concern was translated into policies designed to block such trends, including their absurd support of German rearmament under Hitler - one known to be a fervent anti-communist and, moreover, one known to have territorial designs on Eastern Europe and Soviet Russia, the communist USSR...

Churchill's summing up

Commenting on [Chamberlain's] extraordinary about-face, Churchill wrote *"Look back and see what we had successively accepted and thrown away: a Germany rearmed in violation of a solemn treaty; air superiority or even air parity cast away; the Rhineland forcibly occupied and the Siegfried Line built or building; the Berlin-Rome Axis established; Austria devoured and digested by the Reich; Czechoslovakia deserted and ruined by the Munich Pact, its fortress line in German hands, its mighty arsenal of Skoda henceforward making munitions for the German armies; President Roosevelt's effort to tabilise or bring to a head the European situation by the intervention of the United States waved aside with one hand and Soviet Russia's undoubted willingness to join the Western Powers and go all lengths to save Czechoslovakia ignored on the other; the services of thirty five Czech divisions against the still un-ripened German army cast away, when great Britain could herself supply only two to strengthen the front in France; all gone with the wind.History may be scoured and ransacked to find a parallel to this sudden and complete reversal of five or six years' policy of easy-going placatory appeasement, and its transformation almost overnight into a readiness to accept an obviously imminent war on far worse conditions and on the greatest scale.which*

must surely lead to the slaughter of tens of millions of people."

Suggestions for further reading

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Chapter 3

MONEY AND CLIMATE INACTION

3.1 Greed is driving us towards disaster

Religions warn against excessive love of money. For example, in Christianity, Greed is listed among the seven deadly sins, and the Bible contains the admonition: “The love of money is the root of all evil.”

Today, with the future of our planet at stake, greed is driving us towards disaster. Economics and politics are far too closely linked. Decisions are made on the basis of short-term financial considerations, and these decisions are sacrificing hope for saving human civilization and the biosphere from catastrophic climate change.

What will happen if we fail (for the sake of money) to avoid a climate catastrophe? Rising temperatures will make most of the world uninhabitable. Large numbers of animals and plants that cannot move long distances will become extinct. Humans will not necessarily become extinct. but the global population of humans will be reduced to a small number. There is a danger that human solidarity will break down entirely, as everyone tries to save themselves.

3.2 Noam Chomsky on climate inaction

Here are some quotations from an article entitled *Chomsky and Pollin: COP26 Pledges Will Fail Unless Pushed by Mass Organizing*, Published by Truthout on October 28, 2021:

“...Survival is at stake. The basic facts are brutally clear, more so with each passing year. They are laid out clearly enough in the latest Intergovernmental Panel on Climate Change (IPCC) report, released on August 9. In brief, any hope of avoiding disaster requires taking significant steps right away to reduce fossil fuel use, continuing annually with the goal of effectively phasing out fossil

fuel use by mid-century. We are approaching a precipice. A few steps more, and we fall over it, forever.

“Falling off the precipice does not imply that everyone will die soon; there’s a long way down. Rather, it means that irreversible tipping points will be reached, and barring some now-unforeseen technological miracle, the human species will be entering a new era: one of inexorable decline, with mounting horrors of the kind we can easily depict, extrapolating realistically from what already surrounds us - an optimistic estimate, since non-linear processes may begin to take off and dangers lurk that are only dimly perceived.

“It will be an era of ‘sauve qui peut’ - run for your lives, everyone for themselves, material catastrophe heightened by social collapse and wholesale psychic trauma of a kind never before experienced. And on the side, an assault on nature of indescribable proportions.

“All of this is understood at a very high level of confidence. Even a relic of rationality tells us that it is ridiculous to take a chance on its being mistaken, considering the stakes...

“The evidence at hand is not encouraging. Let’s go back to August 9, 2021, with its clear warning that we must begin now to reduce fossil fuel use.

“Immediately on receipt of this grim warning, the president of the most powerful state in world history issued an appeal to the global oil cartel OPEC to increase production. Europe followed suit, joined by the rest of what is called ‘advanced society.’ The reason is an energy crunch. That’s doubtless a problem. One way to deal with it is to race towards the precipice. Another is for the rich in the rich societies, the major culprits, to tighten their belts while we sharply accelerate transition to sustainable energy...”

3.3 Greta Thunberg’s TED talk

Greta Thunberg was born in Sweden in 2003. Her father, Svante Thunberg, is related to Svante Arrhenius, one of the important pioneers of climate science, and is named after him. Greta’s mother was a successful opera singer. Greta Thunberg’s strong belief in the urgency of action to prevent catastrophic climate change converted her parents, so that they made changes in their lives. For example, Greta’s mother gave up her career as an opera singer because it involved air travel.

In November, 2018, Greta Thunberg gave an impressively clear TEDx talk in Stockholm, the video of which was recently released.¹ Here is a transcript of the talk.

When I was about 8 years old, I first heard about something called ‘climate change’ or ‘global warming’. Apparently, that was something humans had created by our way of living. I was told to turn off the lights to save energy

¹<https://www.dailykos.com/stories/2018/12/16/1819508/-A-Call-to-Action-on-Climate-Change-by-15-year-Old-Greta-Thunberg>

and to recycle paper to save resources. I remember thinking that it was very strange that humans, who are an animal species among others, could be capable of changing the Earth's climate. Because, if we were, and if it was really happening, we wouldn't be talking about anything else. As soon as you turn on the TV, everything would be about that. Headlines, radio, newspapers: You would never read or hear about anything else. As if there was a world war going on, but no one ever talked about it. If burning fossil fuels was so bad that it threatened our very existence, how could we just continue like before? Why were there no restrictions? Why wasn't it made illegal?

To me, that did not add up. It was too unreal.

So, when I was 11, I became ill, I fell into depression, I stopped talking, and I stopped eating. In two months, I lost about 10 kilos of weight. Later on, I was diagnosed with Asperger's syndrome, OCD and selective mutism. This basically means, I only speak, when I think it is necessary.

Now is one of those moments.

For those of us, who are on the spectrum, almost everything is black or white. We aren't very good at lying and we usually don't enjoy participating in the social games that the rest of you seem so fond of. I think, in many ways, that we autistic are the normal ones and the rest of the people are pretty strange. Especially when it comes to the sustainability crisis: Where everyone keeps saying that climate change is an existential threat and the most important issue of all. And yet, they just carry on like before.

I don't understand that. Because if the emissions have to stop, then we must stop the emissions. To me, that is black or white. There are no gray areas when it comes to survival. Either we go on as a civilization or we don't.

We have to change.

Rich countries like Sweden need to start reducing emissions by at least 15% every year. And that is so that we can stay below a 2 degrees warming target. Yet, as the IPCC has recently demonstrated, aiming instead for 1.5 degrees Celsius would significantly reduce the climate impacts. But we can only imagine what that means for reducing emissions.

You would think the media and every one of our leaders would be talking about nothing else. But they never even mention it.

Nor does anyone ever mentioned the greenhouse gases already locked in the system. Nor that air pollution is hiding some warming; so that, when we stop burning fossil fuels, we already have an extra level of warming - perhaps as high as 0.5 to 1.1 degrees Celsius.

Furthermore, does hardly anyone speak about the fact that we are in the midst of the sixth mass extinction: With up to 200 species going extinct every single day. That the extinction rate is today between 1000 and 10,000 times higher than what is seen as normal.

Nor does hardly anyone ever speak about the aspect of equity or climate justice, clearly stated everywhere in the Paris agreement, which is absolutely

necessary to make it work on a global scale. That means that rich countries need to get down to zero emissions within 6 to 12 years with today's emission speed. And that is so that people in poorer countries can have a chance to heighten their standard of living by building some of the infrastructures that we have already built, such as roads, schools, hospitals, clean drinking water, electricity, and so on. Because, how can we expect countries like India or Nigeria to care about the climate crisis if we, who already have everything, don't care even a second about it or our actual commitments to the Paris agreement?

So why are we not reducing our emissions? Why are they in fact still increasing? Are we knowingly causing a mass extinction? Are we evil?

No, of course, not. People keep doing what they do because the vast majority doesn't have a clue about the actual consequences for their everyday life. And they don't know that rapid change is required.

We all think we know and we all think everybody knows. But we don't.

Because, how could we? If there really was a crisis, and if this crisis was caused by our emissions, you would at least see some signs. Not just flooded cities. Tens of thousands of dead people and whole nations leveled to piles of torn down buildings. You would see some restrictions.

But no. And no one talks about it. There are no emergency meetings, no headlines, no breaking news. No one is acting as if we were in a crisis.

Even most climate scientists or green politicians keep on flying around the world, eating meat and dairy.

If I live to be 100, I will be alive in the year 2103. When you think about the future today, you don't think beyond the year 2050. By then I will, in the best case, not even have lived half of my life. What happens next? In the year 2078, I will celebrate my 75th birthday. If I have children or grandchildren, maybe they will spend that day with me. Maybe they will ask me about you, the people who were around back in 2018. Maybe they will ask why you didn't do anything while there still was time to act. What we do or don't do right now, will affect my entire life and the lives of my children and grandchildren. What we do or don't do right now, me and my generation can't undo in the future.

So, when school started in August of this year, I decided that this was enough. I set myself down on the ground outside the Swedish parliament. I school-striking for the climate.

Some people say that I should be in school instead. Some people say that I should study, to become a climate scientist so that I can solve the climate crisis.

But the climate crisis has already been solved. We already have all the facts and solutions. All we have to do is to wake up and change.

And why should I be studying for a future that soon will be no more, when no one is doing anything whatsoever to save that future? And what is the

point of learning facts in the school system, when the most important facts given by the finest science of that same school system clearly means nothing to our politicians and our society?

Some people say that Sweden is just a small country and that it doesn't matter what we do. But I think that if a few children can get headlines all over the world just by not coming to school for a few weeks, imagine what we could all do together if we wanted to?

Now we're almost at the end of my talk and this is where people usually people usually start talking about hope. Solar panels, wind power, circular economy, and so on. But I'm not going to do that. We've had 30 years of pep talking and selling positive ideas. And I'm sorry but it doesn't work because if it would have, the emissions would have gone down by now. They haven't.

And yes, we do need hope. Of course, we do. But the one thing we need more than hope is action. Once we start to act, hope is everywhere. So instead of looking for hope, look for action. Then and only then, hope will come today.

Today we use 100 million barrels of oil every single day. There are no politics to change that. There are no rules to keep that oil in the ground. So, we can't save the world by playing by the rules, because the rules have to be changed.

Everything needs to change and it has to start today.

Thank you.

3.4 Only immediate climate action can save the future

Immediate action to halt the extraction of fossil fuels and greatly reduce the emission of CO₂ and other greenhouse gasses is needed to save the long-term future of human civilization and the biosphere.

At the opening ceremony of United Nations-sponsored climate talks in Katowice, Poland, Sir David Attenborough said "Right now, we are facing a man-made disaster of global scale. Our greatest threat in thousands of years. Climate change. If we don't take action, the collapse of our civilizations and the extinction of much of the natural world is on the horizon. The world's people have spoken. Their message is clear. Time is running out. They want you, the decision-makers, to act now."

Antonio Guterres, UN Secretary-General, said climate change was already "a matter of life and death" for many countries. He added that the world is "nowhere near where it needs to be" on the transition to a low-carbon economy.

Swedish student Greta Thunberg, is a 16-year-old who has launched a climate protest movement in her country. She said, in a short but very clear speech after that of UN leader Antonio Guterres: "Some people say that I should be in school instead. Some people say that I should study to become a climate scientist so that I can 'solve the climate crisis'. But the climate crisis has already been solved. We already have all the facts and solutions."

She added: "Why should I be studying for a future that soon may be no more, when

no one is doing anything to save that future? And what is the point of learning facts when the most important facts clearly mean nothing to our society?"

Thunberg continued: "Today we use 100 million barrels of oil every single day. There are no politics to change that. There are no rules to keep that oil in the ground. So we can't save the world by playing by the rules. Because the rules have to be changed."

She concluded by saying that "since our leaders are behaving like children, we will have to take the responsibility they should have taken long ago."

Appearing among billionaires, corporate CEO's and heads of state at the Davos Economic Forum in Switzerland, like a new Joan of Arc, 16-year-old Swedish climate activist Greta Thunberg called on decision-makers to fulfil their responsibilities towards future generations. Here are some excerpts from her speech:

Greta's speech at Davos

Our house is on fire. I am here to say, our house is on fire. According to the IPCC, we are less than 12 years away from not being able to undo our mistakes. In that time, unprecedented changes in all aspects of society need to have taken place, including a reduction of our CO₂ emissions by at least 50%...

Here in Davos - just like everywhere else - everyone is talking about money. It seems money and growth are our only main concerns.

And since the climate crisis has never once been treated as a crisis, people are simply not aware of the full consequences on our everyday life. People are not aware that there is such a thing as a carbon budget, and just how incredibly small that remaining carbon budget is. That needs to change today.

No other current challenge can match the importance of establishing a wide, public awareness and understanding of our rapidly disappearing carbon budget, that should and must become our new global currency and the very heart of our future and present economics.

We are at a time in history where everyone with any insight of the climate crisis that threatens our civilization - and the entire biosphere - must speak out in clear language, no matter how uncomfortable and unprofitable that may be.

We must change almost everything in our current societies. The bigger your carbon footprint, the bigger your moral duty. The bigger your platform, the bigger your responsibility.





Figure 3.1: Greta Thunberg on the cover of Time Magazine, The Intergovernmental Panel on Climate Change, in their October 2018 report, used strong enough language to wake up at least part of the public: the children whose future is at stake. Here is an excerpt from a speech which 16-year-old Swedish climate activist Greta Thunberg made at the Davos Economic Forum in January, 2019: “Our house is on fire. I am here to say, our house is on fire. According to the IPCC, we are less than 12 years away from not being able to undo our mistakes. In that time, unprecedented changes in all aspects of society need to have taken place, including a reduction of our CO2 emissions by at least 50%...”

3.5 Worldwide school strike, 15 March, 2019

Over 1.4 million young students across all continents took to the streets on Friday March 15th for the first ever global climate strike. Messages in more than 40 languages were loud and clear: world leaders must act now to address the climate crisis and save our future. The school strike was the largest climate action in history. Nevertheless it went almost unmentioned in the media,

Here are some of the statements by the students explaining why they took part in the strikes:

In India, no one talks about climate change. You don't see it on the news or in the papers or hear about it from government. We want global leaders to declare a climate emergency. If we don't act today, then we will have no tomorrow. - Vidit Baya, 17, Udaipur, India.

We face heartbreaking loss due to increasingly extreme weather events. We urge the Taiwanese government to implement mitigation measures and face up to the vulnerability of indigenous people, halt construction projects in the indigenous traditional realm, and recognize the legal status of Plains Indigenous People, in order to implement environmental protection as a bottom-up approach - Kaisanan Ahuan, Puli City, Taiwan.

We have reached a point in history when we have the technical capacities to solve poverty, malnutrition, inequality and of course global warming. The deciding factors for whether we take advantage of our potential will be our activism, our international unity and our ability to develop the art of making the impossible possible. Whether we succeed or not depends on our political will - Eyal Weintraub, 18, and Bruno Rodriguez, 18, Argentina.

The damage done by multinationals is enormous: the lack of transparency, dubious contracts, the weakening of the soil, the destruction of flora and fauna, the lack of respect for mining codes, the contamination of groundwater. In Mali, the state exercises insufficient control over the practices of the multinationals, and it is us, the citizens, who suffer the consequences. The climate alarm has sounded, and the time has come for us all to realize that there is still time to act locally, in our homes, our villages, our cities - Mone Fousseny, 22, Mali.

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²<https://www.theguardian.com/environment/2019/apr/03/parents-around-the-world-mobilise-behind-youth-climate-strikes>

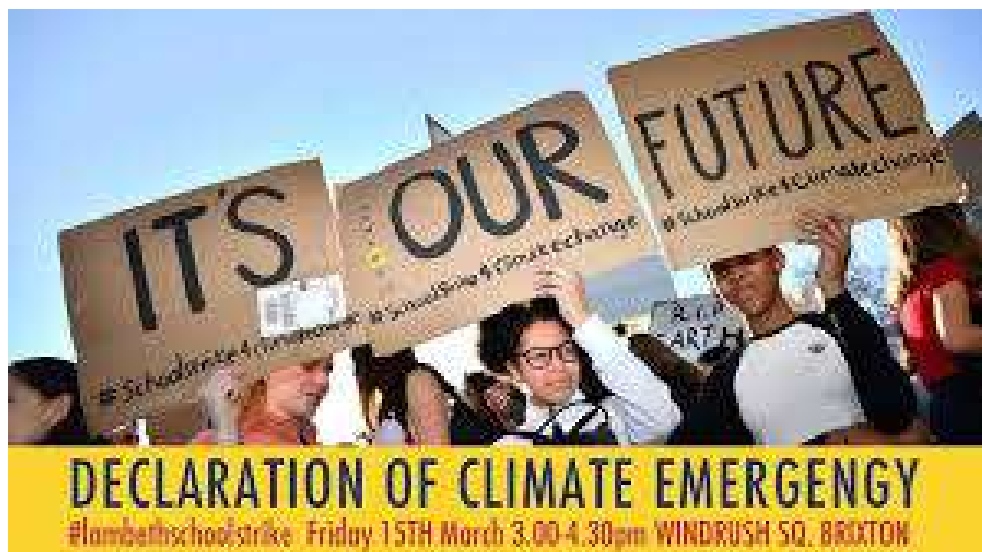






Figure 3.2: Eve White and her children join climate protesters in Tasmania. According to an article in *The Guardian*, parents and grandparents around the world are mobilizing in support of the youth climate movement that has swept the globe.

Concerns of young protesters are justified

In an article in the journal *Science* dated 12 April, 2019,³ 20 prominent climate scientists stated that the concerns of student protesters around the world are fully justified. Here are some quotations from the article:

The world's youth have begun to persistently demonstrate for the protection of the climate and other foundations of human well-being. As scientists and scholars who have recently initiated similar letters of support in our countries, we call for our colleagues across all disciplines and from the entire world to support these young climate protesters. We declare: Their concerns are justified and supported by the best available science. The current measures for protecting the climate and biosphere are deeply inadequate.

Nearly every country has signed and ratified the Paris Agreement of 2015, committing under international law to hold global warming well below 2°C above preindustrial levels and to pursue efforts to limit the temperature increase to 1.5°C. The scientific community has clearly concluded that a global warming of 2°C instead of 1.5°C would substantially increase climate-related impacts and the risk of some becoming irreversible. Moreover, given the uneven distribution of most impacts, 2°C of warming would further exacerbate existing global inequalities.

It is critical to immediately begin a rapid reduction in CO₂ and other greenhouse gas emissions. The degree of climate crisis that humanity will experience in the future will be determined by our cumulative emissions; rapid reduction now will limit the damage. For example, the Intergovernmental Panel on Climate Change (IPCC) has recently assessed that halving CO₂ emissions by 2030 (relative to 2010 levels) and globally achieving net-zero CO₂ emissions by 2050 (as well as strong reductions in other greenhouse gases) would allow a 50% chance of staying below 1.5°C of warming. Considering that industrialized countries produced more of and benefited more from previous emissions, they have an ethical responsibility to achieve this transition more quickly than the world as a whole.

Many social, technological, and nature-based solutions already exist. The young protesters rightfully demand that these solutions be used to achieve a sustainable society. Without bold and focused action, their future is in critical danger. There is no time to wait until they are in power...

The enormous grassroots mobilization of the youth climate movement - including Fridays for Future, School (or Youth) Strike 4 Climate, Youth for (or 4) Climate, and Youth Climate Strike - shows that young people understand the situation. We approve and support their demand for rapid and forceful action. We see it as our social, ethical, and scholarly responsibility to state in no uncertain terms: Only if humanity acts quickly and resolutely can we limit

³<https://science.sciencemag.org/content/364/6436/139.2>



global warming, halt the ongoing mass extinction of animal and plant species, and preserve the natural basis for the food supply and well-being of present and future generations. This is what the young people want to achieve. They deserve our respect and full support.



Figure 3.3: Greta Thunberg addressing a meeting of the European Parliament in April, 2019. She complained that Brexit was treated as an emergency by the European Union, but climate change, which is a far greater emergency has been almost neglected. The 16-year-old, who is due to meet the Pope on Wednesday, said, “We face an end to civilization as we know it unless permanent changes take place in our society...European elections are coming soon and many like me who are affected most by this crisis, are not allowed to vote. That is why millions of children are taking to the street to draw attention to the climate crisis... It is not too late to act but it will take far-reaching vision and fierce determination... My plea is: Please wake up and do the seemingly impossible.”

3.6 The World Meteorological Organization's report

According to a recent United Nations report, extreme weather events displaced 2 million people during 2018. While no single event can be unambiguously attributed to anthropogenic climate change, scientists believe the the increasing frequency of extreme weather events is definitely linked to global warming. The same is true of their increasing severity.

The report states that during 2018, extreme weather events impacted roughly 62 million people, of whom 2 million were displaced from their homes. In the words of the WMO report, "The physical signs and socio-economic impacts of climate change are accelerating, as record greenhouse gas concentrations drive global temperatures towards increasingly dangerous levels."

UN Secretary General Antonio Guterres, speaking at the launching of the WMO report, used the occasion to remind global leaders of the urgency of the climate emergency. Guterres has convened a climate summit meeting scheduled for September 23, 2019, and referring to the meeting, he said: "Don't come with a speech, come with a plan. This is what science says is needed. It is what young people around the globe are rightfully demanding." Two weeks previously, on March 15, one and a half million students from more than 130 countries had skipped school to participate in the largest climate demonstration in history, demanding action to save the future from the threat of catastrophic climate change.

3.7 Only 12 years left to limit climate change catastrophe

The world's leading scientists met at the Forty-Eighth Session of the IPCC and First Joint Session of Working Groups I, II, and III, 1-5 October 2018 in Incheon, Republic of Korea and openly declared that civilization is on track for collapse because of reckless use of fossil fuels, unless immediate action is taken to drastically cut the extraction and use of fossil fuels.

The report finds that limiting global warming to 1.5°C would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050.

"It's a line in the sand and what it says to our species is that this is the moment and we must act now," said Debra Roberts, a co-chair of the working group on impacts. "This is the largest clarion bell from the science community and I hope it mobilizes people and dents the mood of complacency."

"We have presented governments with pretty hard choices. We have pointed out the enormous benefits of keeping to 1.5C, and also the unprecedented shift in energy systems and transport that would be needed to achieve that," said Jim Skea, a co-chair of the working group on mitigation. "We show it can be done within laws of physics and chemistry.



Figure 3.4: A firefighter battles fire in California. The world is currently 1 degree Centigrade warmer than preindustrial levels.

Then the final tick box is political will. We cannot answer that. Only our audience can - and that is the governments that receive it.”

Bob Ward, of the Grantham Research Institute on Climate Change, said the final document was “incredibly conservative” because it did not mention the likely rise in climate-driven refugees or the danger of tipping points that could push the world on to an irreversible path of extreme warming.

Policymakers commissioned the report at the Paris climate talks in 2016, but since then the gap between science and politics has widened. Donald Trump has promised to withdraw the US - the world’s biggest source of historical emissions - from the accord. Brazil’s president, Jair Bolsonaro, threatens to do the same and also open the Amazon rainforest to agribusiness.

3.8 COP24, the climate summit in Poland

The UN Secretary General’s address to the opening session

Welcome to COP 24.

I thank President Duda, Minister Kowalczyk and COP President Designate Mijal Kurtyka for their warm welcome.

We are in trouble. We are in deep trouble with climate change.

Climate change is running faster than we are and we must catch up sooner rather than later before it is too late.

For many, people, regions even countries this is already a matter of life and death.

This meeting is the most important gathering on climate change since the Paris Agreement was signed.



Figure 3.5: UN Secretary-General Antonio Guterres: “It is hard to overstate the urgency of our situation. Even as we witness devastating climate impacts causing havoc across the world, we are still not doing enough, nor moving fast enough, to prevent irreversible and catastrophic climate disruption. Nor are we doing enough to capitalize on the enormous social, economic and environmental opportunities of climate action.”

It is hard to overstate the urgency of our situation.

Even as we witness devastating climate impacts causing havoc across the world, we are still not doing enough, nor moving fast enough, to prevent irreversible and catastrophic climate disruption.

Nor are we doing enough to capitalize on the enormous social, economic and environmental opportunities of climate action.

And so, I want to deliver four simple messages.

First: science demands a significantly more ambitious response.

Second: the Paris Agreement provides the framework for action, so we must operationalize it.

Third: we have a collective responsibility to invest in averting global climate chaos, to consolidate the financial commitments made in Paris and to assist the most vulnerable communities and nations.

Fourth: climate action offers a compelling path to transform our world for the better.

Let me turn first to science.

According to the World Meteorological Organization, the 20 warmest years on record have been in the past 22 years, with the top four in the past four years.

The concentration of carbon dioxide is the highest it has been in 3 million years.

Emissions are now growing again.

The recent special report from the Intergovernmental Panel on Climate Change finds that warming could reach 1.5 degrees as soon as 2030, with devastating impacts.

The latest UN Environment Programme Emissions Gap Report tells us that the current Nationally Determined Contributions under the Paris Agreement will lead to global warming of about 3 degrees by the end of the century.

Furthermore, the majority of countries most responsible for greenhouse gas emissions are behind in their efforts to meet their Paris pledges.

So, it is plain we are way off course.

We need more action and more ambition.

We absolutely have to close this emissions gap.

If we fail, the Arctic and Antarctic will continue to melt, corals will bleach and then die, the oceans will rise, more people will die from air pollution, water scarcity will plague a significant proportion of humanity, and the cost of disasters will skyrocket.

Last year I visited Barbuda and Dominica, which were devastated by hurricanes. The destruction and suffering I saw was heart-breaking. That story is repeated almost daily somewhere in the world.

These emergencies are preventable.

Emissions must decline by 45 per cent from 2010 levels by 2030 and be net zero by 2050.

Renewable energy will need to supply half to two-thirds of the world's primary energy by 2050 with a corresponding reduction in fossil fuels.

In short, we need a complete transformation of our global energy economy, as well as how we manage land and forest resources.

We need to embrace low-carbon, climate-resilient sustainable development.

I am hopeful that the Talanoa Dialogue will provide a very strong impulse for increased ambition in the commitments for climate action.

Excellencies,

This brings me to my second point.

The Paris Agreement provides a framework for the transformation we need.

It is our job here in Katowice is to finalize the Paris Agreement Work Programme – the rule book for implementation.

I remind all Parties that this is a deadline you set for yourselves and it is vital you meet it.

We need a unifying implementation vision that sets out clear rules, inspires action and promotes raised ambition, based on the principle of equity and common but differentiated responsibilities and respective capabilities, in light of different national circumstances.

We have no time for limitless negotiations.

A completed Work Programme will unleash the potential of the Paris Agreement.

It will build trust and make clear that countries are serious about addressing climate change.

Dear Friends,

This brings me to my third point: the central importance of finance.

We need concerted resource mobilization and investment to successfully combat climate change.

We need transformative climate action in five key economic areas - energy, cities, land use, water and industry.

Some 75 per cent of the infrastructure needed by 2050 still remains to be built.

How this is done will either lock us in to a high-emissions future or steer us towards truly sustainable low-emissions development.

Governments and investors need to bet on the green economy, not the grey.

That means embracing carbon pricing, eliminating harmful fossil fuel subsidies and investing in clean technologies.

It also means providing a fair transition for those workers in traditional sectors that face disruption, including through retraining and social safety nets.

We also have a collective responsibility to assist the most vulnerable communities and countries - such as small island nations and the least developed countries - by supporting adaptation and resilience.

Making clear progress to mobilize the pledged \$100 billion dollars a year will provide a much-needed positive political signal.

I have appointed the President of France and Prime Minister of Jamaica to lead the mobilization of the international community, both public and private, to reach that target in the context of preparation of the Climate Summit I have convened in September of next year.

I also urge Member States to swiftly implement the replenishment of the Green Climate Fund.

It is an investment in a safer, less costly future.

Dear Friends,

All too often, climate action is seen as a burden. My fourth point is this: decisive climate action today is our chance to right our ship and set a course for a better future for all.

We have the knowledge.

Many technological solutions are already viable and affordable.

Cities, regions, civil society and the business community around the world are moving ahead.

What we need is political more will and more far-sighted leadership.

This is the challenge on which this generation's leaders will be judged.

Climate action is not just the right thing to do - it makes social and economic sense.

Meeting the goals of the Paris Agreement would reduce air pollution - saving more than a million lives each year by 2030, according to the World Health

Organization.

According to the recent New Climate Economy report, ambitious climate action could yield 65 million jobs and a direct economic gain of \$26 trillion US dollars compared to business as usual over the next 12 years.

We are seeing early signs of this economic transformation, but we are nowhere near where we need to be.

The transition to a low-carbon economy needs political impetus from the highest levels.

And it requires inclusivity, because everyone is affected by climate change. That is the message of the Talanoa Dialogue.

We need a full-scale mobilization of young people.

And we need a global commitment to gender equality, because women's leadership is central to durable climate solutions.

A successful conference here in Katowice can provide the catalyst.

There is now significant global momentum for climate action.

It has galvanized private business and investors around the world, while cities and regional governments are also showing that ambitious climate action is possible and desirable.

Let us build on this momentum.

I am convening a Climate Summit in September next year to raise ambition and mobilize the necessary resources.

But that ambition needs to begin here, right now, in Katowice, driven by governments and leaders who understand that their legacies and the well-being of future generations are at stake.

We cannot afford to fail in Katowice.

Some might say that it will be a difficult negotiation. I know it is not easy. It requires a firm political will for compromise. But, for me, what is really difficult is to be a fisherman in Kiribati seeing his country in risk of disappearing or a farmer or herder in the Sahel losing livelihoods and losing peace. Or being a woman in Dominica or any other Caribbean nation enduring hurricane after hurricane destroying everything in its path.

Ladies and gentlemen,

Climate change is the single most important issue we face.

It affects all our plans for sustainable development and a safe, secure and prosperous world.

So, it is hard to comprehend why we are collectively still moving too slowly - and even in the wrong direction.

The IPCC's Special Report tells us that we still have time to limit temperature rise.

But that time is running out.

We achieved success in Paris because negotiators were working towards a common goal.



Figure 3.6: Greta: “Many people say that Sweden is just a small country, and it doesn’t matter what we do. But I’ve learned that you are never too small to make a difference. And if a few children can get headlines all over the world just by not going to school, then imagine what we could all do together if we really wanted to.”

I implore you to maintain the same spirit of urgent collaboration here in Katowice with a dynamic Polish leadership in the negotiations.

Katowice must ensure that the bonds of trust established in Paris will endure.

Incredible opportunity exists if we embrace a low-carbon future and unleash the power of the Paris Agreement.

But we must start today building the tomorrow we want.

Let us rise to the challenge and finish the work the world demands of us.

Thank you.

Greta Thunberg’s address to the opening session

Greta Thunberg (born 3 January 2003) is a Swedish climate activist. She is known for protesting outside the Swedish parliament building to raise climate change activism.

On 20 August 2018, Thunberg, then in 9th grade, decided to not attend school until the 2018 Sweden general election on 9 September after heat waves and wildfires in Sweden. Her demands were that the Sweden government reduce carbon emissions as per the Paris Agreement, and she protested via sitting outside the Riksdag every day during school hours with the sign “Skolstrejk för klimatet” (school strike for the climate). After the general elections, she continued to strike only on Fridays. The strike is now in its 17th week. The



Figure 3.7: Greta: “You only talk about moving forward with the same bad ideas that got us into this mess, even when the only sensible thing to do is pull the emergency brake. You are not mature enough to tell it like it is. Even that burden you leave to us children.”



Figure 3.8: Greta: “Until you start focusing on what needs to be done, rather than what is politically possible, there is no hope. We cannot solve a crisis without treating it as a crisis. We need to keep the fossil fuels in the ground, and we need to focus on equity. And if solutions within the system are so impossible to find, then maybe we should change the system itself.”

transcript of her address to the opening session of COP24^{45 6 7} is given below,

My name is Greta Thunberg. I am 15 years old, and I'm from Sweden. I speak on behalf of Climate Justice Now!

Many people say that Sweden is just a small country, and it doesn't matter what we do. But I've learned that you are never too small to make a difference. And if a few children can get headlines all over the world just by not going to school, then imagine what we could all do together if we really wanted to.

But to do that, we have to speak clearly, no matter how uncomfortable that may be. You only speak of green eternal economic growth because you are too scared of being unpopular. You only talk about moving forward with the same bad ideas that got us into this mess, even when the only sensible thing to do is pull the emergency brake. You are not mature enough to tell it like it is. Even that burden you leave to us children.

But I don't care about being popular. I care about climate justice and the living planet. Our civilization is being sacrificed for the opportunity of a very small number of people to continue making enormous amounts of money. Our biosphere is being sacrificed so that rich people in countries like mine can live in luxury. It is the sufferings of the many which pay for the luxuries of the few.

The year 2078, I will celebrate my 75th birthday. If I have children, maybe they will spend that day with me. Maybe they will ask me about you. Maybe they will ask why you didn't do anything while there still was time to act. You say you love your children above all else, and yet you are stealing their future in front of their very eyes.

Until you start focusing on what needs to be done, rather than what is politically possible, there is no hope. We cannot solve a crisis without treating it as a crisis. We need to keep the fossil fuels in the ground, and we need to focus on equity. And if solutions within the system are so impossible to find, then maybe we should change the system itself.

We have not come here to beg world leaders to care. You have ignored us in the past, and you will ignore us again. We have run out of excuses, and we are running out of time. We have come here to let you know that change is coming, whether you like it or not. The real power belongs to the people. Thank you.

⁴<https://www.youtube.com/watch?v=VFkQSGyeCWg>

⁵<https://www.youtube.com/watch?v=0TYyBtb1PH4>

⁶<https://www.youtube.com/watch?v=DdAOgNTxxt0>

⁷<https://www.youtube.com/watch?v=pJ1HRGA8g10>



Figure 3.9: Greta Thunberg addresses the National Assembly In Paris on July 23, 2019 in Paris, France.



Figure 3.10: Greta Thunberg crossing the Atlantic on a small emission-free boat.

An appeal by Greta Thunberg, October 30, 2021

Dear friends,

Humanity is failing to stop the climate crisis. It's now beyond urgent – the planet is screaming for help.

Right now world leaders are meeting for historic climate talks – but pledges without real action won't cut it anymore. We need bold, visionary leaders to finally do what's needed to pull us back from the abyss.

I'll be at the talks with inspiring youth leaders like Vanessa Nakate and Dominika Lasota. We'll personally meet dozens of governments – it's the perfect opportunity to deliver a giant call for urgent action. Join us now: add your name with one click and pass this on.

To world leaders,

“Betrayal”. That's how young people around the world describe our governments' failure to cut carbon emissions. And it's no surprise.

We are catastrophically far from the crucial goal of 1.5 degrees C, and yet governments everywhere are still accelerating the crisis, spending billions on fossil fuels.

This is not a drill. It's code red for the Earth. Millions will suffer as our planet is devastated – a terrifying future that will be created, or avoided, by the decisions you make. You have the power to decide.

As citizens across the planet, we urge you to face up to the climate emergency. Not next year. Not next month. Now:

As citizens across the planet, we urge you to face up to the climate emergency. Not next year. Not next month. Now:As citizens across the planet, we urge you to face up to the climate emergency. Not next year. Not next month. Now:

- Keep the precious goal of 1.5 degrees C alive with immediate, drastic, annual emission reductions unlike anything the world has ever seen.
- End all fossil fuel investments, subsidies, and new projects immediately, and stop new exploration and extraction.
- End ‘creative’ carbon accounting by publishing total emissions for all consumption indices, supply chains, international aviation and shipping, and the burning of biomass.
- Deliver the \$100bn promised to the most vulnerable countries, with additional funds for climate disasters.

- Enact climate policies to protect workers and the most vulnerable, and reduce all forms of inequality.

We can still do this. There is still time to avoid the worst consequences if we are prepared to change. It will take determined, visionary leadership. And it will take immense courage – but know that when you rise, billions will be right behind you.

It can feel incredibly hard to keep hope alive in the face of inaction. But my hope lies in people – in the millions of us who are rising to save the future. It lies in our marches, in our dogged determination to keep fighting, and in our trembling voices as we speak truth to power. My hope is rooted in action and fuelled by a love for humanity and our most beautiful earth. It's what keeps me absolutely convinced that we can do this. And we must do this. Together.

With fierce hope,

Greta +...

Cop26: 'Greta Mania' hits Glasgow as Swedish teenager is mobbed

Here are some quotations from an article by Karla Adam, published on November 1, 2021 in Stuff⁸:

“Greta Thunberg may not have been officially invited to the landmark COP26 climate summit in Glasgow, but on the first day of the conference, she was making her presence known.

“The Swedish teenager, who is something of a rock star for climate activists around the world, is among the thousands of activists who are descending on Glasgow for the UN Climate Change Conference, known as COP26, which kicked off on Sunday (local time).

“They are calling on world leaders take bold action to prevent global temperatures from rising by more than 1.5 Celsius above preindustrial levels.

“Speaking to the BBC's Andrew Marr, Thunberg said that the 1.5C goal was ‘possible in theory’ but ‘it's up to us if we want that to happen.’...

3.9 The UK declares a climate emergency

Introducing the motion in the House of Commons, Labour leader Jeremy Corbyn said: “We have no time to waste. We are living in a climate crisis that will spiral dangerously out of control unless we take rapid and dramatic action now. This

⁸<https://www.stuff.co.nz/environment/climate-news/300442754/cop26-greta-mania-hits-glasgow-as-swedish-teenager-is-mobbed>

is no longer about a distant future. We're talking about nothing less than the irreversible destruction of the environment within our lifetimes of members of this house."

Here are some excerpts from an article by Amy Goodman and Nermeen Shaikh of Democracy now published in Truthout on May 2, 2019.⁹:

On Wednesday, the House of Commons became the first parliament in the world to declare a climate emergency. The resolution came on the heels of the recent Extinction Rebellion mass uprising that shut down Central London last month in a series of direct actions. Activists closed bridges, occupied public landmarks and even superglued themselves to buildings, sidewalks and trains to demand urgent action to combat climate change. Police arrested more than 1,000 protesters. Labour Party Leader Jeremy Corbyn told Parliament, "We are witnessing an unprecedented upsurge of climate activism, with groups like Extinction Rebellion forcing the politicians in this building to listen. For all the dismissive and defensive column inches the processes have provoked, they are a massive and, I believe, very necessary wake-up call. Today we have the opportunity to say, 'We hear you.'" We speak with George Monbiot, British journalist, author and columnist with The Guardian. His recent piece for The Guardian is headlined "Only rebellion will prevent an ecological apocalypse." Monbiot says capitalism "is like a gun pointed at the heart of the planet. It will essentially, necessarily destroy our life-support systems. Among those characteristics is the drive for perpetual economic growth on a finite planet."

⁹<https://truthout.org/video/george-monbiot-on-the-uk-climate-emergency/>



3.10 Understatement of existential climate risk

Here are some excerpts from a 44-page report entitled *What Lies Beneath: The Understanding of Existential Climate Risk*, by David Spratt and Ian Dunlop¹⁰:

Three decades ago, when serious debate on human-induced climate change began at the global level, a great deal of statesmanship was on display. There was a preparedness to recognize that this was an issue transcending nation states, ideologies and political parties which had to be addressed pro-actively in the long-term interests of humanity as a whole. This was the case even though the existential nature of the risk it posed was far less clear cut than it is today.

As global institutions, such as the United Nations Framework Convention on Climate Change (UNFCCC) which was established at the Rio Earth Summit in 1992, were developed to take up this challenge, and the extent of change this would demand of the fossil-fuel-dominated world order became clearer, the forces of resistance began to mobilize. Today, as a consequence, and despite the diplomatic triumph of the 2015 Paris Agreement, the debate around climate change policy has never been more dysfunctional, indeed Orwellian.

In his book 1984, George Orwell describes a double-think totalitarian state where most of the population accepts “the most flagrant violations of reality, because they never fully grasped the enormity of what was demanded of them, and were not sufficiently interested in public events to notice what was

¹⁰<https://www.breakthroughonline.org.au/>

happening. By lack of understanding they remained sane.”

Orwell could have been writing about climate change and policymaking. International agreements talk of limiting global warming to 1.5-2 degrees Celsius ($^{\circ}\text{C}$), but in reality they set the world on a path of 3-5 $^{\circ}\text{C}$ of warming. Goals are reaffirmed, only to be abandoned. Coal is “clean”. Just 1 $^{\circ}\text{C}$ of warming is already dangerous, but this cannot be admitted. The planetary future is hostage to myopic national self-interest. Action is delayed on the assumption that as yet unproven technologies will save the day, decades hence. The risks are existential, but it is “alarmist” to say so.

A one-in-two or one-in-three chance of missing a goal is normalized as reasonable. Moral hazard permeates official thinking, in that there is an incentive to ignore the risks in the interests of political expediency.

Climate policymaking for years has been cognitively dissonant, “a flagrant violation of reality”. So it is unsurprising that there is a lack of understanding amongst the public and elites of the full measure of the climate challenge. Yet most Australians sense where we are heading: three-quarters of Australians see climate change as catastrophic risk, and half see our way of life ending within the next 100 years.

Politics and policymaking have norms: rules and practices, assumptions and boundaries, that constrain and shape them. In recent years, the previous norms of statesmanship and long-term thinking have disappeared, replaced by an obsession with short-term political and commercial advantage. Climate policymaking is no exception. Since 1992, short-term economic interest has trumped environmental and future human needs.

The world today emits 50% more carbon dioxide (CO_2) from the consumption of energy than it did 25 years ago, and the global economy has more than doubled in size. The UNFCCC strives “to enable economic development to proceed in a sustainable manner”, but every year humanity’s ecological footprint becomes larger and less sustainable. Humanity now requires the biophysical capacity of 1.7 Earths annually as it rapidly chews up natural capital.

A fast, emergency-scale transition to a post-fossil fuel world is absolutely necessary to address climate change. But this is excluded from consideration by policymakers because it is considered to be too disruptive. The orthodoxy is that there is time for an orderly economic transition within the current short-termist political paradigm. Discussion of what would be safe - less warming than we presently experience - is non-existent. And so we have a policy failure of epic proportions.

Policymakers, in their magical thinking, imagine a mitigation path of gradual change to be constructed over many decades in a growing, prosperous world. The world not imagined is the one that now exists: of looming financial instability; of a global crisis of political legitimacy and “fake news”; of a sustainability crisis that extends far beyond climate change to include all the fundamentals of human existence and most significant planetary boundaries

(soils, potable water, oceans, the atmosphere, biodiversity, and so on); and of severe global energy-sector dislocation.

In anticipation of the upheaval that climate change would impose upon the global order, the IPCC was established by the United Nations (UN) in 1988, charged with regularly assessing the global consensus on climate science as a basis for policymaking. The IPCC Assessment Reports (AR), produced every five-to-eight years, play a large part in the public framing of the climate narrative: new reports are a global media event.

AR5 was produced in 2013-14, with AR6 due in 2022. The IPCC has done critical, indispensable work of the highest standard in pulling together a periodic consensus of what must be the most exhaustive scientific investigation in world history.

It does not carry out its own research, but reviews and collates peer-reviewed material from across the spectrum of this incredibly complex area, identifying key issues and trends for policymaker consideration. However, the IPCC process suffers from all the dangers of consensus-building in such a wide-ranging and complex arena. For example, IPCC reports, of necessity, do not always contain the latest available information. Consensus-building can lead to “least drama”, lowest-common-denominator outcomes, which overlook critical issues. This is particularly the case with the “fat-tails” of probability distributions, that is, the high-impact but lower-probability events where scientific knowledge is more limited.

Vested-interest pressure is acute in all directions; climate denialists accuse the IPCC of alarmism, whereas many climate action proponents consider the IPCC to be far too conservative. To cap it all, the IPCC conclusions are subject to intense political oversight before being released, which historically has had the effect of substantially watering-down sound scientific findings.

These limitations are understandable, and arguably were not of overriding importance in the early period of the IPCC. However, as time has progressed, it is now clear that the risks posed by climate change are far greater than previously anticipated. We have moved out of the twilight period of much talk, but relatively limited climate impacts, into the harsh light of physically-evident existential threats. Climate change is now turning nasty, as we have witnessed recently in the North America, East and South Asia, the Middle East and Europe, with record-breaking heatwaves and wildfires, more intense flooding and more damaging hurricanes.

The distinction between climate science and risk is the critical issue, for the two are not the same. Scientific reticence - a reluctance to spell out the full risk implications of climate science in the absence of perfect information - has become a major problem. Whilst this is understandable, particularly when scientists are continually criticized by denialists and political apparatchiks for speaking out, it is extremely dangerous given the fat-tail risks of climate change. Waiting for perfect information, as we are continually urged to do

by political and economic elites, means it will be too late to act. Time is not on our side. Sensible risk management addresses risk in time to prevent it happening, and that time is now.

Irreversible, adverse climate change on the global scale now occurring is an existential risk to human civilization. Many of the world's top climate scientists - Kevin Anderson, James Hansen, Michael E. Mann, Michael Oppenheimer, Naomi Oreskes, Stefan Rahmstorf, Eric Rignot, Hans Joachim Schellnhuber, Kevin Trenberth and others - who are quoted in this report well understand these implications and are forthright about their findings, where we are heading, and the limitations of IPCC reports.

This report seeks to alert the wider community and business and political leaders to these limitations and urges changes to the IPCC approach, to the wider UNFCCC negotiations, and to national policymaking. It is clear that existing processes will not deliver the transformation to a carbon-negative world in the limited time now available. We urgently require a re-framing of scientific research within an existential risk-management framework. This requires special precautions that go well beyond conventional risk management. Like an iceberg, there is great danger in "what lies beneath".

Existential Risk to Human Civilization

In 2016, the World Economic Forum survey of the most impactful risks for the years ahead elevated the failure of climate change mitigation and adaptation to the top of the list, ahead of weapons of mass destruction, ranking second, and water crises, ranking third. By 2018, following a year characterized by high-impact hurricanes and extreme temperatures, extreme-weather events were seen as the single most prominent risk. As the survey noted: "We have been pushing our planet to the brink and the damage is becoming increasingly clear."

Climate change is an existential risk to human civilization: that is, an adverse outcome that would either annihilate intelligent life or permanently and drastically curtail its potential.

Temperature rises that are now in prospect, after the Paris Agreement, are in the range of 3-5 °C. At present, the Paris Agreement voluntary emission reduction commitments, if implemented, would result in planetary warming of 3.4 °C by 2100, without taking into account "long-term" carbon-cycle feedbacks. With a higher climate sensitivity figure of 4.5 °C, for example, which would account for such feedbacks, the Paris path would result in around 5 °C of warming, according to a MIT study.

A study by Schroeder Investment Management published in June 2017 found - after taking into account indicators across a wide range of the political, financial, energy and regulatory sectors - the average temperature increase implied for the Paris Agreement across all sectors was 4.1 °C.

Yet 3 °C of warming already constitutes an existential risk. A 2007 study

by two US national security think-tanks concluded that 3 °C of warming and a 0.5 meter sea-level rise would likely lead to “outright chaos” and “nuclear war is possible”, emphasizing how “massive non-linear events in the global environment give rise to massive nonlinear societal event”.

The Global Challenges Foundation (GCF) explains what could happen: “If climate change was to reach 3 °C, most of Bangladesh and Florida would drown, while major coastal cities - Shanghai, Lagos, Mumbai - would be swamped, likely creating large flows of climate refugees. Most regions in the world would see a significant drop in food production and increasing numbers of extreme weather events, whether heat waves, floods or storms. This likely scenario for a 3 °C rise does not take into account the considerable risk that self-reinforcing feedback loops set in when a certain threshold is reached, leading to an ever increasing rise in temperature. Potential thresholds include the melting of the Arctic permafrost releasing methane into the atmosphere, forest die-back releasing the carbon currently stored in the Amazon and boreal forests, or the melting of polar ice caps that would no longer reflect away light and heat from the sun.”

Warming of 4 °C or more could reduce the global human population by 80% or 90%, and the World Bank reports “there is no certainty that adaptation to a 4 °C world is possible.”

Prof. Kevin Anderson says a 4 °C future “is incompatible with an organized global community, is likely to be beyond ‘adaptation’, is devastating to the majority of ecosystems, and has a high probability of not being stable”.

This is a commonly-held sentiment amongst climate scientists. A recent study by the European Commission’s Joint Research Centre found that if the global temperature rose 4 °C, then extreme heatwaves with “apparent temperatures” peaking at over 55 °C will begin to regularly affect many densely populated parts of the world, forcing much activity in the modern industrial world to stop. (“Apparent temperatures” refers to the Heat Index, which quantifies the combined effect of heat and humidity to provide people with a means of avoiding dangerous conditions.)

In 2017, one of the first research papers to focus explicitly on existential climate risks proposed that “mitigation goals be set in terms of climate risk category instead of a temperature threshold”, and established a “dangerous” risk category of warming greater than 1.5 °C, and a “catastrophic” category for warming of 3 °C or more. The authors focussed on the impacts on the world’s poorest three billion people, on health and heat stress, and the impacts of climate extremes on such people with limited adaptation resources. They found that a 2 °C warming “would double the land area subject to deadly heat and expose 48% of the population (to deadly heat). A 4 °C warming by 2100 would subject 47% of the land area and almost 74% of the world population to deadly heat, which could pose existential risks to humans and mammals alike unless massive adaptation measures are implemented.”

A 2017 survey of global catastrophic risks by the Global Challenges Foundation found that: “In high-end [climate] scenarios, the scale of destruction is beyond our capacity to model, with a high likelihood of human civilization coming to an end.”

84% of 8000 people in eight countries surveyed for the Foundation considered climate change a “global catastrophic risk”.

Existential risk may arise from a fast rate of system change, since the capacity to adapt, in both the natural and human worlds, is inversely proportional to the pace of change, amongst other factors. In 2004, researchers reported on the rate of warming as a driver of extinction...

At 4 °C of warming “the limits for adaptation for natural systems would largely be exceeded throughout the world”.

Ecological breakdown of this scale would ensure an existential human crisis. By slow degrees, these existential risks are being recognized. In May 2018, an inquiry by the Australian Senate into national security and global warming recognized “climate change as a current and existential national security risk... defined as ‘one that threatens the premature extinction of Earth-originating intelligent life or the permanent and drastic destruction of its potential for desirable future development’”.

In April 2018, the Intelligence on European Pensions and Institutional Investment think-tank warned business leaders that “climate change is an existential risk whose elimination must become a corporate objective”.

However the most recent IPCC Assessment Report did not consider the issue. Whilst the term “risk management” appears in the 2014 IPCC Synthesis Report fourteen times, the terms “existential” and “catastrophic” do not appear...

3.11 Scientists leaked the newest IPCC Report

Here are excerpts from an article entitled **Leak of IPCC Report!** by Scientist’s Rebellion.¹¹:

“We have leaked part III of the upcoming IPCC report. There’s no time to wait around, there’s no time for continued inaction - the people deserve to know NOW what our corporate owned politicians have done to them.

“The greatest crime ever has already been carried out - the perpetrators are still at liberty, but the victims are starting to pile up.

“We leaked the report because governments - pressured and bribed by fossil fuel and other industries, protecting their failed ideology and avoiding accountability - have edited the conclusions before official reports were released in the

¹¹<https://scientistrebellion.com/we-leaked-the-upcoming-ipcc-report/>

past. We leaked it to show that scientists are willing to disobey and take personal risk to inform the public.

“The report explicitly states that incremental change is not a viable option. It states that individual behavioral changes alone are insignificant. It states that justice, equity and redistribution are essential to climate policy.

“It says that we need massive investment - to transform energy systems, transport, industry, land use and agriculture, housing, and to prepare for the accelerating effects of climate breakdown - not the death cult of conservative economics.

“It shows that we must abandon economic growth, which is the basis of capitalism.

“For thousands of scientists - mostly older, privileged, moderate - to agree on something so apparently radical demonstrates the severity of the present moment. But the real radicals are in power. They will plunder the Earth until it is but fire and ash, unless we stop them.

“We plead with people to go into serious nonviolent resistance. To join us in the streets to apply unbearable pressure on this genocidal system - to take it down before it takes us all down with it.”

Only immediate climate action can save the future

Immediate action to halt the extraction of fossil fuels and greatly reduce the emission of CO₂ and other greenhouse gasses is needed to save the long-term future of human civilization and the biosphere.

At the opening ceremony of United Nations-sponsored climate talks in Katowice, Poland, Sir David Attenborough said “Right now, we are facing a man-made disaster of global scale. Our greatest threat in thousands of years. Climate change. If we don’t take action, the collapse of our civilizations and the extinction of much of the natural world is on the horizon. The world’s people have spoken. Their message is clear. Time is running out. They want you, the decision-makers, to act now.”

Antonio Guterres, UN Secretary-General, said climate change was already “a matter of life and death” for many countries. He added that the world is “nowhere near where it needs to be” on the transition to a low-carbon economy.

Swedish student Greta Thunberg, is a 16-year-old who has launched a climate protest movement in her country. She said, in a short but very clear speech after that of UN leader Antonio Guterres: “Some people say that I should be in school instead. Some people say that I should study to become a climate scientist so that I can ‘solve the climate crisis’. But the climate crisis has already been solved. We already have all the facts and solutions.”

She added: “Why should I be studying for a future that soon may be no more, when no one is doing anything to save that future? And what is the point of learning facts when the most important facts clearly mean nothing to our society?”

Thunberg continued: “Today we use 100 million barrels of oil every single day. There are no politics to change that. There are no rules to keep that oil in the ground. So we

can't save the world by playing by the rules. Because the rules have to be changed."

She concluded by saying that "since our leaders are behaving like children, we will have to take the responsibility they should have taken long ago."

Institutional inertia

Our collective failure to respond adequately to the current crisis is very largely due to institutional inertia. Our financial system is deeply embedded and resistant to change. Our entire industrial infrastructure is based on fossil fuels; but if the future is to be saved, the use of fossil fuels must stop. International relations are still based on the concept of absolutely sovereign nation states, even though this concept has become a dangerous anachronism in an era of instantaneous global communication and economic interdependence. Within nations, systems of law and education change very slowly, although present dangers demand rapid revolutions in outlook and lifestyle.

The failure of the recent climate conferences to produce strong final documents can be attributed to the fact that the nations attending the conferences felt themselves to be in competition with each other, when in fact they ought to have cooperated in response to a common danger. The heavy hand of the fossil fuel industry also made itself felt at the conferences.

Until the development of coal-driven steam engines in the 19th century humans lived more or less in harmony with their environment. Then, fossil fuels, representing many millions of years of stored sunlight, were extracted and burned in two centuries, driving a frenzy of growth of population and industry that has lasted until the present. But today, the party is over. Coal, oil and gas are nearly exhausted, and what remains of them must be left in the ground to avoid existential threats to humans and the biosphere. Big coal and oil corporations base the value of their stocks on ownership of the remaining resources that are still buried, and they can be counted on to use every trick, fair or unfair, to turn those resources into money.

In general corporations represent a strong force resisting change. By law, the directors of corporations are obliged to put the profits of stockholders above every other consideration. No room whatever is left for an ecological or social conscience. Increasingly, corporations have taken control of our mass media and our political system. They intervene in such a way as to make themselves richer, and thus to increase their control of the system.

Polite conversation and cultural inertia

Each day, the conventions of polite conversation contribute to our sense that everything is as it always was. Politeness requires that we do not talk about issues that might be contrary to another person's beliefs. Thus polite conversation is dominated by trivia, entertainment, sports, the weather, gossip, food, and so on. Worries about the distant future, the danger of nuclear war, the danger of uncontrollable climate change, or the danger of widespread famine seldom appear in conversations at the dinner table, over coffee or at the pub. In conversations between polite people, we obtain the false impression that

all is well with the world. But in fact, all is not well. We have to act promptly and adequately to save the future.

The situation is exactly the same in the mass media. The programs and articles are dominated by trivia and entertainment. Serious discussions of the sudden crisis which civilization now faces are almost entirely absent, because the focus is on popularity and ratings. As Neil Postman remarked, we are entertaining ourselves to death.

Further growth implies future collapse

We have to face the fact that endless economic growth on a finite planet is a logical impossibility, and that we have reached or passed the sustainable limits to growth.

In today's world, we are pressing against the absolute limits of the earth's carrying capacity, and further growth carries with it the danger of future collapse. In the long run, neither the growth of industry nor that of population is sustainable; and we have now reached or exceeded the sustainable limits.

The size of the human economy is, of course, the product of two factors: the total number of humans, and the consumption per capita. Let us first consider the problem of reducing the per-capita consumption in the industrialized countries. The whole structure of western society seems designed to push its citizens in the opposite direction, towards ever-increasing levels of consumption. The mass media hold before us continually the ideal of a personal utopia, filled with material goods.

Every young man in a modern industrial society feels that he is a failure unless he fights his way to the "top"; and in recent years, women too have been drawn into the competition. Of course, not everyone can reach the top; there would not be room for everyone; but society urges us all to try, and we feel a sense of failure if we do not reach the goal. Thus, modern life has become a competition of all against all for power and possessions.

When possessions are used for the purpose of social competition, demand has no natural upper limit; it is then limited only by the size of the human ego, which, as we know, is boundless. This would be all to the good if unlimited industrial growth were desirable; but today, when further industrial growth implies future collapse, western society urgently needs to find new values to replace our worship of power, our restless chase after excitement, and our admiration of excessive consumption.

If you turn on your television set, the vast majority of the programs that you will be offered give no hint at all of the true state of the world or of the dangers which we will face in the future. Part of the reason for this willful blindness is that no one wants to damage consumer confidence. No one wants to bring on a recession. No one wants to shoot Santa Claus.

But sooner or later a severe recession will come, despite our unwillingness to recognize this fact. Perhaps we should prepare for it by reordering the world's economy and infrastructure to achieve long-term sustainability, i.e. steady-state economics, population stabilization, and renewable energy.

Our responsibility to future generations and to the biosphere

All of the technology needed for the replacement of fossil fuels by renewable energy is already in place. Although renewable sources currently supply only 19 percent of the world's energy requirements, they are growing rapidly. For example, wind energy is growing at the rate of 30 percent per year. Because of the remarkable properties of exponential growth, this will mean that wind will soon become a major supplier of the world's energy requirements, despite bitter opposition from the fossil fuel industry.

Both wind and solar energy can now compete economically with fossil fuels, and this situation will become even more pronounced if more countries put a tax on carbon emissions, as Finland, the Netherlands, Norway, Costa Rica, the United Kingdom and Ireland already have done.¹²

Much research and thought have also been devoted to the concept of a steady-state economy. The only thing that is lacking is political will. It is up to the people of the world to make their collective will felt.¹³

History has given to our generation an enormous responsibility towards future generations. We must achieve a new kind of economy, a steady-state economy. We must stabilize global population. We must replace fossil fuels by renewable energy. We must abolish nuclear weapons. We must end the institution of war. We must reclaim democracy in our own countries when it has been lost. We must replace nationalism by a just system of international law. We must prevent degradation of the earth's environment. We must act with dedication and fearlessness to save the future of the earth for human civilization and for the plants and animals with which we share the gift of life.

“And yes, we do need hope. Of course, we do. But the one thing we need more than hope is action. Once we start to act, hope is everywhere. So instead of looking for hope, look for action. Then and only then, hope will come today.”
Greta Thunberg

Why do we not respond to the crisis?

Today we are faced with multiple interrelated crises, for example the threat of catastrophic climate change or equally catastrophic thermonuclear war, and the threat of widespread famine. These threats to human existence and to the biosphere demand a prompt and rational response; but because of institutional and cultural inertia, we are failing to take the steps that are necessary to avoid disaster.

¹²<http://eruditio.worldacademy.org/issue-5/article/urgent-need-renewable-energy>

¹³<http://steadystate.org/category/herman-daly/>

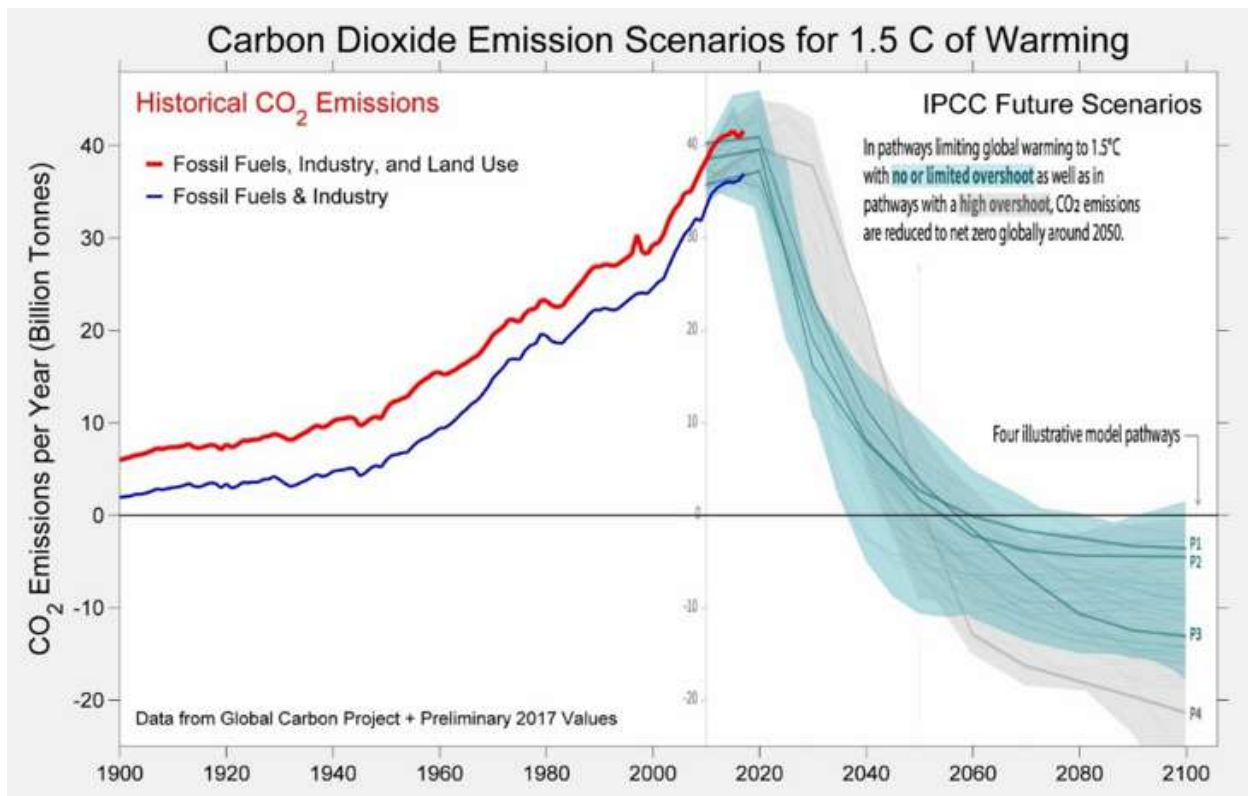
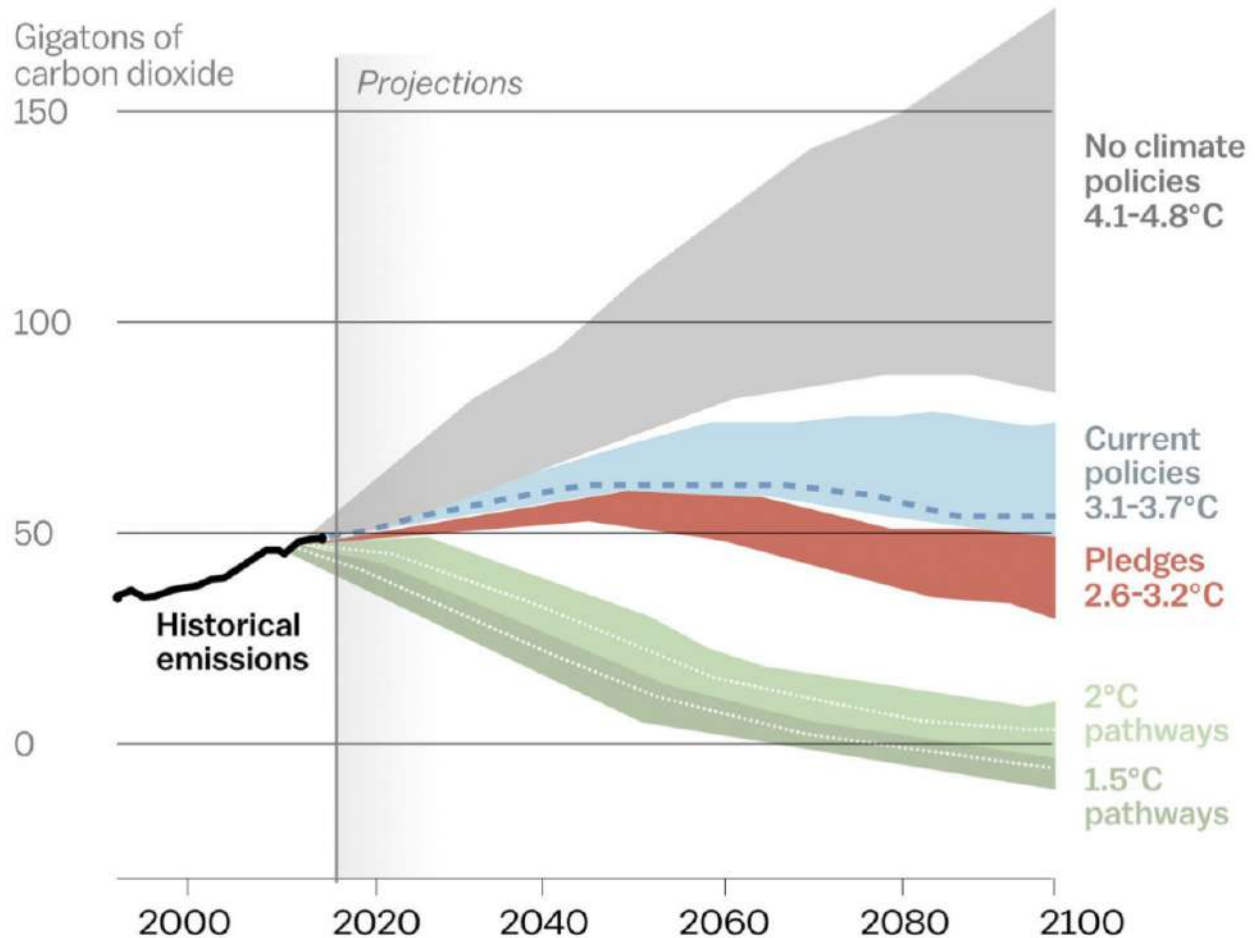


Figure 3.11: Our carbon budget. If global warming is to be limited to 1.5°C, CO₂ emissions must fall extremely rapidly. This means radical and fundamental changes for economies and lifestyles.

Effect of current pledges and policies

Global greenhouse gas emissions



Source: Climate Action Tracker

Vox

Figure 3.12: Predicted gigatons of carbon emitted during the present century under various policies. Under current policies, temperatures at the end of the century are predicted to be 3.1-3.7°C higher than normal, which would be disastrous. This implies that quick action must be taken to change current policies.

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Chapter 4

MONEY, TRUMP, AND CORPORATE DEMOCRATS

4.1 Donald Trump is still a danger

Although he is no longer in the White House; although he has been banned from most social media, Donald Trump is still a danger because of his hold on the Republican Party and because of the irrational support that he still commands from his followers.

The 14th Amendment should be used to disqualify Trump

Section 3 of the 14th Amendment states that “No person shall be a Senator or Representative in Congress, or elector of President and Vice President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may, by a vote of two-thirds of each House, remove such disability.”

Wikipedia states that “On January 10, 2021, Nancy Pelosi, the Speaker of the House, formally requested Representatives’ input as to whether to pursue Section 3 disqualification of former US president Donald Trump because of his role in the attack on the United States Capitol on January 6. Unlike impeachment, which requires a supermajority to convict, disqualification under Section 3 would only require a simple majority of each house of Congress.”

Donald Trump should be prosecuted for his many crimes

Donald Trump is guilty of many crimes, for all of which he ought to be prosecuted. These include tax evasion, misuse of public funds, and excess deaths from COVID-19 caused by

his deliberate hiding of the facts regarding the pandemic. and inadequate governmental response. He caused several hundred thousand unnecessary deaths.

4.2 Today's Republican Party is completely irresponsible

The Republican Party always had protection of the privileges of the rich as its primary goal. The GOP degenerated much further under Trump and today it can hardly be called a political party. Instead it is an instrument of destruction. Nominally, the Republican goal is to destroy the Democrats, but in the process it is destroying the planet, destroying the future of human society and the biosphere.

In the Paris Agreement of 2016, the nations of the world agreed to aim at limiting global warming to 1.5 degrees C above preindustrial levels. Trump withdrew from the agreement, promoted the use of coal and other fossil fuels, and sabotaged both renewable energy development and the Environmental Protection Agency. Trump was a climate change denier, but he was not alone in this. In the 2016 Presidential Election, all of the major Republican candidates denied the climate change is really taking place.

Manchin and Sinema sabotage Biden's climate efforts

More recently, US President Joe Biden hoped to pass the Build Back Better Act, containing important steps towards preventing catastrophic climate change, but the legislation has been gutted and sabotaged, not only by unanimous Republican but also by two Senators who claim to be Democrats but who might as well be Republicans. Joe Manchin and Kyrsten Sinema. They are blocking Biden's climate agenda, and thus destroying humanity's chance for a reasonable future. For this antihuman activity, Joe Manchin receives very large amounts of money from giant coal mining corporations.¹

4.3 Trump is a COVID-19 mass murderer!

Here are some quotations from an article entitled **Deborah Birx Admits Trump's Campaign Distracted From COVID Response** by Heather Digby Parton, published by Truthout on October 27, 2021.

"Is playing politics with a deadly pandemic a crime against humanity? The Brazilian Senate thinks so, and they have backed a report calling for charges against President Jair Bolsonaro over his handling of COVID-19..."

"Brazil's death toll is huge - second only to the United States - with over 600,000 deaths and counting. Their first wave was monstrous with mass graves

¹Kyrsten Sinema gets her blood money from the pharmaceutical industry.



Figure 4.1: Deborah Birx, White House coronavirus response coordinator, speaks at the daily briefing of the White House Coronavirus Task Force as Donald Trump looks on in the Rose Garden at the White House April 15, 2020.

and overwhelming hospital overload. When the second hit they were so ill-prepared that they ran out of oxygen. Bolsonaro's response has been to tell people to 'stop whining' about 'the little flu.' He refused necessary lockdown measures from the beginning and relentlessly pushed snake oil cures like hydroxychloroquine. He has disparaged vaccines, masks and other public health measures...

"We all saw the similarities between Bolsonaro and Trump's reaction to the pandemic in real-time.

"They both downplayed the virus and were obsessively concerned with the economic fallout, leading them to lean on scientists to fudge the numbers. Both of them were constantly out in public exposing themselves and others to the virus and they each recommended unscientific cure-alls while ignoring the public health recommendations that actually mitigated the worst of the virus. Trump really wanted to take credit for the vaccines but he has been forced to downplay that achievement due to skepticism among his followers, while Bolsonaro just comes right out and says they don't work. Their record in the pandemic is astonishingly similar.

"Here in the U.S., the task of investigating what happened with the pandemic has fallen to the House Select Subcommittee on the Coronavirus Crisis, which has kept a pretty low profile these last few months. But on Tuesday they took the testimony of Dr. Deborah Birx, Trump's COVID-19 coordinator. According to the New York Times, Birx reiterated her earlier shocking claim that at least 130,000 lives were unnecessarily lost because the administration refused to do everything it could to ensure the nation followed the public health recommendations to mitigate the spread of the disease..."

4.4 Evangelicals

Here is an excerpt from a December 31, 2018 article in the New York Times by Katherine Stewart:

The month before the 2018 midterms, a thousand theaters screened "The Trump Prophecy," a film that tells the story of Mark Taylor, a former firefighter who claims that God told him in 2011 that Donald Trump would be elected president.

At a critical moment in the film, just after the actor representing Mr. Taylor collapses in the flashing light of an epiphany, he picks up a Bible and turns to the 45th chapter of the book of Isaiah, which describes the anointment of King Cyrus by God. In the next scene, we hear Mr. Trump being interviewed on "The 700 Club," a popular Christian television show.

As Lance Wallnau, an evangelical author and speaker who appears in the film, once said, "I believe the 45th president is meant to be an Isaiah 45 Cyrus," who will "restore the crumbling walls that separate us from cultural collapse."

Cyrus, in case you've forgotten, was born in the sixth century B.C.E. and became the first emperor of Persia. Isaiah 45 celebrates Cyrus for freeing a population of Jews who were held captive in Babylon. Cyrus is the model for a nonbeliever appointed by God as a vessel for the purposes of the faithful.

The identification of the 45th president with an ancient Middle Eastern potentate isn't a fringe thing. "The Trump Prophecy" was produced with the help of professors and students at Liberty University, whose president, Jerry Falwell Jr., has been instrumental in rallying evangelical support for Mr. Trump. Jeanine Pirro of Fox News has picked up on the meme, as has Ron Dermer, the Israeli ambassador to the United States, among many others.

As the Trump presidency falls under siege on multiple fronts, it has become increasingly clear that the so-called values voters will be among the last to leave the citadel. A lot of attention has been paid to the supposed paradox of evangelicals backing such an imperfect man, but the real problem is that our idea of Christian nationalism hasn't caught up with the reality. We still buy the line that the hard core of the Christian right is just an interest group working to protect its values. But what we don't get is that Mr. Trump's supposedly anti-Christian attributes and anti-democratic attributes are a vital part of his attraction.

Today's Christian nationalists talk a good game about respecting the Constitution and America's founders, but at bottom they sound as if they prefer autocrats to democrats. In fact, what they really want is a king. "It is God that raises up a king," according to Paula White, a prosperity gospel preacher who has advised Mr. Trump.

Ralph Drollinger, who has led weekly Bible study groups in the White House attended by Vice President Mike Pence and many other cabinet members, likes the word "king" so much that he frequently turns it into a verb. "Get ready to king in our future lives," he tells his followers. "Christian believers will - soon, I hope - become the consummate, perfect governing authorities!"

The great thing about kings like Cyrus, as far as today's Christian nationalists are concerned, is that they don't have to follow rules. They are the law. This makes them ideal leaders in paranoid times.



Figure 4.2: Apparently insanity rules the United States today. The Evangelical Right believes that Trump was sent by God to be King, despite the fact that, according to Glenn Kessler, author of the Washington Post’s Fact Checker column, Trump told an average of 15 lies per day in 2018, bringing the total number of documented lies since he took office in January 2017 to 7,645. But neither Trump’s lies, nor his racism and misogyny, nor his cruel authorization of imprisonment of very young children and even babies, are his worst crimes. His most serious offense is a crime against human civilization and the biosphere: his support for coal, his climate change denial, his sabotaging of renewable energy, and his withdrawal from the Paris agreement. These actions, and support for them by Republicans, caused Noam Chomsky to call the Republican Party “the most dangerous organization in history”.



Figure 4.3: An artist's impression of Trump's National Security Advisor John Bolton.



Figure 4.4: Stars and stripes.



Figure 4.5: Anit-Mexican language used by Trump is very similar to the language used by the El Paso mass murderer. A recent article *Ex-FBI Official, FBI reluctant to probe white supremacists because Trump considers them his base*, quotes Dave Gomez as saying “There’s some reluctance among agents to bring forth an investigation that targets what the president perceives as his base.”



Figure 4.6: Family members mourning the victims of the El Paso murders.



Figure 4.7: A woman lights a candle at a makeshift memorial outside Walmart, near the scene of a mass shooting which left 22 people dead, on August 4, 2019, in El Paso, Texas.

4.5 The El Paso mass murders

On the morning of August 3, 2019, 21-year-old Patrick Wood Crusius, a Republican follower of Donald Trump, walked into a Walmart in El Paso Texas. carrying an AK-47 automatic weapon. He opened fire on the largely Latino customers, killing 22 people and seriously injuring 24 others. In a manifesto, which he published on the Internet just before the murders, he wrote “In general, I support the Christchurch shooter and his manifesto. This attack is a response to the Hispanic invasion of Texas. They are the instigators, not me. I am simply defending my country from cultural and ethnic replacement brought on by an invasion.” The language and ideas used by Crusius are similar to those of Donald Trump, who often speaks of a Mexican invasion.

The following day, there was another mass shooting, this time in Dayton, Ohio. Again an automatic attack rifle was used. Nine people were killed.

Between January and February, 2019, President Donald Trump’s Facebook page ran about 2,200 ads referring to immigration as an “invasion”.

4.6 Trump copies Hitler’s rhetoric

Book review: *When at Times the Mob Is Swayed*

Below are some quotations from an article by Steven Rosenfeld, published by *Common Dreams* on Friday, August 9, 2019. Rosenfeld’s article is a review of a book by Bert Neuborne entitled *When at Times the Mob Is Swayed: A Citizen’s Guide to Defending Our Republic*.

Neuborne doesn’t make this comparison [between Trump and Hitler] lightly. His 55-year career began by challenging the constitutionality of the Vietnam War in the 1960s. He became the ACLU’s national legal director in the 1980s under Ronald Reagan. He was founding legal director of the Brennan Center for Justice at New York University Law School in the 1990s. He has been part of more than 200 Supreme Court cases and Holocaust reparation litigation.

“Why does an ignorant, narcissistic buffoon like Trump trigger such anxiety? Why do so many Americans feel it existentially (not just politically) important to resist our forty-fifth president?” he writes. “Partly it’s just aesthetics. Trump is such a coarse and appalling man that it’s hard to stomach his presence in Abraham Lincoln’s house. But that’s not enough to explain the intensity of my dread. LBJ was coarse. Gerald Ford and George W. Bush were dumb as rocks. Richard Nixon was an anti-Semite. Bill Clinton’s mistreatment of women dishonored his office. Ronald Reagan was a dangerous ideologue. I opposed each of them when they appeared to exceed their constitutional powers. But I never felt a sense of existential dread. I never sensed that the very existence of a tolerant democracy was in play.”

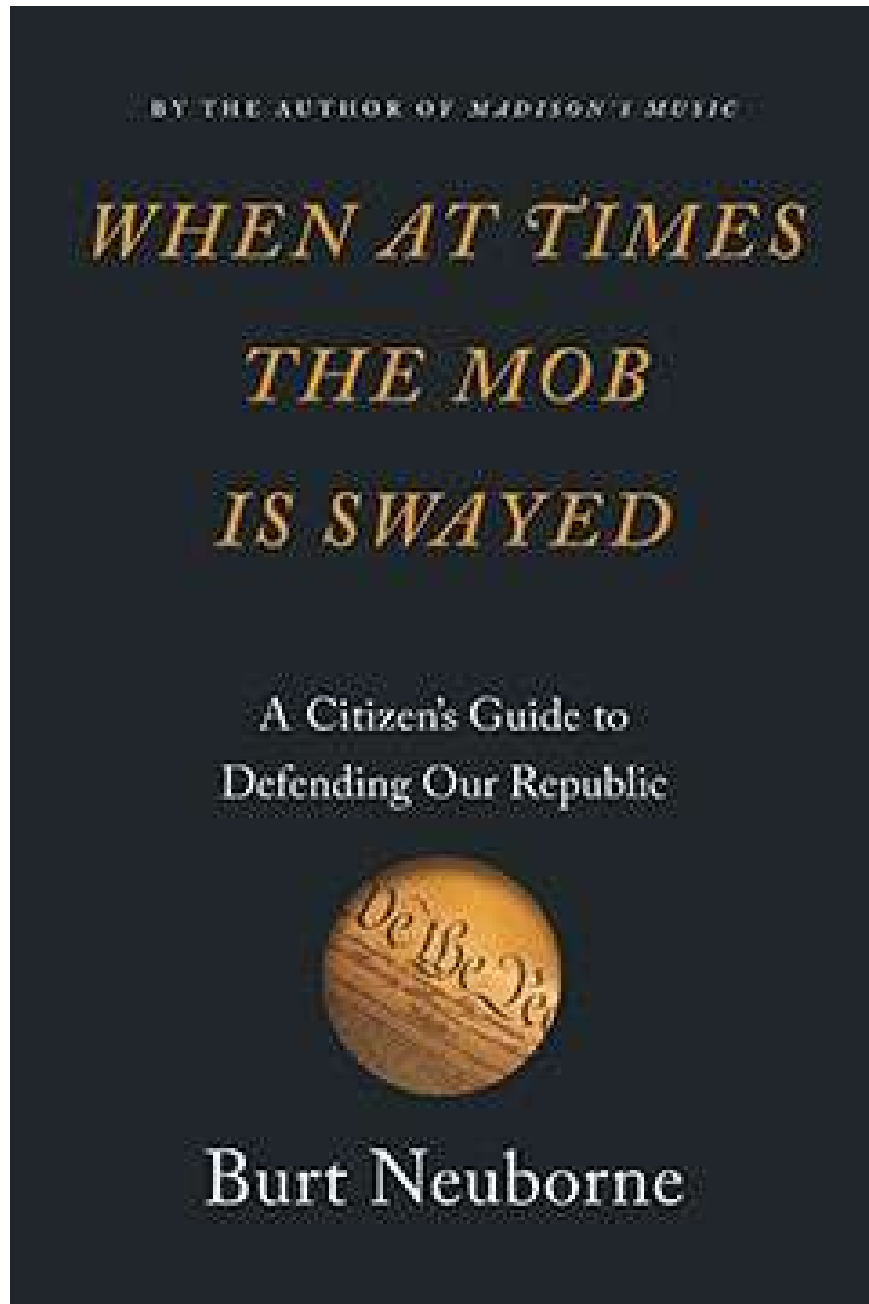


Figure 4.8: Burt Neuborne's brilliant book on the current crisis of American democracy is a warning that we must take very seriously.



A younger Trump, according to his first wife's divorce filings, kept and studied a book translating and annotating Adolf Hitler's pre-World War II speeches in a locked bedside cabinet, Neuborne noted. The English edition of *My New Order*, published in 1941, also had analyses of the speeches' impact on his era's press and politics. "Ugly and appalling as they are, those speeches are masterpieces of demagogic manipulation," Neuborne says.

"Watching Trump work his crowds, though, I see a dangerously manipulative narcissist unleashing the demagogic spells that he learned from studying Hitler's speeches - spells that he cannot control and that are capable of eroding the fabric of American democracy," Neuborne says. "You see, we've seen what these rhetorical techniques can do. Much of Trump's rhetoric - as a candidate and in office - mirrors the strategies, even the language, used by Adolf Hitler in the early 1930s to erode German democracy."

Many Americans may seize or condemn Neuborne's analysis, which has more than 20 major points of comparison. The author repeatedly says his goal is not "equating" the men - as "it trivializes Hitler's obscene crimes to compare them to Trump's often pathetic foibles."

Indeed, the book has a larger frame: whether federal checks and balances - Congress, the Supreme Court, the Electoral College - can contain the havoc that Trump thrives on and the Republican Party at large has embraced. But the Trump-Hitler compilation is a stunning warning, because, as many Holocaust survivors have said, few Germans or Europeans expected what unfolded in the years after Hitler amassed power.

Here's how Neuborne introduces this section. Many recent presidents have been awful, "But then there was Donald Trump, the only president in recent American history to openly despise the twin ideals - individual dignity and fundamental equality - upon which the contemporary United States is built. When you confront the reality of a president like Trump, the state of both sets of brakes - internal [constitutional] and external [public resistance] - become hugely important because Donald Trump's political train runs on the most potent and dangerous fuel of all: a steady diet of fear, greed, loathing, lies, and envy. It's a toxic mixture that has destroyed democracies before, and can do so again.

"Give Trump credit," he continues. "He did his homework well and became the twenty-first-century master of divisive rhetoric. We're used to thinking of Hitler's Third Reich as the incomparably evil tyranny that it undoubtedly was. But Hitler didn't take power by force. He used a set of rhetorical tropes codified in Trump's bedside reading that persuaded enough Germans to welcome Hitler as a populist leader. The Nazis did not overthrow the Weimar Republic. It fell into their hands as the fruit of Hitler's satanic ability to mesmerize enough Germans to trade their birthright for a pottage of scapegoating, short-term economic gain, xenophobia, and racism. It could happen here."

Twenty points of similarity

Neuborne lists the following points of similarity between early Hitler and Trump:

1. Neither was elected by a majority. Trump lost the popular vote by 2.9 million votes, receiving votes by 25.3 percent of all eligible American voters. "That's just a little less than the percentage of the German electorate that turned to the Nazi Party in 1932-33," Neuborne writes. "Unlike the low turnouts in the United States, turnout in Weimar Germany averaged just over 80 percent of eligible voters." He continues, "Once installed as a minority chancellor in January 1933, Hitler set about demonizing his political opponents, and no one - not the vaunted, intellectually brilliant German judiciary; not the respected, well-trained German police; not the revered, aristocratic German military; not the widely admired, efficient German government bureaucracy; not the wealthy, immensely powerful leaders of German industry; and not the powerful center-right political leaders of the Reichstag - mounted a serious effort to stop him."
2. Both found direct communication channels to their base. By 1936's Olympics, Nazi narratives dominated German cultural and political life. "How on earth did Hitler pull it off? What satanic magic did Trump find in Hitler's speeches?" Neuborne asks. He addresses Hitler's extreme rhetoric soon enough, but notes that Hitler found a direct communication pathway - the Nazi Party gave out radios with only one channel, tuned to Hitler's voice, bypassing Germany's news media. Trump has an online equivalent.

"Donald Trump's tweets, often delivered between midnight and dawn, are the twenty-first century's technological embodiment of Hitler's free plastic radios," Neuborne says. "Trump's Twitter account, like Hitler's radios, enables a charismatic leader to establish and maintain a personal, unfiltered line of communication with an adoring political base of about 30-40 percent of the population, many (but not all) of whom are only too willing, even anxious, to swallow Trump's witches' brew of falsehoods, half-truths, personal invective, threats, xenophobia, national security scares, religious bigotry, white racism, exploitation of economic insecurity, and a never ending-search for scapegoats."
3. Both blame others and divide on racial lines. As Neuborne notes, "Hitler used his single-frequency radios to wax hysterical to his adoring base about his pathological racial and religious fantasies glorifying Aryans and demonizing Jews, blaming Jews (among other racial and religious scapegoats) for German society's ills." That is comparable to "Trump's tweets and public statements, whether dealing with black-led demonstrations against police violence, white-led racist mob violence, threats posed by

undocumented aliens, immigration policy generally, protests by black and white professional athletes, college admission policies, hate speech, even response to hurricane damage in Puerto Rico," he says. Again and again, Trump uses "racially tinged messages calculated to divide whites from people of color."

4. Both relentlessly demonize opponents. "Hitler's radio harangues demonized his domestic political opponents, calling them parasites, criminals, cockroaches, and various categories of leftist scum," Neuborne notes. "Trump's tweets and speeches similarly demonize his political opponents. Trump talks about the country being 'infested' with dangerous aliens of color. He fantasizes about jailing Hillary Clinton, calls Mexicans rapists, refers to 'shithole countries,' degrades anyone who disagrees with him, and dreams of uprooting thousands of allegedly disloyal bureaucrats in the State Department, the Environmental Protection Agency, the FBI, and the CIA, who he calls 'the deep state' and who, he claims, are sabotaging American greatness."
5. They unceasingly attack objective truth. "Both Trump and Hitler maintained a relentless assault on the very idea of objective truth," he continues. "Each began the assault by seeking to delegitimize the mainstream press. Hitler quickly coined the epithet *Lügenpresse* (literally 'lying press') to denigrate the mainstream press. Trump uses a paraphrase of Hitler's lying press epithet - 'fake news' - cribbed, no doubt, from one of Hitler's speeches. For Trump, the mainstream press is a 'lying press' that publishes 'fake news.'" Hitler attacked his opponents as spreading false information to undermine his positions, Neuborne says, just as Trump has attacked "elites" for disseminating false news, "especially his possible links to the Kremlin."
6. They relentlessly attack mainstream media. Trump's assaults on the media echo Hitler's, Neuborne says, noting that he "repeatedly attacks the 'failing New York Times,' leads crowds in chanting 'CNN sucks,' [and] is personally hostile to most reporters." He cites the White House's refusal to fly the flag at half-mast after the murder of five journalists in Annapolis in June 2018, Trump's efforts to punish CNN by blocking a merger of its corporate parent, and trying to revoke federal Postal Service contracts held by Amazon, which was founded by Jeff Bezos, who also owns the Washington Post.
7. Their attacks on truth include science. Neuborne notes, "Both Trump and Hitler intensified their assault on objective truth by deriding scientific experts, especially academics who question Hitler's views on race or Trump's views on climate change, immigration, or economics. For both

Trump and Hitler, the goal is (and was) to eviscerate the very idea of objective truth, turning everything into grist for a populist jury subject to manipulation by a master puppeteer. In both Trump's and Hitler's worlds, public opinion ultimately defines what is true and what is false."

8. Their lies blur reality - and supporters spread them. "Trump's pathological penchant for repeatedly lying about his behavior can only succeed in a world where his supporters feel free to embrace Trump's 'alternative facts' and treat his hyperbolic exaggerations as the gospel truth," Neuborne says. "Once Hitler had delegitimized the mainstream media by a series of systematic attacks on its integrity, he constructed a fawning alternative mass media designed to reinforce his direct radio messages and enhance his personal power. Trump is following the same path, simultaneously launching bitter attacks on the mainstream press while embracing the so-called alt-right media, co-opting both Sinclair Broadcasting and the Rupert Murdoch-owned Fox Broadcasting Company as, essentially, a Trump Broadcasting Network."
9. Both orchestrated mass rallies to show status. "Once Hitler had cemented his personal communications link with his base via free radios and a fawning media and had badly eroded the idea of objective truth, he reinforced his emotional bond with his base by holding a series of carefully orchestrated mass meetings dedicated to cementing his status as a charismatic leader, or Führer," Neuborne writes. "The powerful personal bonds nurtured by Trump's tweets and Fox's fawning are also systematically reinforced by periodic, carefully orchestrated mass rallies (even going so far as to co-opt a Boy Scout Jamboree in 2017), reinforcing Trump's insatiable narcissism and his status as a charismatic leader."
10. They embrace extreme nationalism. "Hitler's strident appeals to the base invoked an extreme version of German nationalism, extolling a brilliant German past and promising to restore Germany to its rightful place as a preeminent nation," Neuborne says. "Trump echoes Hitler's jingoistic appeal to ultranationalist fervor, extolling American exceptionalism right down to the slogan 'Make America Great Again,' a paraphrase of Hitler's promise to restore German greatness."
11. Both made closing borders a centerpiece. "Hitler all but closed Germany's borders, freezing non-Aryan migration into the country and rendering it impossible for Germans to escape without official permission. Like Hitler, Trump has also made closed borders a centerpiece of his administration," Neuborne continues. "Hitler barred Jews. Trump bars Muslims and seekers of sanctuary from Central America. When the lower courts blocked

Trump's Muslim travel ban, he unilaterally issued executive orders replacing it with a thinly disguised substitute that ultimately narrowly won Supreme Court approval under a theory of extreme deference to the president."

12. They embraced mass detention and deportations. "Hitler promised to make Germany free from Jews and Slavs. Trump promises to slow, stop, and even reverse the flow of non-white immigrants, substituting Muslims, Africans, Mexicans, and Central Americans of color for Jews and Slavs as scapegoats for the nation's ills. Trump's efforts to cast dragnets to arrest undocumented aliens where they work, live, and worship, followed by mass deportation... echo Hitler's promise to defend Germany's racial identity," he writes, also noting that Trump has "stooped to tearing children from their parents [as Nazis in World War II would do] to punish desperate efforts by migrants to find a better life."
13. Both used borders to protect selected industries. "Like Hitler, Trump seeks to use national borders to protect his favored national interests, threatening to ignite protectionist trade wars with Europe, China, and Japan similar to the trade wars that, in earlier incarnations, helped to ignite World War I and World War II," Neuborne writes. "Like Hitler, Trump aggressively uses our nation's political and economic power to favor selected American corporate interests at the expense of foreign competitors and the environment, even at the price of international conflict, massive inefficiency, and irreversible pollution [climate change]."
14. They cemented their rule by enriching elites. "Hitler's version of fascism shifted immense power - both political and financial - to the leaders of German industry. In fact, Hitler governed Germany largely through corporate executives," he continues. "Trump has also presided over a massive empowerment - and enrichment - of corporate America. Under Trump, large corporations exercise immense political power while receiving huge economic windfalls and freedom from regulations designed to protect consumers and the labor force. Hitler despised the German labor movement, eventually destroying it and imprisoning its leaders. Trump also detests strong unions, seeking to undermine any effort to interfere with the 'prerogatives of management.'"
15. Both rejected international norms. "Hitler's foreign policy rejected international cooperation in favor of military and economic coercion, culminating in the annexation of the Sudetenland, the phony Hitler-Stalin nonaggression pact, the invasion of Czechoslovakia, and the horrors of global war," Neuborne notes. "Like Hitler, Trump is deeply hostile to

multinational cooperation, withdrawing from the Trans-Pacific Partnership, the Paris Agreement on climate change, and the nuclear agreement with Iran, threatening to withdraw from the North American Free Trade Agreement, abandoning our Kurdish allies in Syria..."

16. They attack domestic democratic processes. "Hitler attacked the legitimacy of democracy itself, purging the voting rolls, challenging the integrity of the electoral process, and questioning the ability of democratic government to solve Germany's problems," Neuborne notes. "Trump has also attacked the democratic process, declining to agree to be bound by the outcome of the 2016 elections when he thought he might lose, supporting the massive purge of the voting rolls allegedly designed to avoid (nonexistent) fraud, championing measures that make it harder to vote, tolerating - if not fomenting - massive Russian interference in the 2016 presidential election, encouraging mob violence at rallies, darkly hinting at violence if Democrats hold power, and constantly casting doubt on the legitimacy of elections unless he wins."
17. Both attack the judiciary and rule of law. "Hitler politicized and eventually destroyed the vaunted German justice system. Trump also seeks to turn the American justice system into his personal playground," Neuborne writes. "Like Hitler, Trump threatens the judicially enforced rule of law, bitterly attacking American judges who rule against him, slyly praising Andrew Jackson for defying the Supreme Court, and abusing the pardon power by pardoning an Arizona sheriff found guilty of criminal contempt of court for disobeying federal court orders to cease violating the Constitution."
18. Both glorify the military and demand loyalty oaths. "Like Hitler, Trump glorifies the military, staffing his administration with layers of retired generals (who eventually were fired or resigned), relaxing control over the use of lethal force by the military and the police, and demanding a massive increase in military spending," Neuborne writes. Just as Hitler "imposed an oath of personal loyalty on all German judges" and demanded courts defer to him, "Trump's already gotten enough deference from five Republican [Supreme Court] justices to uphold a largely Muslim travel ban that is the epitome of racial and religious bigotry." Trump has also demanded loyalty oaths. "He fired James Comey, a Republican appointed in 2013 as FBI director by President Obama, for refusing to swear an oath of personal loyalty to the president; excoriated and then sacked Jeff Sessions, his handpicked attorney general, for failing to suppress the criminal investigation into... Trump's possible collusion with Russia in influencing the 2016 elections; repeatedly threatened to dismiss Robert Mueller, the special counsel carrying out the investigation; and called again and again

for the jailing of Hillary Clinton, his 2016 opponent, leading crowds in chants of ‘lock her up.’” A new chant, “send her back,” has since emerged at Trump rallies directed at non-white Democratic congresswomen.

19. They proclaim unchecked power. “Like Hitler, Trump has intensified a disturbing trend that predated his administration of governing unilaterally, largely through executive orders or proclamations,” Neuborne says, citing the Muslim travel ban, trade tariffs, unraveling of health and environmental safety nets, ban on transgender military service, and efforts to end President Obama’s protection for Dreamers. “Like Hitler, Trump claims the power to overrule Congress and govern all by himself. In 1933, Hitler used the pretext of the Reichstag fire to declare a national emergency and seize the power to govern unilaterally. The German judiciary did nothing to stop him. German democracy never recovered. When Congress refused to give Trump funds for his border wall even after he threw a tantrum and shut down the government, Trump, like Hitler, declared a phony national emergency and claimed the power to ignore Congress,” Neuborne continues. “Don’t count on the Supreme Court to stop him. Five justices gave the game away on the President’s unilateral travel ban. They just might do the same thing on the border wall.” It did in late July, ruling that Trump could divert congressionally appropriated funds from the Pentagon budget - undermining constitutional separation of powers.
20. Both relegate women to subordinate roles. “Finally,” writes Neuborne, “Hitler propounded a misogynistic, stereotypical view of women, valuing them exclusively as wives and mothers while excluding them from full participation in German political and economic life. Trump may be the most openly misogynist figure ever to hold high public office in the United States, crassly treating women as sexual objects, using nondisclosure agreements and violating campaign finance laws to shield his sexual misbehavior from public knowledge, attacking women who come forward to accuse men of abusive behavior, undermining reproductive freedom, and opposing efforts by women to achieve economic equality.”

4.7 Corporate Democrats

The Democratic National Committee has been purchased by corporate money

The disastrous 2016 US election

In the United States, campaigns for the presidential election of 2016 might have been an occasion for a realistic discussion of the enormously important challenges which we now

face, not only in the America, but also throughout the world.

Most thoughtful people agree that the two most important issues facing humanity today are the threat of catastrophic and uncontrollable climate change, and the threat of nuclear war. Each of these threatened disasters has the potential to destroy human civilization and much of the biosphere. But on the whole these vitally important issues were not discussed in an honest way in the mainstream media. Instead the campaign spectacle presented to us by the media was washed down into the murky depths of stupidity by rivers of money from the fossil fuel giants and the military industrial complex.

The Republican presidential candidates were almost single-voiced in denying the reality of climate change, and they were almost unanimously behind foreign policy options that would push the world to the brink of nuclear war.

Unless rapid action is taken, the world may soon pass a tipping point after which human efforts to avoid catastrophic climate change will be useless because feedback loops will have taken over. However, our present situation is by no means hopeless, because of the extremely rapid rate of growth of renewable energy. What can governments do to help? They can stop subsidizing the fossil fuel industry! Without massive fossil fuel subsidies, renewables would be the cheaper option, and economic forces alone would drive the urgently-needed transition to 100% renewable energy.

A report by RNE21, a global renewable energy policy network, states that “Global subsidies for fossil fuels remain high despite reform efforts. Estimates range from USD 550 billion (International Energy Agency) to USD 5.6 trillion per year (International Monetary Fund), depending on how ‘subsidy’ is defined and calculated.”

“Growth in renewable energy (and energy efficiency improvements) is tempered by subsidies to fossil fuels and nuclear power, particularly in developing countries. Subsidies keep conventional energy prices artificially low, which makes it more difficult for renewable energy to compete...”

“Creating a level playing field can lead to a more efficient allocation of financial resources, helping to strengthen to advance the development of energy efficiency and renewable energy technologies. Removing fossil fuel and energy subsidies globally would reflect more accurately the true cost of energy generation.” ²

There is, so to speak, an elephant in the room; but no one wants to talk about it. Everyone (with a very few exceptions) pretends not to see it. They pretend that it is not there. What is this metaphorical elephant? It is the Pentagon’s colossal budget, which is far too sacred a thing to be mentioned in an election campaign.

The size of this budget is almost beyond comprehension: 610 billion dollars per year. This does not include nuclear weapons research, maintenance, cleanup and production, which are paid for by the Department of Energy. Nor does it include payments in pensions to military retirees and widows, nor interest on debt for past wars, nor the State Department’s financing foreign arms sales and military-related development assistance, nor special emergency grants for current wars. Nor are the expenses of the Department of Homeland Security included in the Pentagon’s budget, nor those of the CIA, nor the huge budget

²<http://www.ren21.net/status-of-renewables/global-status-report/>

of NSA and other dark branches of the US government. One can only guess at the total figure if everything should be included, but it is probably well over a trillion dollars per year.

The hidden presence in the room is a trillion-dollar elephant. Perhaps we should include subsidies to fossil fuel giants. Then we would have a multi-trillion-dollar elephant. But it is too sacred to be mentioned. Cut Medicare! Cut pensions! Cut Social Security! Abolish food stamps! Sacrifice support for education! We are running out of money! (Meanwhile the elephant stands there, too holy to be seen.)

Against expectations, Donald Trump who, in the words of Michael Moore, is a “wretched, ignorant, dangerous part-time clown and full-time sociopath”, was elected in 2016. What happened? Disillusioned by the way in which the immensely popular Senator Bernie Sanders was sabotaged by the media and by the Democratic National Committee, and despising Hillary Clinton for her involvement in US wars and Wall Street banks, many progressive voters stayed away from the polls. In their absence, Trump won narrowly. He lost the popular vote, but won the electoral vote. Trump’s White House was a morass of dissension, erratic decisions and lies.



Figure 4.9: Is this the person to whom we ought to entrust the future of our planet? When elected, Donald Trump not only pulled the United States out of the Paris Agreement; he also sabotaged the Environmental Protection Agency to such an extent that the carefully collected facts on climate change that the agency had accumulated had to be secretly saved by scientists to prevent their destruction by the Trump administration. Furthermore, Donald Trump's administration not only subsidized giant coal corporations. It also has sabotaged renewable energy initiatives in the United States.



Figure 4.10: When Senator Bernie Sanders began his campaign for the Democratic presidential nomination, few people believed that he could succeed. But as his campaign gained momentum, enormous crowds were attracted to his reformist speeches, and small individual donors supported his expenses. Although the crowds at Sanders' speeches were at least four times the size of those attending the rallies of other candidates, they were not reported in the mass media. Sanders' campaign was also sabotaged by the corporate-controlled Democratic National Committee. His huge popularity remains undimmed today, despite his loss in the 2016 primary. He advocates a social system for the United States similar to these which have made the Scandinavian countries leaders in both human development and human happiness indices.



Figure 4.11: Dr. Jill Stein was the Green Party's presidential candidate in 2016. She was the only candidate who was willing to talk about the “elephant in the room” - the obscenely enormous military budget that consumed almost a trillion dollars that could otherwise have been used for social goals, health, education and infrastructure.



Figure 4.12: Disillusioned progressive voters who stayed at home were responsible for Trump's victory. Democrats must be very careful not to make the same mistake in future elections. They must nominate a truly progressive candidate for President.

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Chapter 5

MONEY AND WAR

5.1 Eisenhower's farewell address

In his famous farewell address, US President Dwight Eisenhower eloquently described the terrible effects of an overgrown Military-industrial complex. Here are his words:

“We have been compelled to create a permanent armaments industry of vast proportions.... This conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence, economic, political, even spiritual, is felt in every city, every State house, every office of the Federal government...[and] we must not fail to comprehend its grave implications. Our toil, resources and livelihood are all involved; so is the very structure of our society.

“In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the Military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.”

In another speech, he said: “Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed. This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, the hopes of its children.”

Today the world spends more than 1.7 trillion dollars (\$ 1,700,000,000,000) every year on armaments. This vast river of money, almost too large to be imagined, is the “devil's dynamo” driving the institution of war. Politicians notoriously can be bought with a tiny fraction of this enormous amount; hence the decay of democracy. It is also plain that if the almost unbelievable sums now wasted on armaments were used constructively, most of the pressing problems now facing humanity could be solved.

Because the world spends almost two thousand billion dollars each year on armaments, it follows that very many people make their living from war. This is the reason why it is correct to speak of war as an institution, and why it persists, although we know that it is the cause of much of the suffering that inflicts humanity.

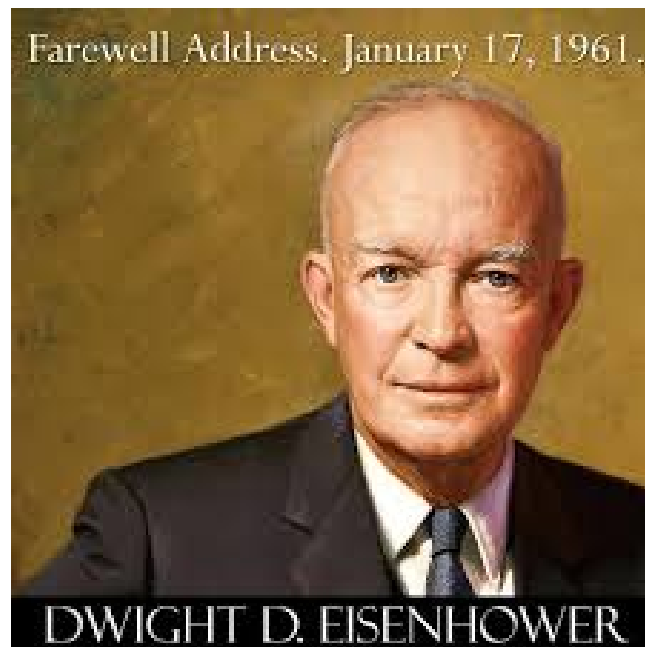


Figure 5.1: “In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the Military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.”



5.2 The threats and costs of war

In the long run, because of the enormously destructive weapons, which have been produced through the misuse of science, the survival of civilization can only be insured if we are able to abolish the institution of war.

Modern warfare has become prohibitively dangerous and destructive because of the enormously powerful weapons that scientists and engineers have developed. The institution of war could not continue without their cooperation. Thus, scientists and engineers throughout the world have a special responsibility.

Wars are driven by the collective paranoia of voters, who are willing to allow colossal sums to be spent by ‘Defense Departments’. But are civilians really defended? Absolutely not!

We can see this most clearly if we think of nuclear war. Nations threaten each other with “Mutually Assured Destruction”, which has the very appropriate acronym MAD. What does this mean? Does it mean that civilians are being protected? Not at all. Instead they are threatened with complete destruction. Civilians here play the role of hostages in the power games of their leaders. Those leaders’ goal is not protection of ordinary people, but rather protection of the gargantuan profits of the military-industrial complex. As the Indian writer Arundhati Roy put it, “Once weapons were manufactured to fight wars. Now wars are manufactured to sell weapons.”

If a thermonuclear war occurs, it will be the end of human civilization and much of the biosphere. This will definitely happen in the future unless the world rids itself of nuclear weapons, since, in the long run, the finite chance of accidental nuclear war happening due to a technical or human failure during a given year will gradually build up into a certainty of disaster. Scientists and engineers must not sell their knowledge and talents to this march towards the precipice.

The direct and indirect costs of war

The costs of war, both direct and indirect, are so enormous that they are almost beyond comprehension. We face a direct threat because a thermonuclear war may destroy human civilization and much of the biosphere, and an indirect threat because the institution of war interferes seriously with the use of tax money for constructive and peaceful purposes.

Today, despite the end of the Cold War, the world spends roughly 1.7 trillion (i.e. 1.7 million million) US dollars each year on armaments. This colossal flood of money could have been used instead for education, famine relief, development of infrastructure, or on urgently needed public health measures.

The World Health Organization lacks funds to carry through an antimalarial program on as large a scale as would be desirable, but the entire program could be financed for less than our military establishments spend in a single day. Five hours of world arms spending is equivalent to the total cost of the 20-year WHO campaign that resulted in the eradication of smallpox. For every 100,000 people in the world, there are 556 soldiers, but only 85 doctors. Every soldier costs an average of \$20,000 per year, while the average spent on



Figure 5.2: Children born with birth defects due to the US use of Agent Orange during the Vietnam War. Source: stopwarcoalition.org

education is only \$380 per school-aged child. With a diversion of funds consumed by three weeks of military spending, the world could create a sanitary water supply for all its people, thus eliminating the cause of almost half of all human illness.

A new drug-resistant form of tuberculosis has recently become widespread in Asia and in the former Soviet Union. In order to combat this new and highly dangerous form of tuberculosis and to prevent its spread, WHO needs \$500 million, an amount equivalent to 1.2 hours of world arms spending.

Today's world is one in which roughly ten million children die every year from starvation or from diseases related to poverty. Besides this enormous waste of young lives through malnutrition and preventable disease, there is a huge waste of opportunities through inadequate education. The rate of illiteracy in the 25 least developed countries is 80%, and the total number of illiterates in the world is estimated to be 800 million. Meanwhile every 60 seconds the world spends \$6.5 million on armaments.

It is plain that if the almost unbelievable sums now wasted on the institution of war were used constructively, most of the pressing problems of humanity could be solved, but today the world spends more than 20 times as much on war as it does on development.

Medical and psychological consequences; loss of life

While in earlier epochs it may have been possible to confine the effects of war mainly to combatants, in the 20th century the victims of war were increasingly civilians, and especially children. For example, according to Quincy Wright's statistics, the First and Second World Wars cost the lives of 26 million soldiers, but the toll in civilian lives was much larger: 64 million.

Since the Second World War, despite the best efforts of the UN, there have been over 150 armed conflicts; and, if civil wars are included, there are on any given day an average of 12 wars somewhere in the world. In the conflicts in Indo-China, the proportion of civilian victims was between 80% and 90%, while in the Lebanese civil war some sources state that the proportion of civilian casualties was as high as 97%.

Civilian casualties often occur through malnutrition and through diseases that would be preventable in normal circumstances. Because of the social disruption caused by war,



Figure 5.3: A little girl cries as medics attend to her injuries at al-Shifa hospital in Gaza in 2014, during the conflict. Photo: UNICEF/Eyad El Baba

normal supplies of food, safe water and medicine are interrupted, so that populations become vulnerable to famine and epidemics.¹

Effects of war on children

According to UNICEF figures, 90% of the casualties of recent wars have been civilians, and 50% children. The organization estimates that in recent years, violent conflicts have driven 20 million children from their homes. They have become refugees or internally displaced persons within their own countries.

During the last decade 2 million children have been killed and 6 million seriously injured or permanently disabled as the result of armed conflicts, while 1 million children have been orphaned or separated from their families. Of the ten countries with the highest rates of death of children under five years of age, seven are affected by armed conflicts. UNICEF estimates that 300,000 child soldiers are currently forced to fight in 30 armed conflicts throughout the world. Many of these have been forcibly recruited or abducted.

Even when they are not killed or wounded by conflicts, children often experience painful psychological traumas: the violent death of parents or close relatives, separation from their families, seeing family members tortured, displacement from home, disruption of ordinary life, exposure to shelling and other forms of combat, starvation and anxiety about the future.²

¹<http://www.cadmusjournal.org/article/volume-2/issue-2-part-3/lessons-world-war-i>
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²<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2080482/>



Figure 5.4: **Asylum-seekers in a holding centre on Greece's Samos Island.**

Refugees

Human Rights Watch estimates that in 2001 there were 15 million refugees in the world, forced from their countries by war, civil and political conflict, or by gross violations of human rights. In addition, there were an estimated 22 million internally displaced persons, violently forced from their homes but still within the borders of their countries.

In 2001, 78% of all refugees came from ten areas: Afghanistan, Angola, Burma, Burundi, Congo-Kinshasa, Eritrea, Iraq, the Palestinian territories, Somalia and Sudan. A quarter of all refugees are Palestinians, who make up the world's oldest and largest refugee population. 45% of the world's refugees have found sanctuaries in Asia, 30% in Africa, 19% in Europe and 5% in North America.

Refugees who have crossed an international border are in principle protected by Article 14 of the Universal Declaration of Human Rights, which affirms their right "to seek and to enjoy in other countries asylum from persecution". In 1950 the Office of the High Commissioner for Refugees was created to implement Article 14, and in 1951 the Convention Relating to the Status of Refugees was adopted by the UN. By 2002 this legally binding treaty had been signed by 140 nations. However the industrialized countries have recently adopted a very hostile and restrictive attitude towards refugees, subjecting them to arbitrary arrests, denial of social and economic rights, and even forcible return to countries in which they face persecution.

The status of internally displaced persons is even worse than that of refugees who have crossed international borders. In many cases the international community simply ignores their suffering, reluctant to interfere in the internal affairs of sovereign states. In fact, the United Nations Charter is self-contradictory in this respect, since on the one hand it calls for non-interference in the internal affairs of sovereign states, but on the other hand, people everywhere are guaranteed freedom from persecution by the Charter's Universal

Declaration of Human Rights.³

Damage to infrastructure

Most insurance policies have clauses written in fine print exempting companies from payment of damage caused by war. The reason for this is simple. The damage caused by war is so enormous that insurance companies could never come near to paying for it without going bankrupt.

We mentioned above that the world spends 1.7 trillion dollars each year on preparations for war. A similarly colossal amount is needed to repair the damage to infrastructure caused by war. Sometimes this damage is unintended, but sometimes it is intentional.

During World War II, one of the main aims of air attacks by both sides was to destroy the industrial infrastructure of the opponent. This made some sense in a war expected to last several years, because the aim was to prevent the enemy from producing more munitions. However, during the Gulf War of 1990, the infrastructure of Iraq was attacked, even though the war was expected to be short. Electrical generating plants and water purification facilities were deliberately destroyed with the apparent aim of obtaining leverage over Iraq after the war.

In general, because war has such a catastrophic effect on infrastructure, it can be thought of as the opposite of development. War is the greatest generator of poverty.⁴

Ecological damage

Warfare during the 20th century has not only caused the loss of 175 million lives (primarily civilians) - it has also caused the greatest ecological catastrophes in human history. The damage takes place even in times of peace. Studies by Joni Seager, a geographer at the University of Vermont, conclude that “a military presence anywhere in the world is the single most reliable predictor of ecological damage”.

Modern warfare destroys environments to such a degree that it has been described as an “environmental holocaust.” For example, herbicides use in the Vietnam War killed an estimated 6.2 billion board-feet of hardwood trees in the forests north and west of Saigon, according to the American Association for the Advancement of Science. Herbicides such as Agent Orange also made enormous areas of previously fertile land unsuitable for agriculture for many years to come. In Vietnam and elsewhere in the world, valuable agricultural land has also been lost because land mines or the remains of cluster bombs make it too dangerous for farming.

During the Gulf War of 1990, the oil spills amounted to 150 million barrels, 650 times the amount released into the environment by the notorious Exxon Valdez disaster. During

³<https://www.hrw.org/topic/refugees>

⁴<https://www.wsws.org/en/articles/2002/11/iraq-n04.html>

<http://www.globalresearch.ca/crimes-against-humanity-the-destruction-of-iraqs-electricity-infrastructure-the-social-economic-and-environmental-impacts/5355665>

<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/00157630-EN-ERP-48.PDF>



Figure 5.5: **Image source: Greenpeace**

the Gulf War an enormous number of shells made of depleted uranium were fired. When the dust produced by exploded shells is inhaled it often produces cancer, and it will remain in the environment of Iraq for decades.

Radioactive fallout from nuclear tests pollutes the global environment and causes many thousands of cases of cancer, as well as birth abnormalities. Most nuclear tests have been carried out on lands belonging to indigenous peoples. Agent Orange also produced cancer, birth abnormalities and other serious forms of illness both in the Vietnamese population and among the foreign soldiers fighting in Vietnam⁵

5.3 The threat of nuclear war

As bad as conventional arms and conventional weapons may be, it is the possibility of a catastrophic nuclear war that poses the greatest threat to humanity. There are today roughly 16,000 nuclear warheads in the world. The total explosive power of the warheads that exist or that could be made on short notice is approximately equal to 500,000 Hiroshima bombs.

To multiply the tragedy of Hiroshima by a factor of half a million makes an enormous difference, not only quantitatively, but also qualitatively. Those who have studied the question believe that a nuclear catastrophe today would inflict irreversible damage on our civilization, genetic pool and environment.

Thermonuclear weapons consist of an inner core where the fission of uranium-235 or plutonium takes place. The fission reaction in the core is able to start a fusion reaction in the next layer, which contains isotopes of hydrogen. It is possible to add a casing of ordinary uranium outside the hydrogen layer, and under the extreme conditions produced

⁵<http://www.dailymail.co.uk/news/article-2401378/Agent-Orange-Vietnamese-children-suffering-effects-herbicide-sprayed-US-Army-40-years-ago.html>



Figure 5.6: **The 15 megaton explosion detonated by the United States at Bikini Atoll in 1954 produced lasting biological damage to humans and animals living on the distant Marshall Islands. Today, half a century later, the islanders still experience radiation sickness in the form of leukemia and birth defects. Source: www.theguardian.com**

by the fusion reaction, this ordinary uranium can undergo fission. In this way, a fission-fusion-fission bomb of almost limitless power can be produced.

For a victim of severe radiation exposure, the symptoms during the first week are nausea, vomiting, fever, apathy, delirium, diarrhoea, oropharyngeal lesions and leukopenia. Death occurs during the first or second week.

We can perhaps be helped to imagine what a nuclear catastrophe means in human terms by reading the words of a young university professor, who was 2,500 meters from the hypocenter at the time of the bombing of Hiroshima: “Everything I saw made a deep impression: a park nearby covered with dead bodies... very badly injured people evacuated in my direction... Perhaps most impressive were girls, very young girls, not only with their clothes torn off, but their skin peeled off as well. ... My immediate thought was that this was like the hell I had always read about. ... I had never seen anything which resembled it before, but I thought that should there be a hell, this was it.”

One argument that has been used in favor of nuclear weapons is that no sane political leader would employ them. However, the concept of deterrence ignores the possibility of war by accident or miscalculation, a danger that has been increased by nuclear proliferation and by the use of computers with very quick reaction times to control weapons systems.

Recent nuclear power plant accidents remind us that accidents frequently happen through human and technical failure, even for systems which are considered to be very “safe.” We must also remember the time scale of the problem. To assure the future of humanity, nuclear catastrophe must be avoided year after year and decade after decade. In the long run, the safety of civilization cannot be achieved except by the abolition of nuclear weapons, and ultimately the abolition of the institution of war.

In 1985, International Physicians for the Prevention of Nuclear War received the Nobel

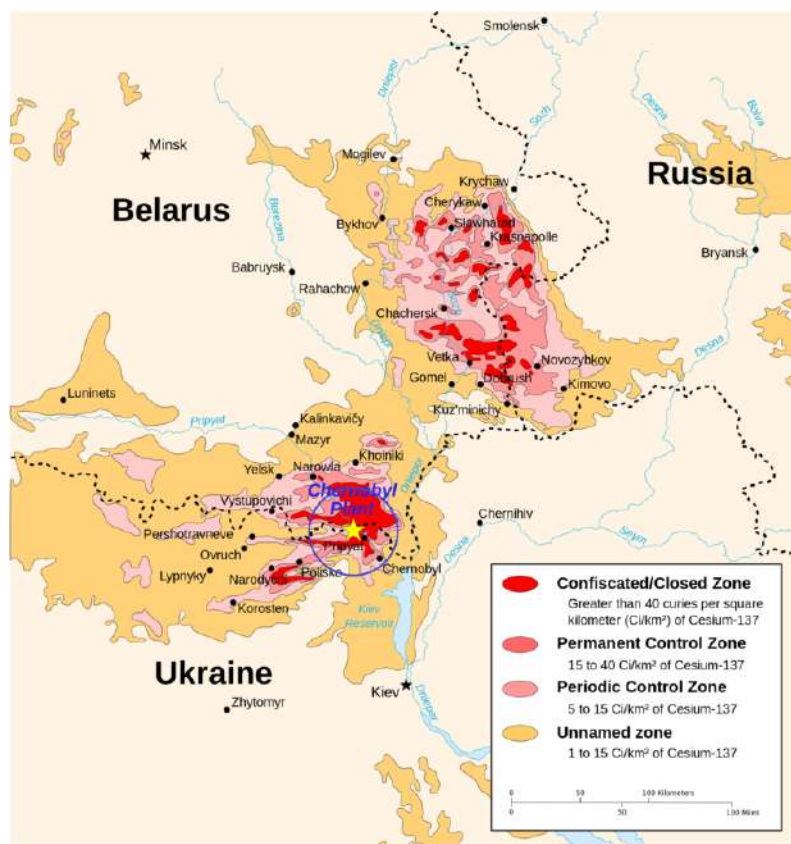


Figure 5.7: A nuclear war would be an ecological disaster, making large portions of the world permanently uninhabitable because of long-lasting radioactivity. Chernobyl radiation map 1996 30km zone by CIA Factbook. Licensed under CC BY-SA 2.5 via Wikimedia Commons.



Figure 5.8: Sculpture depicting Saint George slaying the dragon. The dragon is created from fragments of Soviet SS-20 and United States Pershing nuclear missiles. UN Photo/Milton Grant

Peace Prize. IPPNW had been founded in 1980 by six physicians, three from the Soviet Union and three from the United States. Today, the organization has wide membership among the world's physicians. Professor Bernard Lowen of the Harvard School of Public Health, one of the founders of IPPNW, said in a recent speech:

"...No public health hazard ever faced by humankind equals the threat of nuclear war. Never before has man possessed the destructive resources to make this planet uninhabitable... Modern medicine has nothing to offer, not even a token benefit, in the event of nuclear war..."

"We are but transient passengers on this planet Earth. It does not belong to us. We are not free to doom generations yet unborn. We are not at liberty to erase humanity's past or dim its future. Social systems do not endure for eternity. Only life can lay claim to uninterrupted continuity. This continuity is sacred."

The danger of a catastrophic nuclear war casts a dark shadow over the future of our species. It also casts a very black shadow over the future of the global environment. The environmental consequences of a massive exchange of nuclear weapons have been treated in a number of studies by meteorologists and other experts from both East and West. They predict that a large-scale use of nuclear weapons would result in fire storms with very high winds and high temperatures, which would burn a large proportion of the wild land fuels in the affected nations. The resulting smoke and dust would block out sunlight for a period of many months, at first only in the northern hemisphere but later also in the southern hemisphere.

Temperatures in many places would fall far below freezing, and much of the earth's plant life would be killed. Animals and humans would then die of starvation. The nuclear winter effect was first discovered as a result of the Mariner 9 spacecraft exploration of Mars in 1971. The spacecraft arrived in the middle of an enormous dust-storm on Mars, and measured a large temperature drop at the surface of the planet, accompanied by a heating of the upper atmosphere. These measurements allowed scientists to check their theoretical models for predicting the effect of dust and other pollutants distributed in planetary atmospheres.

Using experience gained from the studies of Mars, R.P. Turco, O.B. Toon, T. Ackerman, J.B. Pollack and C. Sagan made a computer study of the climatic effects of the smoke and dust that would result from a large-scale nuclear war. This early research project is sometimes called the TTAPS Study, after the initials of the authors.

In April 1983, a special meeting was held in Cambridge, Massachusetts, where the results of the TTAPS Study and other independent studies of the nuclear winter effect were discussed by more than 100 experts. Their conclusions were presented at a forum in Washington, D.C., the following December, under the chairmanship of U.S. Senators Kennedy and Hatfield. The numerous independent studies of the nuclear winter effect all agreed of the following main predictions:

High-yield nuclear weapons exploded near the earth's surface would put large amounts of dust into the upper atmosphere. Nuclear weapons exploded over cities, forests, oilfields and refineries would produce fire storms of the type experienced in Dresden and Hamburg after incendiary bombings during the Second World War. The combination of high-altitude

dust and lower altitude soot would prevent sunlight from reaching the earth's surface, and the degree of obscuration would be extremely high for a wide range of scenarios.

A baseline scenario used by the TTAPS study assumes a 5,000-megaton nuclear exchange, but the threshold for triggering the nuclear winter effect is believed to be much lower than that. After such an exchange, the screening effect of pollutants in the atmosphere might be so great that, in the northern and middle latitudes, the sunlight reaching the earth would be only 1% of ordinary sunlight on a clear day, and this effect would persist for many months. As a result, the upper layers in the atmosphere might rise in temperature by as much as 100 °C, while the surface temperatures would fall, perhaps by as much as 50 °C.

The temperature inversion produced in this way would lead to superstability, a condition in which the normal mixing of atmospheric layers is suppressed. The hydrological cycle (which normally takes moist air from the oceans to a higher and cooler level, where the moisture condenses as rain) would be strongly suppressed. Severe droughts would thus take place over continental land masses. The normal cleansing action of rain would be absent in the atmosphere, an effect which would prolong the nuclear winter.

In the northern hemisphere, forests would die because of lack of sunlight, extreme cold, and drought. Although the temperature drop in the southern hemisphere would be less severe, it might still be sufficient to kill a large portion of the tropical forests, which normally help to renew the earth's oxygen.

The oxygen content of the atmosphere would then fall dangerously, while the concentration of carbon dioxide and oxides of nitrogen produced by firestorms would remain high. The oxides of nitrogen would ultimately diffuse to the upper atmosphere, where they would destroy the ozone layer.

Thus, even when the sunlight returned after an absence of many months, it would be sunlight containing a large proportion of the ultraviolet frequencies which are normally absorbed by the ozone in the stratosphere, and therefore a type of light dangerous to life. Finally, after being so severely disturbed, there is no guarantee that the global climate would return to its normal equilibrium.

Even a nuclear war below the threshold of nuclear winter might have climatic effects very damaging to human life. Professor Paul Ehrlich, of Stanford University, has expressed this in the following words:

"...A smaller war, which set off fewer fires and put less dust into the atmosphere, could easily depress temperatures enough to essentially cancel grain production in the northern hemisphere. That in itself would be the greatest catastrophe ever delivered upon Homo Sapiens, just that one thing, not worrying about prompt effects. Thus even below the threshold, one cannot think of survival of a nuclear war as just being able to stand up after the bomb has gone off."⁶

⁶<http://www.voanews.com/content/pope-francis-calls-for-nuclear-weapons-ban/2909357.html>
<http://www.cadmusjournal.org/article/issue-4/flaws-concept-nuclear-deterrence>
<http://www.countercurrents.org/avery300713.htm>
<https://www.wagingpeace.org/author/john-avery/>
<http://www.commondreams.org/news/2015/08/06/70-years-after-bombing-hiroshima-calls-abolish->

5.4 Flaws in the concept of nuclear deterrence

Before discussing other defects in the concept of deterrence, it must be said very clearly that the idea of “massive nuclear retaliation” is completely unacceptable from an ethical point of view. The doctrine of retaliation, performed on a massive scale, violates not only the principles of common human decency and common sense, but also the ethical principles of every major religion. Retaliation is especially contrary to the central commandment of Christianity which tells us to love our neighbor, even if he or she is far away from us, belonging to a different ethnic or political group, and even if our distant neighbor has seriously injured us. This principle has a fundamental place not only in Christianity but also in Buddhism. “Massive retaliation” completely violates these very central ethical principles, which are not only clearly stated and fundamental but also very practical, since they prevent escalatory cycles of revenge and counter-revenge.

Contrast Christian ethics with estimates of the number of deaths that would follow a US nuclear strike against Russia: Several hundred million deaths. These horrifying estimates shock us not only because of the enormous magnitude of the expected mortality, but also because the victims would include people of every kind: women, men, old people, children and infants, completely irrespective of any degree of guilt that they might have. As a result of such an attack, many millions of people in neutral countries would also die. This type of killing has to be classified as genocide.

When a suspected criminal is tried for a wrongdoing, great efforts are devoted to clar-

nuclear-weapons

<http://www.informationclearinghouse.info/article42488.htm>

<http://www.informationclearinghouse.info/article42492.htm>

<http://www.commondreams.org/views/2015/08/06/hiroshima-and-nagasaki-remembering-power>

<http://human-wrongs-watch.net/2015/07/22/israel-iran-and-the-nuclear-non-proliferation-treaty/>

<http://human-wrongs-watch.net/2015/06/25/militarisms-hostages/>

<http://human-wrongs-watch.net/2015/05/24/the-path-to-zero-dialogues-on-nuclear-dangers-by-richard-falk-and-david-krieger/>

<http://human-wrongs-watch.net/2015/03/30/europe-must-not-be-forced-into-a-nuclear-war-with-russia/>

<http://www.truth-out.org/opinion/item/32073-the-us-should-eliminate-its-nuclear-arsenal-not-modernize-it>

<http://www.cadmusjournal.org/article/issue-4/flaws-concept-nuclear-deterrence>

<http://www.cadmusjournal.org/article/issue-6/arms-trade-treaty-opens-new-possibilities-u>

<http://eruditio.worldacademy.org/issue-6/article/remember-your-humanity>

<http://www.informationclearinghouse.info/article42568.htm>

<https://firstlook.org/theintercept/2014/09/23/nobel-peace-prize-fact-day-syria-7th-country-bombed-obama/>

<http://www.informationclearinghouse.info/article42577.htm>

<http://www.informationclearinghouse.info/article42580.htm>

<http://human-wrongs-watch.net/2015/08/06/us-unleashing-of-atomic-weapons-against-civilian-populations-was-a-criminal-act-of-the-first-order/>

<http://human-wrongs-watch.net/2015/08/06/hiroshima-and-nagasaki-remembering-the-power-of-peace/>

<http://human-wrongs-watch.net/2015/08/04/atomic-bombing-hear-the-story-setsuko-thurlow/>

<http://human-wrongs-watch.net/2015/08/04/atomic-bombing-hear-the-story-yasuaki-yamashita/>

<http://human-wrongs-watch.net/2015/08/03/why-nuclear-weapons/>

ifying the question of guilt or innocence. Punishment only follows if guilt can be proved beyond any reasonable doubt. Contrast this with the totally indiscriminate mass slaughter that results from a nuclear attack!

It might be objected that disregard for the guilt or innocence of victims is a universal characteristic of modern war, since statistics show that, with time, a larger and larger percentage of the victims have been civilians, and especially children. For example, the air attacks on Coventry during World War II, or the fire bombings of Dresden and Tokyo, produced massive casualties which involved all segments of the population with complete disregard for the question of guilt or innocence. The answer, I think, is that modern war has become generally unacceptable from an ethical point of view, and this unacceptability is epitomized in nuclear weapons.

The enormous and indiscriminate destruction produced by nuclear weapons formed the background for an historic 1996 decision by the International Court of Justice in the Hague. In response to questions put to it by WHO and the UN General Assembly, the Court ruled that "the threat and use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and particularly the principles and rules of humanitarian law." The only *possible* exception to this general rule might be "an extreme circumstance of self-defense, in which the very survival of a state would be at stake". But the Court refused to say that even in this extreme circumstance the threat or use of nuclear weapons would be legal. It left the exceptional case undecided. In addition, the World Court added unanimously that "there exists an obligation to pursue in good faith *and bring to a conclusion* negotiations leading to nuclear disarmament in all its aspects under strict international control."

This landmark decision has been criticized by the nuclear weapon states as being decided "by a narrow margin", but the structuring of the vote made the margin seem more narrow than it actually was. Seven judges voted against Paragraph 2E of the decision (the paragraph which states that the threat or use of nuclear weapons would be generally illegal, but which mentions as a possible exception the case where a nation might be defending itself from an attack that threatened its very existence.) Seven judges voted for the paragraph, with the President of the Court, Muhammad Bedjaoui of Algeria casting the deciding vote. Thus the Court adopted it, seemingly by a narrow margin. But three of the judges who voted against 2E did so because they believed that no possible exception should be mentioned! Thus, if the vote had been slightly differently structured, the result would have been ten to four.

Of the remaining four judges who cast dissenting votes, three represented nuclear weapons states, while the fourth thought that the Court ought not to have accepted the questions from WHO and the UN. However Judge Schwebel from the United States, who voted against Paragraph 2E, nevertheless added, in a separate opinion, "It cannot be accepted that the use of nuclear weapons on a scale which would - or could - result in the deaths of many millions in indiscriminate inferno and by far-reaching fallout, have pernicious effects in space and time, and render uninhabitable much of the earth, could be lawful." Judge Higgins from the UK, the first woman judge in the history of the Court, had problems with the word "generally" in Paragraph 2E and therefore voted against it,

but she thought that a more profound analysis might have led the Court to conclude in favor of illegality in all circumstances. Judge Fleischhauer of Germany said in his separate opinion, “The nuclear weapon is, in many ways, the negation of the humanitarian considerations underlying the law applicable in armed conflict and the principle of neutrality. The nuclear weapon cannot distinguish between civilian and military targets. It causes immeasurable suffering. The radiation released by it is unable to respect the territorial integrity of neutral States.”

President Bedjaoui, summarizing the majority opinion, called nuclear weapons “the ultimate evil”, and said “By its nature, the nuclear weapon, this blind weapon, destabilizes humanitarian law, the law of discrimination in the use of weapons... The ultimate aim of every action in the field of nuclear arms will always be nuclear disarmament, an aim which is no longer utopian and which all have a duty to pursue more actively than ever.”

Thus the concept of nuclear deterrence is not only unacceptable from the standpoint of ethics; it is also contrary to international law. The World Courts 1996 advisory Opinion unquestionably also represents the opinion of the majority of the world's peoples. Although no formal plebiscite has been taken, the votes in numerous resolutions of the UN General Assembly speak very clearly on this question. For example the New Agenda Resolution (53/77Y) was adopted by the General Assembly on 4 December 1998 by a massively affirmative vote, in which only 18 out of the 170 member states voted against the resolution.⁷ The New Agenda Resolution proposes numerous practical steps towards complete nuclear disarmament, and it calls on the Nuclear-Weapon States “to demonstrate an unequivocal commitment to the speedy and total elimination of their nuclear weapons and without delay to pursue in good faith and bring to a conclusion negotiations leading to the elimination of these weapons, thereby fulfilling their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)”. Thus, in addition to being ethically unacceptable and contrary to international law, nuclear weapons also contrary to the principles of democracy.

More recently, on 7 July, 2017, the Treaty on the Prohibition of Nuclear Weapons was passed by a massive majority in the General Assembly of the United Nations, It was opposed only by the nuclear weapons states and a few of their allies. The Nuclear Ban Treaty makes it very clear that nuclear weapons are illegal under international law. Although the nuclear weapons states still cling to their world-destroying weapons, it is to be hoped that the force of global public opinion will eventually force them to comply with the law.

Having said these important things, we can now turn to some of the other defects in the concept of nuclear deterrence. One important defect is that nuclear war may occur through accident or miscalculation - through technical defects or human failings. This possibility is made greater by the fact that despite the end of the Cold War, thousands of missiles carrying nuclear warheads are still kept on a “hair-trigger” state of alert with

⁷Of the 18 countries that voted against the New Agenda resolution, 10 were Eastern European countries hoping for acceptance into NATO, whose votes seem to have been traded for increased probability of acceptance.

a quasi-automatic reaction time measured in minutes. There is a constant danger that a nuclear war will be triggered by error in evaluating the signal on a radar screen. For example, the BBC reported recently that a group of scientists and military leaders are worried that a small asteroid entering the earth's atmosphere and exploding could trigger a nuclear war if mistaken for a missile strike.

A number of prominent political and military figures (many of whom have ample knowledge of the system of deterrence, having been part of it) have expressed concern about the danger of accidental nuclear war. Colin S. Grey⁸ expressed this concern as follows: "The problem, indeed the enduring problem, is that we are resting our future upon a nuclear deterrence system concerning which we cannot tolerate even a single malfunction." General Curtis E. LeMay⁹ has written, "In my opinion a general war will grow through a series of political miscalculations and accidents rather than through any deliberate attack by either side." Bruce G. Blair¹⁰ has remarked that "It is obvious that the rushed nature of the process, from warning to decision to action, risks causing a catastrophic mistake."... "This system is an accident waiting to happen."

Today, the system that is supposed to give us security is called Mutually Assured Destruction, appropriately abbreviated as MAD. It is based on the idea of deterrence, which maintains that because of the threat of massive retaliation, no sane leader would start a nuclear war.

One important defect in the concept of deterrence is the fact that nuclear war may occur through accident or miscalculation, through technical defects or human failings, or by terrorism. This possibility is made greater by the fact that despite the end of the Cold War, thousands of missiles carrying nuclear warheads are still kept on "hair-trigger alert" with a quasi-automatic reaction time measured in minutes. There is a constant danger that a nuclear war will be triggered by error in evaluating the signal on a radar screen.

Incidents in which global disaster is avoided by a hair's breadth are constantly occurring. For example, on the night of 26 September, 1983, Lt. Col. Stanislav Petrov, a young software engineer, was on duty at a surveillance center near Moscow. Suddenly the screen in front of him turned bright red.

An alarm went off. It's enormous piercing sound filled the room. A second alarm followed, and then a third, fourth and fifth. "The computer showed that the Americans had launched a strike against us", Petrov remembered later. His orders were to pass the information up the chain of command to Secretary General Yuri Andropov. Within minutes, a nuclear counterattack would be launched. However, because of certain inconsistent features of the alarm, Petrov disobeyed orders and reported it as a computer error, which indeed it was.

Most of us probably owe our lives to his coolheaded decision and knowledge of software systems. The narrowness of this escape is compounded by the fact that Petrov was on duty only because of the illness of another officer with less knowledge of software, who would

⁸Chairman, National Institute for Public Policy

⁹Founder and former Commander in Chief of the United States Strategic Air Command

¹⁰Brookings Institute

have accepted the alarm as real.

Narrow escapes such as this show us clearly that in the long run, the combination of space-age science and stone-age politics will destroy us. We urgently need new political structures and new ethics to match our advanced technology.

Nuclear weapons are criminal! Every war is a crime!

War was always madness, always immoral, always the cause of unspeakable suffering, economic waste and widespread destruction, and always a source of poverty, hate, barbarism and endless cycles of revenge and counter-revenge. It has always been a crime for soldiers to kill people, just as it is a crime for murderers in civil society to kill people. No flag has ever been wide enough to cover up atrocities.

But today, the development of all-destroying modern weapons has put war completely beyond the bounds of sanity and elementary humanity.

Can we not rid ourselves of both nuclear weapons and the institution of war itself? We must act quickly and resolutely before everything that we love in our beautiful world is reduced to radioactive ashes.

5.5 Dangers of nuclear power generation

The Chernobyl disaster

The dangers of nuclear power generation are exemplified by the Chernobyl disaster: On the 26th of April, 1986, during the small hours of the morning, the staff of the Chernobyl nuclear reactor in Ukraine turned off several safety systems in order to perform a test. The result was a core meltdown in Reactor 4, causing a chemical explosion that blew off the reactor's 1,000-ton steel and concrete lid. 190 tons of highly radioactive uranium and graphite were hurled into the atmosphere. The resulting radioactive fallout was 200 times greater than that caused by the nuclear bombs that destroyed Hiroshima and Nagasaki. The radioactive cloud spread over Belarus, Ukraine, Russia, Finland, Sweden and Eastern Europe, exposing the populations of these regions to levels of radiation 100 times the normal background. Ultimately, the radioactive cloud reached as far as Greenland and parts of Asia.

The exact number of casualties resulting from the Chernobyl meltdown is a matter of controversy, but according to a United Nations report, as many as 9 million people have been adversely affected by the disaster. Since 1986, the rate of thyroid cancer in affected areas has increased ten-fold. An area of 155,000 square kilometers (almost half the size of Italy) in Belarus, Ukraine and Russia is still severely contaminated. Even as far away as Wales, hundreds of farms are still under restrictions because of sheep eating radioactive grass.

Public opinion turned against nuclear power generation as a result of the Chernobyl disaster. Had the disaster taken place in Western Europe or North America, its effect on

public opinion would have been still greater. Nevertheless, because of the current energy crisis, and because of worries about global warming, a number of people are arguing that nuclear energy should be given a second chance. The counter-argument is that a large increase in the share of nuclear power in the total spectrum of energy production would have little effect on climate change but it would involve unacceptable dangers, not only dangers of accidents and dangers associated with radioactive waste disposal, but above all, dangers of proliferation of nuclear weapons.

Of the two bombs that destroyed Hiroshima and Nagasaki, one made use of the rare isotope of uranium, U-235, while the other used plutonium. Both of these materials can be made by a nation with a nuclear power generation program.

Reactors and nuclear weapons

Uranium has atomic number 92, i.e., a neutral uranium atom has a nucleus containing 92 positively-charged protons, around which 92 negatively-charged electrons circle. All of the isotopes of uranium have the same number of protons and electrons, and hence the same chemical properties, but they differ in the number of neutrons in their nuclei. For example, the nucleus of U-235 has 143 neutrons, while that of U-238 has 146. Notice that $92+143=235$, while $92+146=238$. The number written after the name of an element to specify a particular isotope is the number of neutrons plus the number of protons. This is called the "nucleon number", and the weight of an isotope is roughly proportional to it. This means that U-238 is slightly heavier than U-235. If the two isotopes are to be separated, difficult physical methods dependent on mass must be used, since their chemical properties are identical. In natural uranium, the amount of the rare isotope U-235 is only 0.7 percent.

A paper published in 1939 by Niels Bohr and John A. Wheeler indicated that it was the rare isotope of uranium, U-235, that undergoes fission. A bomb could be constructed, they pointed out, if enough highly enriched U-235 could be isolated from the more common isotope, U-238. Calculations later performed in England by Otto Frisch and Rudolf Peierls showed that the "critical mass" of highly enriched uranium needed is quite small: only a few kilograms.

The Bohr-Wheeler theory also predicted that an isotope of plutonium, Pu-239, should be just as fissionable as U-235¹¹. Instead of trying to separate the rare isotope, U-235, from the common isotope, U-238, physicists could just operate a nuclear reactor until a sufficient amount of Pu-239 accumulated, and then separate it out by ordinary chemical means.

¹¹Both U-235 and Pu-239 have odd nucleon numbers. When U-235 absorbs a neutron, it becomes U-236, while when Pu-239 absorbs a neutron it becomes Pu-240. In other words, absorption of a neutron converts both these species to nuclei with even nucleon numbers. According to the Bohr-Wheeler theory, nuclei with even nucleon numbers are especially tightly-bound. Thus absorption of a neutron converts U-235 to a highly-excited state of U-236, while Pu-239 is similarly converted to a highly excited state of Pu-240. The excitation energy distorts the nuclei to such an extent that fission becomes possible.

Thus in 1942, when Enrico Fermi and his coworkers at the University of Chicago produced the world's first controlled chain reaction within a pile of cans containing ordinary (nonenriched) uranium powder, separated by blocks of very pure graphite, the chain-reacting pile had a double significance: It represented a new source of energy for mankind, but it also had a sinister meaning. It represented an easy path to nuclear weapons, since one of the by-products of the reaction was a fissionable isotope of plutonium, Pu-239. The bomb dropped on Hiroshima in 1945 used U-235, while the Nagasaki bomb used Pu-239.

By reprocessing spent nuclear fuel rods, using ordinary chemical means, a nation with a power reactor can obtain weapons-usable Pu-239. Even when such reprocessing is performed under international control, the uncertainty as to the amount of Pu-239 obtained is large enough so that the operation might superficially seem to conform to regulations while still supplying enough Pu-239 to make many bombs.

The enrichment of uranium¹² is also linked to reactor use. Many reactors of modern design make use of low enriched uranium (LEU) as a fuel. Nations operating such a reactor may claim that they need a program for uranium enrichment in order to produce LEU for fuel rods. However, by operating their ultracentrifuges a little longer, they can easily produce highly enriched uranium (HEU), i.e., uranium containing a high percentage of the rare isotope U-235, and therefore usable in weapons.

Known reserves of uranium are only sufficient for the generation of 8×10^{20} joules of electrical energy¹³, i.e., about 25 TWy. It is sometimes argued that a larger amount of electricity could be obtained from the same amount of uranium through the use of fast breeder reactors, but this would involve totally unacceptable proliferation risks. In fast breeder reactors, the fuel rods consist of highly enriched uranium. Around the core, is an envelope of natural uranium. The flux of fast neutrons from the core is sufficient to convert a part of the U-238 in the envelope into Pu-239, a fissionable isotope of plutonium.

Fast breeder reactors are prohibitively dangerous from the standpoint of nuclear proliferation because both the highly enriched uranium from the fuel rods and the Pu-239 from the envelope are directly weapons-usable. It would be impossible, from the standpoint of equity, to maintain that some nations have the right to use fast breeder reactors, while others do not. If all nations used fast breeder reactors, the number of nuclear weapons states would increase drastically.

It is interesting to review the way in which Israel, South Africa, Pakistan, India and North Korea¹⁴ obtained their nuclear weapons, since in all these cases the weapons were constructed under the guise of "atoms for peace", a phrase that future generations may someday regard as being tragically self-contradictory.

Israel began producing nuclear weapons in the late 1960's (with the help of a "peaceful" nuclear reactor provided by France, and with the tacit approval of the United States) and the country is now believed to possess 100-150 of them, including neutron bombs. Israel's

¹²i.e. production of uranium with a higher percentage of U-235 than is found in natural uranium

¹³Craig, J.R., Vagn, D.J. and Skinner, B.J., *Resources of the Earth: Origin, Use and Environmental Impact, Third Edition*, page 210.

¹⁴Israel, India and Pakistan have refused to sign the Nuclear Non-Proliferation Treaty, and North Korea, after signing the NPT, withdrew from it in 2003.

policy is one of visibly possessing nuclear weapons while denying their existence.

South Africa, with the help of Israel and France, also weaponized its civil nuclear program, and it tested nuclear weapons in the Indian Ocean in 1979. In 1991 however, South Africa destroyed its nuclear weapons and signed the NPT.

India produced what it described as a “peaceful nuclear explosion” in 1974. By 1989 Indian scientists were making efforts to purify the lithium-6 isotope, a key component of the much more powerful thermonuclear bombs. In 1998, India conducted underground tests of nuclear weapons, and is now believed to have roughly 60 warheads, constructed from Pu-239 produced in “peaceful” reactors.

Pakistan’s efforts to obtain nuclear weapons were spurred by India’s 1974 “peaceful nuclear explosion”. As early as 1970, the laboratory of Dr. Abdul Qadeer Khan, (a metallurgist who was to become Pakistan’s leading nuclear bomb maker) had been able to obtain from a Dutch firm the high-speed ultracentrifuges needed for uranium enrichment. With unlimited financial support and freedom from auditing requirements, Dr. Khan purchased restricted items needed for nuclear weapon construction from companies in Europe and the United States. In the process, Dr. Khan became an extremely wealthy man. With additional help from China, Pakistan was ready to test five nuclear weapons in 1998. The Indian and Pakistani nuclear bomb tests, conducted in rapid succession, presented the world with the danger that these devastating weapons would be used in the conflict over Kashmir. Indeed, Pakistan announced that if a war broke out using conventional weapons, Pakistan’s nuclear weapons would be used “at an early stage”.

In Pakistan, Dr. A.Q. Khan became a great national hero. He was presented as the person who had saved Pakistan from attack by India by creating Pakistan’s own nuclear weapons. In a Washington Post article¹⁵ Pervez Hoodbhoy wrote: “Nuclear nationalism was the order of the day as governments vigorously promoted the bomb as the symbol of Pakistan’s high scientific achievement and self-respect...” Similar manifestations of nuclear nationalism could also be seen in India after India’s 1998 bomb tests.

Early in 2004, it was revealed that Dr. Khan had for years been selling nuclear secrets and equipment to Libya, Iran and North Korea, and that he had contacts with Al-Qaeda. However, observers considered that it was unlikely that Khan would be tried, since a trial might implicate Pakistan’s army as well as two of its former prime ministers.

Recent assassination attempts directed at Pakistan’s President, Pervez Musharraf, emphasize the precariousness of Pakistan’s government. There a danger that it may be overthrown, and that the revolutionists would give Pakistan’s nuclear weapons to a subnational organization. This type of danger is a general one associated with nuclear proliferation. As more and more countries obtain nuclear weapons, it becomes increasingly likely that one of them will undergo a revolution, during the course of which nuclear weapons will fall into the hands of criminals or terrorists.

If nuclear reactors become the standard means for electricity generation as the result of a future energy crisis, the number of nations possessing nuclear weapons might ultimately be as high as 40. If this should happen, then over a long period of time the chance that one

¹⁵1 February, 2004

or another of these nations would undergo a revolution during which the weapons would fall into the hands of a subnational group would gradually grow into a certainty.

There is also a possibility that poorly-guarded fissionable material could fall into the hands of subnational groups, who would then succeed in constructing their own nuclear weapons. Given a critical mass of highly-enriched uranium, a terrorist group, or an organized criminal (Mafia) group, could easily construct a crude gun-type nuclear explosive device. Pu-239 is more difficult to use since it is highly radioactive, but the physicist Frank Barnaby believes that a subnational group could nevertheless construct a crude nuclear bomb (of the Nagasaki type) from this material.

We must remember the remark of U.N. Secretary General Kofi Annan after the 9/11/2001 attacks on the World Trade Center. He said, "*This time* it was not a nuclear explosion". The meaning of his remark is clear: If the world does not take strong steps to eliminate fissionable materials and nuclear weapons, it will only be a matter of time before they will be used in terrorist attacks on major cities, or by organized criminals for the purpose of extortion. Neither terrorists nor organized criminals can be deterred by the threat of nuclear retaliation, since they have no territory against which such retaliation could be directed. They blend invisibly into the general population. Nor can a "missile defense system" prevent criminals or terrorists from using nuclear weapons, since the weapons can be brought into a port in any one of the hundreds of thousands of containers that enter on ships each year, a number far too large to be checked exhaustively.

Finally we must remember that if the number of nations possessing nuclear weapons becomes very large, there will be a greatly increased chance that these weapons will be used in conflicts between nations, either by accident or through irresponsible political decisions.

On November 3, 2003, Mohamed ElBaradei, Director General of the International Atomic Energy Agency, made a speech to the United Nations in which he called for "limiting the processing of weapons-usable material (separated plutonium and high enriched uranium) in civilian nuclear programs - as well as the production of new material through reprocessing and enrichment - by agreeing to restrict these operations to facilities exclusively under international control." It is almost incredible, considering the dangers of nuclear proliferation and nuclear terrorism, that such restrictions were not imposed long ago.

From the facts that we have been reviewing, we can conclude that if nuclear power generation becomes widespread during a future energy crisis, and if equally widespread proliferation of nuclear weapons is to be avoided, the powers and budget of the IAEA will have to be greatly increased. All enrichment of uranium and Reprocessing fuel rods throughout the world will have to be placed be under direct international control, as has been emphasized by Mohamed ElBaradei. Because this will need to be done with fairness, such regulations will have to hold both in countries that at present have nuclear weapons and in countries that do not. It has been proposed that there should be an international fuel rod bank, to supply new fuel rods and reprocess spent ones. In addition to this excellent proposal, one might also consider a system where all power generation reactors and all research reactors would be staffed by the IAEA.

Nuclear reactors used for "peaceful" purposes unfortunately also generate fissionable

isotopes of not only of plutonium, but also of neptunium and americium. Thus all nuclear reactors must be regarded as ambiguous in function, and all must be put under strict international control. One must ask whether globally widespread use of nuclear energy is worth the danger that it entails.

Let us now examine the question of whether nuclear power generation would appreciably help to prevent global warming. The fraction of nuclear power in the present energy generation spectrum is at present approximately 1/16. Nuclear energy is used primarily for electricity generation. Thus increasing the nuclear fraction would not affect the consumption of fossil fuels used directly in industry, transportation, in commerce, and in the residential sector. Coal is still a very inexpensive fuel, and an increase in nuclear power generation would do little to prevent it from being burned. Thus besides being prohibitively dangerous, and besides being unsustainable in the long run (because of finite stocks of uranium and thorium), the large-scale use of nuclear power cannot be considered to be a solution to the problem of anthropogenic climate change.

Optimists point to the possibility of using fusion of light elements, such as hydrogen, to generate power. However, although this can be done on a very small scale (and at great expense) in laboratory experiments, the practical generation of energy by means of thermonuclear reactions remains a mirage rather than a realistic prospect on which planners can rely. The reason for this is the enormous temperature required to produce thermonuclear reactions. This temperature is comparable to that existing in the interior of the sun, and it is sufficient to melt any ordinary container. Elaborate “magnetic bottles” have been constructed to contain thermonuclear reactions, and these have been used in successful very small scale experiments. However, despite 50 years of heavily-financed research, there has been absolutely no success in producing thermonuclear energy on a large scale, or at anything remotely approaching commercially competitive prices.

5.6 Military-industrial complexes today

“We’re going to take out seven countries in five years”

In an interview with Amy Goodman¹⁶, retired 4-star General Wesley Clark said: “About ten days after 9/11, I went through the Pentagon and I saw Secretary Rumsfeld and Deputy Secretary Wolfowitz. I went downstairs just to say hello to some of the people on the Joint Staff who used to work for me, and one of the generals called me in. He said, “Sir, you’ve got to come in and talk to me a second.” I said, “Well, you’re too busy.” He said, “No, no.” He says, “We’ve made the decision we’re going to war with Iraq.” This was on or about the 20th of September. I said, “We’re going to war with Iraq? Why?” He said, “I don’t know.” He said, “I guess they don’t know what else to do.” So I said, “Well, did they find some information connecting Saddam to al-Qaeda?” He said, “No, no.” He says, “There’s nothing new that way. They just made the decision to go to war with Iraq.” He said, “I guess it’s like we don’t know what to do about terrorists, but we’ve got a good military

¹⁶<https://genius.com/General-wesley-clark-seven-countries-in-five-years-annotated>



Figure 5.9: General Wesley Clark

and we can take down governments.” And he said, “I guess if the only tool you have is a hammer, every problem has to look like a nail.

So I came back to see him a few weeks later, and by that time we were bombing in Afghanistan. I said, “Are we still going to war with Iraq?” And he said, “Oh, it’s worse than that.” He reached over on his desk. He picked up a piece of paper. And he said, “I just got this down from upstairs” - meaning the Secretary of Defense’s office - “today.” And he said, “This is a memo that describes how we’re going to take out seven countries in five years, starting with Iraq, and then Syria, Lebanon, Libya, Somalia, Sudan and, finishing off, Iran.” I said, “Is it classified?” He said, “Yes, sir.” I said, “Well, don’t show it to me.” And I saw him a year or so ago, and I said, “You remember that?” He said, “Sir, I didn’t show you that memo! I didn’t show it to you!”

The global trade in light arms

An important poverty-generating factor in the developing countries is war - often civil war. The five permanent members of the U.N. Security Council are, ironically, the five largest exporters of small arms. Small arms have a long life. The weapons poured into Africa by both sides during the Cold War are still there, and they contribute to political chaos and civil wars that block development and cause enormous human suffering.

The United Nations website on Peace and Security through Disarmament states that

“Small arms and light weapons destabilize regions; spark, fuel and prolong conflicts; obstruct relief programmes; undermine peace initiatives; exacerbate human rights abuses; hamper development; and foster a ‘culture of violence’.”

An estimated 639 million small arms and light weapons are in circulation worldwide, one for every ten people. Approximately 300,000 people are killed every year by these weapons, many of them women and children.

Examples of endemic conflict

In several regions of Africa, long-lasting conflicts have prevented development and caused enormous human misery. These regions include Ethiopia, Eritria, Somalia (Darfur), Chad, Zimbabwe and the Democratic Republic of Congo. In the Congo, the death toll reached 5.4 million in 2008, with most of the victims dying of disease and starvation, but with war as the root cause. In view of these statistics, the international community can be seen to have a strong responsibility to stop supplying small arms and ammunition to regions of conflict. There is absolutely no excuse for the large-scale manufacture and international sale of small arms that exists today.

The Wolfowitz Doctrine

The Wolfowitz Doctrine is the unofficial name given to the early version of the Defense Strategy for the 1990s: The Regional Defense Strategy report for the 1994-99 fiscal years. It was later released by then Secretary of Defense Dick Cheney in 1993. It brazenly advocates that America do everything in its power to retain its global hegemony and superpower status, including ensuring that Russia, China, Iran and other regional powers - but especially Russia - be prevented from attaining enough power to seriously challenge the US. In short, it's another US blueprint for total global supremacy.

There are many quotable passages from the Wolfowitz Doctrine. Here's one which sums up its aims:

“Our first objective is to prevent the re-emergence of a new rival, either on the territory of the former Soviet Union or elsewhere that poses a threat on the order of that posed formerly by the Soviet Union. This is a dominant consideration underlying the new regional defense strategy and requires that we endeavor to prevent any hostile power from dominating a region whose resources would, under consolidated control, be sufficient to generate global power. These regions include Western Europe, East Asia, the territory of the former Soviet Union, and Southwest Asia.”

Similar motives guide US policy today. In February, 2018, US Secretary of Defense James Mattis said: “We will continue to prosecute the campaign against terrorists, but great-power competition - not terrorism - is now the primary focus of US national security.”

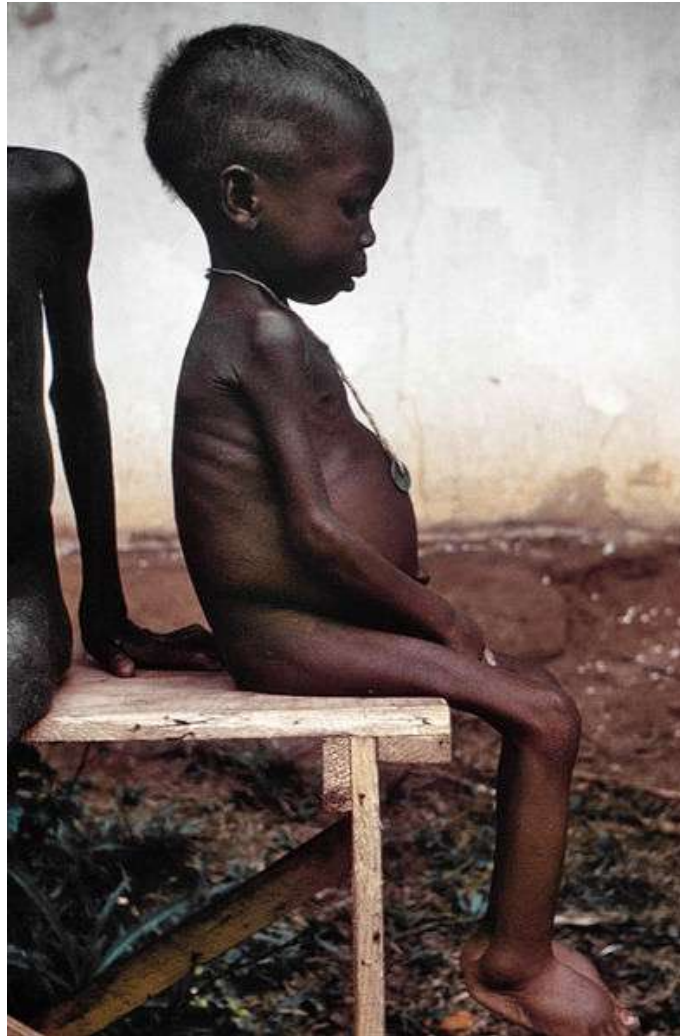


Figure 5.10: 40,000 children die each day from starvation or from poverty-related diseases. Meanwhile, the world spends roughly \$2,00,000,000,000 each year on armaments. Two trillion dollars each year!

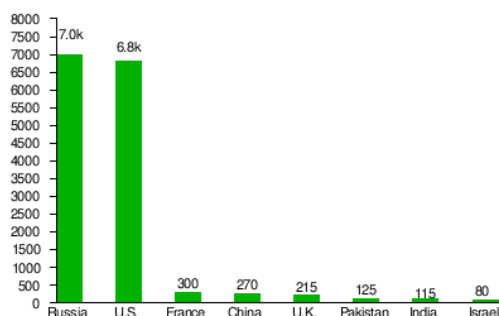


Figure 5.11: Countries by estimated nuclear warhead stockpiles according to the Federation of American scientists.

Militarism in North Korea

The following states are now believed to currently possess nuclear weapons: The United states, Russia, The United Kingdom, France, China, India, Pakistan, North Korea and Israel. The way in which North Korea obtained its nuclear weapons is described by Wikipedia in the following paragraphs:

“The nuclear program can be traced back to about 1962, when North Korea committed itself to what it called ‘all-fortressization’, which was the beginning of the hyper-militarized North Korea of today. In 1963, North Korea asked the Soviet Union for help in developing nuclear weapons, but was refused. The Soviet Union agreed to help North Korea develop a peaceful nuclear energy program, including the training of nuclear scientists. Later, China, after its nuclear tests, similarly rejected North Korean requests for help with developing nuclear weapons.

“Soviet engineers took part in the construction of the Yongbyon Nuclear Scientific Research Center and began construction of an IRT-2000 research reactor in 1963, which became operational in 1965 and was upgraded to 8 MW in 1974. In 1979 North Korea indigenously began to build in Yongbyon a second research reactor, an ore processing plant and a fuel rod fabrication plant. Soviet engineers took part in the construction of the Yongbyon Nuclear Scientific Research Center, and began construction of an IRT-2000 research reactor in 1963, which became operational in 1965 and was upgraded to 8 MW in 1974. In 1979 North Korea indigenously began to build in Yongbyon a second research reactor, an ore processing plant and a fuel rod fabrication plant. ”

Thus like other new nuclear weapons states, North Korea obtained nuclear weapons by misuse of nuclear power generation facilities donated by other countries. In addition, North Korea spend a large fraction of its GDP on conventional armaments. Under the Songun policy, the Korean Peoples Army is the central institution of North Korean society. As of 2016, the Korean Peoples Army had 5,889,000 paramilitary personnel (25% of the population of North Korea) making it the largest paramilitary organization on earth.

Table 5.1: **SIPRI Military Expenditure Database, 2016**

Rank	Country	Annual Spending \$ Bn.	% of GDP
1	United State	611.2	3.3
2	China	215.7	1.9
3	Russia	69.2	5.3
4	Saudi Arabia	63.7	10
5	India	55.9	2.5
6	France	55.7	2.3
7	United Kingdom	48.3	1.9
8	Japan	46.1	1.0
9	Germany	41.1	1.2
10	South Korea	36.8	2.7
11	Italy	27.9	1.5
12	Australia	24.3	2.0

Table 5.2: **SIPRI List of arms manufacturers, 2016**

Rank	Company	Country	Annual Arms Sales \$ Mn.
1	Lockheed Martin	United States	40,830
2	Boeing	United States	29,510
3	Raytheon	United States	22,910
4	BAE Systems	United Kingdom	22,700
5	Northrop Grumman	United States	21,400
6	General Dynamics	United States	19,230
7	Airbus	European Union	12,520
8	L-3 Communications	United States	8,890
9	Leonardo-Finmeccanica	Italy	8,500
10	Thales Group	France	8,170
11	United Technologies Corporation	United States	6,870
12	Huntington Ingalls Industries	United States	6,720



Figure 5.12: North Korea's dictator, Kim Jong-un. The doctrine of nuclear deterrence rests on the assumption that political leaders will always act rationally, an assumption that seems very uncertain in the case of the U.S.-North Korean conflict.

The SIPRI Yearbook, 2017

Dan Smith of the Stockholm International Peace Research Institute (SIPRI) wrote the following Introduction to the organization's yearbook for 2017:

"An overall perspective on 2016 finds a balance between negative developments and the continued functioning of the international system. However, the year ended with clear grounds for concern that the balance sheet seemed to be tipping towards the negative amid growing unease about the durability of key parts of the international security architecture.

"Conflicts in the Middle East continued to generate humanitarian tragedies and large-scale movement of refugees, and violent conflict continued in several other parts of the world, most notably Africa, Asia and to a lesser extent Eastern Europe. Developments in North Korea's nuclear programme contributed to international political instability with potentially serious knock-on effects. On the positive side, the 2015 Paris Climate Agreement entered into force in November 2016, the 2015 Iran nuclear deal began implementation on time in early 2016 and the United Nations General Assembly adopted a resolution to start negotiations in 2017 on eliminating nuclear weapons. Progress was also made on work to monitor the unfolding implementation of the UN's Agenda 2030 for international social and economic development. A major contribution to the positive side of the balance sheet in 2016 was the peace agreement in Colombia.

"Nonetheless, virtually all the major global indicators for peace and security have moved in a negative direction: more military spending, increased arms trading, more violent conflicts and the continuing forward march of military technology.

"Existing multilateral and bilateral arms control agreements and processes are also under challenge-not least due to the deteriorating relationship between Russia and the United States-raising questions of global concern and potentially epochal scope. Were the great gains in peaceful relations since the end of the cold war now being reversed? Would the return of strategic competition between the major powers have negative implications for managing increased conflict risk? These uncertainties, combined with political developments in Europe and the USA- especially the vote by the United Kingdom to leave the European Union and the election of Donald J. Trump as US President-seemed to reveal

a much decreased commitment to international institutions and a renewed emphasis in several key states on a narrowly defined national interest.

“The scale of the challenges facing humanity has been summed up in the proposal to adopt the label of ‘the Anthropocene’ for the current era, thus designating it as one in which human activity is the dominant influence on climate and the environment. It is disconcerting to note that such cooperation risks becoming more elusive than it has seemed for most of the time since the end of the cold war, at a time when it is more needed than ever. Experience has shown that international cooperation can work. But is the international cooperative urge as persistent as the problems it needs to address?”

5.7 A culture of violence

Links with the entertainment industry

Here are a few films that glorify war:

- Black Hawk Down
- Top Gun
- Behind Enemy Lines
- Red Dawn (1984)
- American Sniper
- Iron Eagle
- Pearl Harbor
- Act of Valor
- We Were Soldiers
- The Green Berets

Making a game of killing

The mass media are an important part of our educational system. Perhaps it is time to look more closely at the values that they are transmitting. In particular, we should perhaps look at computer games designed for young boys. They often give the strongest imaginable support to a culture of violence.

For example, a game entitled “Full Spectrum Warrior” was recently reviewed in a Danish newspaper. According to the reviewer, “...An almost perfect combination of graphics, sound, band design, and gameplay makes it seem exactly like the film Black Hawk Down - with the player as the main character. This is not just a coincidence, because the game is based on an army training program... Full Spectrum Warrior is an extremely intense experience, and despite the advanced possibilities, the controls are simple enough so that young children can play it... The player is completely drawn into the screen, and remains there until the end of the mission.” The reviewer gave the game six stars (the maximum).

Another genre of computer games has to do with building empires, ignoring the fact that imperialism is morally indefensible. For example, “Forge of Empires” is a browser-based strategy game. It is described as follows: “The game offers a single-player campaign for players to explore and conquer several provinces, gaining resources and new technology as they progress.” Conquering countries for the sake of gaining their resources is an all-too-familiar feature of the modern world. In the game “Forge of Empires”, our young people are indoctrinated with the ethos of resource wars.

During his trial, the Norwegian mass-murderer Anders Behring Breivik described how he trained for his attack on young people on the Island of Utøya using the computer game “Call of Duty: Modern Warfare”. The court also heard how he took what he called a “sabbatical” for a year between the summers of 2006 and 2007. During this year, he played a game called “World of Warcraft” full-time, in the bedroom of his mother’s Oslo flat, spending up to 16 hours a day using the game to distance himself from the human and moral significance of killing.

Is this not similar to the frame of mind of drone operators, sitting in comfort in their Nevada bunkers, distanced from the reality of killing? They are playing a computer game that kills targeted individuals and their families, in remote countries, by remote control. There is no need to look into the eyes of the victims. They are just abstract symbols in a computer game.

5.8 Militarism is the US national religion

Here are some quotations from an article by William Astore entitled *Military Might Is Our National Religion*¹⁷. He lists the following facts to support his thesis:

- We believe in wars. We may no longer believe in formal declarations of war (not since December 1941 has Congress made one in our name), but that sure hasn’t stopped us from waging them. From Korea to Vietnam, Afghanistan to Iraq, the Cold War to the War on Terror, and so many military interventions in between, including Grenada, Panama, and Somalia, Americans are always fighting somewhere as if we saw great utility in thumbing our noses at the Prince of Peace. (That’s Jesus Christ, if I remember my Catholic catechism correctly.)
- We believe in weaponry, the more expensive the better. The underperforming F-35 stealth fighter may cost \$1.45 trillion over its lifetime. An updated nuclear triad (land-based missiles, nuclear submarines, and strategic bombers) may cost that already mentioned \$1.7 trillion. New (and malfunctioning) aircraft carriers cost us more than \$10 billion each. And all such weaponry requests get funded, with few questions asked, despite a history of their redundancy, ridiculously high price, regular cost

¹⁷Truthout, August 13, 2019

overruns, and mediocre performance. Meanwhile, Americans squabble bitterly over a few hundred million dollars for the arts and humanities.

- We believe in weapons of mass destruction. We believe in them so strongly that we're jealous of anyone nibbling at our near monopoly. As a result, we work overtime to ensure that "infidels" and atheists (that is, the Iranians and North Koreans, among others) don't get them. In historical terms, no country has devoted more research or money to deadly nuclear, biological, and chemical weaponry than the United States. In that sense, we've truly put our money where our mouths are (and where a devastating future might be).
- We believe with missionary zeal in our military and seek to establish our "faith" everywhere. Hence, our global network of perhaps 800 overseas military bases. We don't hesitate to deploy our elite missionaries, our equivalent to the Jesuits, the Special Operations forces to more than 130 countries annually. Similarly, the foundation for what we like to call foreign assistance is often military training and foreign military sales. Our present supreme leader, Pope Trump I, boasts of military sales across the globe, most notably to the "infidel" Saudis. Even when Congress makes what, until recently, was the rarest of attempts to rein in this deadly trade in arms, Pope Trump vetoes it. His rationale: weapons and profits should rule all.
- We believe in our college of cardinals, otherwise known as America's generals and admirals. We sometimes appoint them (or anoint them?) to the highest positions in the land. While Trump's generals - Michael Flynn, James Mattis, H.R. McMaster, and John Kelly - have fallen from grace at the White House, America's generals and admirals continue to rule globally. They inhabit proconsul-like positions in sweeping geographical commands that (at least theoretically) cover the planet and similarly lead commands aimed at dominating the digital-computer realm and special operations. One of them will head a new force meant to dominate space through time eternal. A "strategic" command (the successor to the Strategic Air Command, or SAC, so memorably satirized in Stanley Kubrick's *Dr. Strangelove*) continues to ensure that, at some future moment, the U.S. will be able to commit mass genocide by quite literally destroying the world with nuclear weapons. Indeed, Pope Trump recently boasted that he could end America's Afghan War in a week, apparently through the mass nuclear genocide of (his figure) 10 million Afghans. Even as he then blandly dismissed the idea of wiping that country "off the face of the earth," he openly reflected the more private megalomania of those military professionals funded by the rest of us to think about "the unthinkable". In sum, everything is - theoretically at least - under the

thumbs of our unelected college of cardinals. Their overblown term for it is “full-spectrum dominance,” which, in translation, means they grant themselves god-like powers over our lives and that of our planet (though the largely undefeated enemies in their various wars don’t seem to have acknowledged this reality).

- We believe that freedom comes through obedience. Those who break ranks from our militarized church and protest, like Chelsea Manning, are treated as heretics and literally tortured.
- We believe military spending brings wealth and jobs galore, even when it measurably doesn’t. Military production is both increasingly automated and increasingly outsourced, leading to far fewer good-paying American jobs compared to spending on education, infrastructure repairs of and improvements in roads, bridges, levees, and the like, or just about anything else for that matter.
- We believe, and our most senior leaders profess to believe, that our military represents the very best of us, that we have the “finest” one in human history.
- We believe in planning for a future marked by endless wars, whether against terrorism or “godless” states like China and Russia, which means our military church must be forever strengthened in the cause of winning ultimate victory.



Figure 5.13: The peoples of the world must revolt against the endless wars of their governments. All-destroying modern weapons have made the institution of war prohibitively dangerous.

5.9 Our greed-based economic system today

Today our greed-based, war addicted, and growth-obsessed economic system poses even greater threats than it did during the early phases of the Industrial Revolution. Today it threatens to destroy human civilization and much of the biosphere.

According to a recently-published study by Oxfam, just 1 percent of the world's population controls nearly half of the planet's wealth. The study says that this tiny slice of humanity controls 110 trillion US dollars, or 65 times the total wealth of the poorest 3.5 billion people. The world's 85 richest people own as much as the poorest 50 percent of humanity. 70 percent of the world's people live in a country where income inequality has increased in the past three decades.

This shocking disparity in wealth has lead to the decay of democracy in many countries, because the very rich have used their money to control governments, and also to control the mass media and hence to control public opinion. The actions of many governments today tend not to reflect what is good for the people (or more crucially, what is good for the future of our planet), but rather what is good for special interest groups, for example, the fossil fuel industry and the military-industrial complex.

Today the world spends roughly 1,700,000,000,000 US dollars on armaments, almost 2 trillion. This vast river of money, almost too great to be imagined, flows into the pockets of arms manufacturers, and is used by them to control governments, which in turn vote for bloated military budgets and aggressive foreign policies which provoke the endless crises and conflicts that are necessary to justify the diversion of such vast sums of money from urgently-needed social goals into the bottomless pit of war.

The reelection of the slave-like politicians is ensured by the huge sums made available for their campaigns by the military-industrial complex. This pernicious circular flow of money, driving endless crises, has sometimes been called "The Devil's Dynamo". Thus the world is continually driven to the brink of thermonuclear war by highly dangerous interventions such as the recent ones in North Africa, the Middle East, Ukraine, South and Central America, and the Korean Peninsula.

It is doubtful that any of the political or military figures involved with this arrogant risking of human lives and the human future have any imaginative idea of what a thermonuclear war would be like. In fact it would be an ecological catastrophe of huge proportions, making large areas of the world permanently uninhabitable through long-lived radioactive contamination. The damage to global agriculture would be so great as to produce famine leading to a billion or more deaths from starvation. All the nations of the earth would suffer, neutrals as well as belligerents.

Besides supporting the appalling war machine, our bought-and-paid-for politicians also fail to take the actions that would be needed to prevent the worst effects of climate change. The owners of the fossil fuel industries have even mounted advertising campaigns to convince the public that the threat of anthropogenic climate change is not real. Sadly, the threat of catastrophic climate change is all too real, as 99 percent the worlds climate

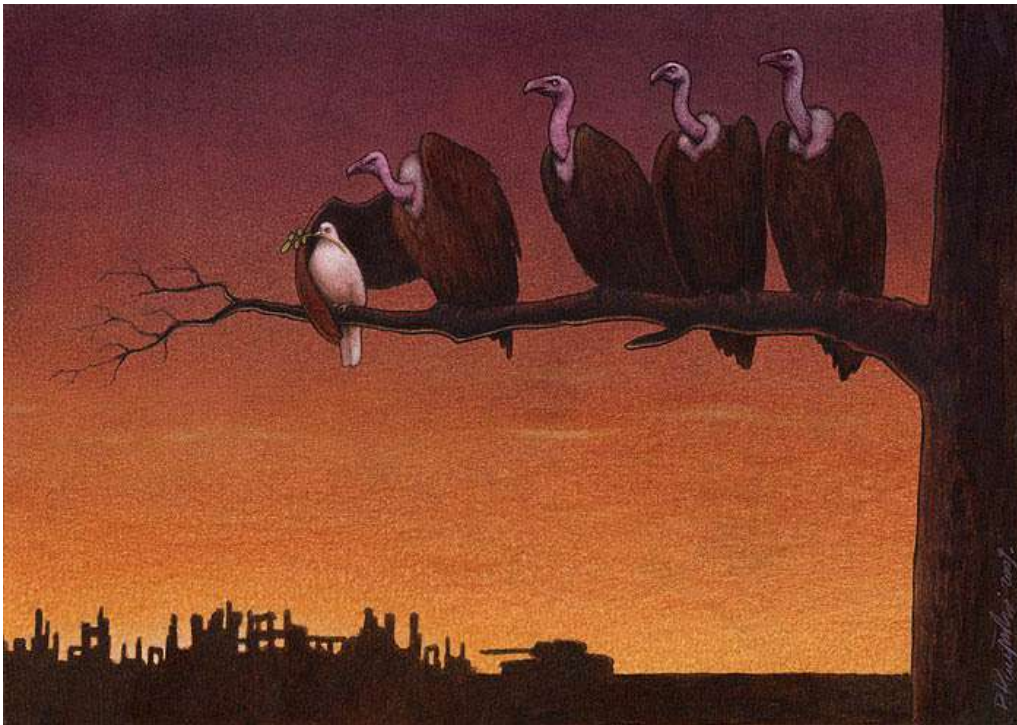


Figure 5.14: **An oxymoron: The vultures of greed never protect the dove of peace.**

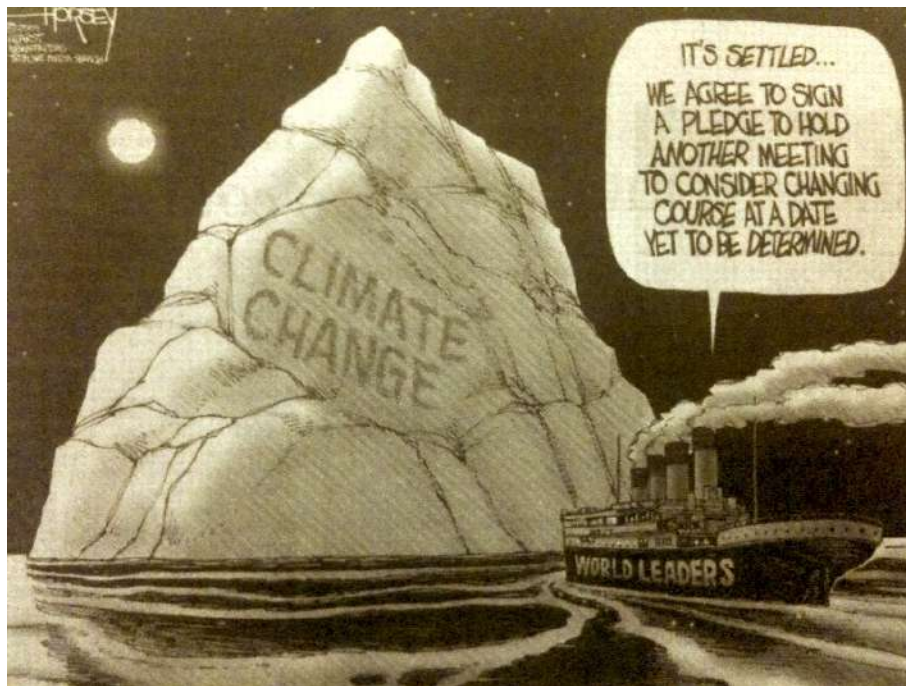


Figure 5.15: The ship in the cartoon is drawn so as to resemble the Titanic.

scientists have warned.

The world has recently passed a dangerous landmark in atmospheric CO₂ concentration, 400 ppm. The last time that the earth experienced such high concentrations of this greenhouse gas were several million years ago. At that time the Arctic was free from ice, and sea levels were 40 meters higher than they are today. Global warming is a slow and long-term effect, so such high sea levels will be slow in arriving, but ultimately we must expect that coastal cities and much of the world's low-lying land will be under water. We must also expect many tropical regions of the world to become uninhabitable because of high temperatures. Finally there is a threat of famine because agriculture will be hit by high temperatures and aridity.

There are several very dangerous feedback loops that may cause the earth's temperatures to rise much faster than has been predicted by the International Panel on Climate Change. By far the most dangerous of these comes from the melting of methane hydrate crystals that are currently trapped in frozen tundra and on the floor of seabeds.

At high pressures, methane combines with water to form crystals called hydrates or clathrates. These crystals are stable at the temperatures currently existing on ocean floors, but whenever the water temperature rises sufficiently, the crystals become unstable and methane gas bubbles to the surface. This effect has already been observed in the Arctic seas north of Russia. The total amount of methane clathrates on ocean floors is not precisely known, but it is estimated to be very large indeed, corresponding to between 3,000 and 11,000 gigatons of carbon. The release of even a small fraction of this amount of methane into our atmosphere would greatly accelerate rising temperatures, leading to the release of

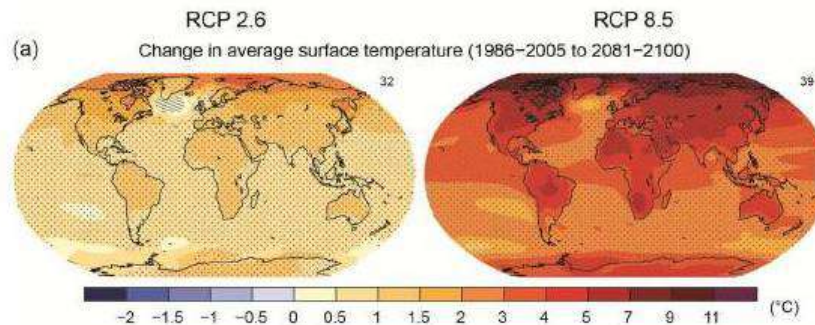


Figure 5.16: Temperature changes will be greatest in the polar regions. Far greater changes in global temperatures are to be expected in the 22nd and 23rd centuries and in subsequent centuries, because the thermal inertia of the oceans makes climate change a very slow and long-term effect.

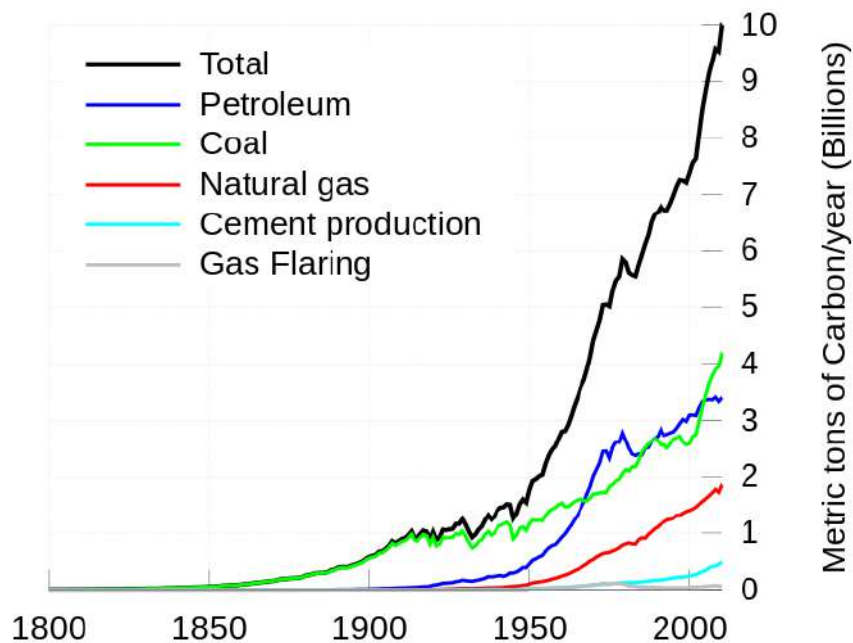


Figure 5.17: The isotope ratios in ice cores from the Greenland ice sheet allow us to see the close correlation between atmospheric CO₂ concentration and temperatures over a very long period of time. Thus regardless of questions of cause and effect, we can expect rising concentrations of CO₂ to be accompanied by rising temperatures. As we can see from the graphs, the rate of increase in carbon emissions has shown no sign of slowing in recent years.

still more methane, in a highly dangerous feedback loop. We must at all costs avoid global temperatures which will cause this feedback loop to trigger in earnest.

5.10 Human motivations were not always so selfish

For the reasons mentioned above, we can see that an economic system where selfishness and greed are exalted as the mainspring for human actions lacks both a social conscience and an ecological conscience. Both these dimensions are needed for the long-term survival of human civilization and the biosphere.

We must remember, however, that the worship of the free market and the exaltation of selfishness are relatively recent developments in human history. During most of their million-year history, humans lived in small groups, not in great cities or nations, and sharing was part of their lifestyle. Perhaps that lifestyle is the one to which we should return if we wish the human future to stretch out for another million years.

5.11 Neocolonialism

In his book, “Neocolonialism, The Last Stage of Imperialism” (Thomas Nielsen, London, 1965), Kwamai Nkrumah defined neocolonialism with the following words: “The essence of neocolonialism is that the State which is subject to it is, in theory, independent, and has all the outward trappings of international sovereignty. In reality its economic system and thus its political policy is directed from the outside. The methods and form of this direction can take various shapes. For example, in an extreme case, the troops of the imperial power may garrison the territory of the neocolonial State and control the government of it. More often, however, neocolonial control is exercised through monetary means...”

“The struggle against neocolonialism is not aimed at excluding the capital of the developed world from operating in less developed countries. It is aimed at preventing the financial power of the developed countries from being used in such a way as to impoverish the less developed.”

5.12 The resource curse

The way in which the industrialized countries maintain their control over less developed nations can be illustrated by the “resource curse”, i.e. the fact that resource-rich developing countries are no better off economically than those that lack resources, but are cursed with corrupt and undemocratic governments. This is because foreign corporations extracting local resources under unfair agreements exist in a symbiotic relationship with corrupt local officials.

One might think that taxation of foreign resource-extracting firms would provide developing countries with large incomes. However, there is at present no international law governing multinational tax arrangements. These are usually agreed to on a bilateral basis,

and the industrialized countries have stronger bargaining powers in arranging the bilateral agreements.

5.13 Confessions of an economic hit-man

18

A book by John Perkins, “Confessions of an Economic Hit-Man”, can give us an idea of the way in which our economic system operates to further enrich wealthy nations and impoverish poor ones. Here are some excerpts:

“Economic hit men (EHMs) are highly paid professionals who cheat countries around the globe out of trillions of dollars. They funnel money from the World Bank, the U.S. Agency for International Development (USAID), and other foreign ‘aid’ organizations into the coffers of huge corporations and the pockets of a few wealthy families who control the planet’s natural resources.”

“Their tools included fraudulent financial reports, rigged elections, payoffs, extortion, sex, and murder. They play a game as old as empire, but one that has taken on new and terrifying dimensions during this time of globalization. I was initially recruited while I was in business school back in the late sixties by the National Security Agency, the nation’s largest and least understood spy organization; but ultimately I worked for private corporations.”

“The first real economic hit man was back in the early 1950s, Kermit Roosevelt, Jr., the grandson of Teddy, who overthrew the government of Iran, a democratically elected government, Mossadegh’s government, who was Time magazine’s person of the year; and he was so successful at doing this without any bloodshed, well, there was a little bloodshed, but no military intervention, just spending millions of dollars and replaced Mossadegh with the Shah of Iran.”

“At that point understood that this idea of economic hit man was an extremely good one. We didn’t have to worry about the threat of war with Russia when we did it this way. The problem with that was that Roosevelt was a C.I.A. agent. He was a government employee. Had he been caught, we would have been in a lot of trouble. It would have been very embarrassing. So, at that point, the decision was made to use organizations like the C.I.A. and the N.S.A. to recruit potential economic hit men like me and then send us to work for private consulting companies, engineering firms, construction companies, so that if we were caught, there would be no connection with the government.”

¹⁸<http://techrig.blogspot.dk/2013/11/confessions-of-economic-hit-man.html>
<https://www.youtube.com/watch?v=yTbdnNgqfs8>
<https://en.wikipedia.org/wiki/Corporatocracy>



5.14 Debt slavery

At the moment, the issue of debt slavery is in the news because of the predicament of Greece and the intended fate of Ukraine, but the problem is a very general one.

If any quantity, for example indebtedness, is growing at the rate of 7% per year, the doubling time is only 9.9 years. At higher rates of interest, the doubling time is still less. If a debt remains unpaid for so long that it more than doubles, most of the repayments will go for interest, rather than for reducing the amount of the debt.

In the case of the debts of third world countries to private banks in the industrialized parts of the world and to the IMF, many of the debts were incurred in the 1970's for purposes which were of no benefit to local populations, for example purchase of military hardware. Today the debts remain, although the amount paid over the years by the developing countries is very many times the amount originally borrowed.

Third world debt can be regarded as a means by which the industrialized nations extract raw materials from developing countries without any repayment whatever. In fact, besides extracting raw materials, they extract money. The injustice of this arrangement was emphasized recently by Pope Francis in his wonderful encyclical *Laudato Si'*.¹⁹

Dr. Michael Klare holds the post of Five Colleges Professor of Peace and World Security Studies at Hampshire College, Amherst College, Smith College, Mount Holyoke College, and the University of Massachusetts Amherst. He has written 16 books exploring the relationship between natural resources and war.²⁰

Like Naomi Klein, Prof. Klare believes that the peace movement and the climate movement ought to join forces.²¹

5.15 Blood for oil

There is a close relationship between petroleum and war. James A. Paul, Executive Director of the Global Policy Forum, has described this relationship very clearly in the following words:

“Modern warfare particularly depends on oil, because virtually all weapons systems rely on oil-based fuel - tanks, trucks, armored vehicles, self-propelled artillery pieces, airplanes, and naval ships. For this reason, the governments and general staffs of powerful nations seek to ensure a steady supply of oil during wartime, to fuel oil-hungry military forces in far-flung operational theaters.”

¹⁹<http://dissidentvoice.org/2015/07/a-revolutionary-pope-calls-for-rethinking-the-outdated-criteria-that-rule-the-world/>

<http://www.globalissues.org/issue/28/third-world-debt-undermines-development>

²⁰<https://www.youtube.com/watch?v=PCXgNbTdhNo>

<https://www.youtube.com/watch?v=S-cdHIGFrF0>

<https://www.youtube.com/watch?v=LIdlm4ywAlc>

<https://www.youtube.com/watch?v=PCXgNbTdhNo>

<https://www.youtube.com/watch?v=S-cdHIGFrF0>

²¹<https://www.youtube.com/watch?v=LIdlm4ywAlc>

“Just as governments like the US and UK need oil companies to secure fuel for their global war-making capacity, so the oil companies need their governments to secure control over global oilfields and transportation routes. It is no accident, then, that the world’s largest oil companies are located in the world’s most powerful countries.”

“Almost all of the world’s oil-producing countries have suffered abusive, corrupt and undemocratic governments and an absence of durable development. Indonesia, Saudi Arabia, Libya, Iraq, Iran, Angola, Colombia, Venezuela, Kuwait, Mexico, Algeria - these and many other oil producers have a sad record, which includes dictatorships installed from abroad, bloody coups engineered by foreign intelligence services, militarization of government and intolerant right-wing nationalism.”

Iraq, in particular, has been the scene of a number of wars motivated by the West’s thirst for oil. During World War I, 1914-1918, the British captured the area (then known as Mesopotamia) from the Ottoman Empire after four years of bloody fighting. Although Lord Curzon denied that the British conquest of Mesopotamia was motivated by oil, there is ample evidence that British policy was indeed motivated by a desire for control of the region’s petroleum. For example, Curzon’s Cabinet colleague Sir Maurice Hankey stated in a private letter that oil was “a first-class war aim”. Furthermore, British forces continued to fight after the signing of the Mudros Armistice. In this way, they seized Mosul, the capital of a major oil-producing region, thus frustrating the plans of the French, who had been promised the area earlier in the secret Sykes-Picot Agreement.

Lord Curzon was well aware of the military importance of oil, and following the end of the First World War he remarked: “The Allied cause has floated to victory on a wave of oil”.

During the period between 1918 and 1930, fierce Iraqi resistance to the occupation was crushed by the British, who used poison gas, airplanes, incendiary bombs, and mobile armored cars, together with forces drawn from the Indian Army. Winston Churchill, who was Colonial Secretary at the time, regarded the conflict in Iraq as an important test of modern military-colonial methods.

In 1932, Britain granted nominal independence to Iraq, but kept large military forces in the country and maintained control of it through indirect methods. In 1941, however, it seemed likely that Germany might try to capture the Iraqi oilfields, and therefore the British again seized direct political power in Iraq by means of military force. It was not only Germany that Britain feared, but also US attempts to gain access to Iraqi oil.

The British fear of US interest in Iraqi oil was soon confirmed by events. In 1963 the US secretly backed a military coup in Iraq that brought Saddam Hussein’s Ba’ath Party to power. In 1979 the western-backed Shah of Iran was overthrown, and the United States regarded the fundamentalist Shi’ite regime that replaced him as a threat to supplies of oil from Saudi Arabia. Washington saw Saddam’s Iraq as a bulwark against the militant Shi’ite extremism of Iran that was threatening oil supplies from pro-American states such as Kuwait and Saudi Arabia.

In 1980, encouraged to do so by the fact that Iran had lost its US backing, Saddam Hussein’s government attacked Iran. This was the start of a extremely bloody and destructive war that lasted for eight years, inflicting almost a million casualties on the two



nations. Iraq used both mustard gas and the nerve gases Tabun and Sarin against Iran, in violation of the Geneva Protocol.

Both the United States and Britain helped Saddam Hussein's government to obtain chemical weapons. A chemical plant, called Falluja 2, was built by Britain in 1985, and this plant was used to produce mustard gas and nerve gas. Also, according to the Riegel Report to the US Senate, May 25, (1994), the Reagan Administration turned a blind eye to the export of chemical weapon precursors to Iraq, as well as anthrax and plague cultures that could be used as the basis for biological weapons. According to the Riegel Report, "records available from the supplier for the period 1985 until the present show that during this time, pathogenic (meaning disease producing) and toxigenic (meaning poisonous), and other biological research materials were exported to Iraq pursuant to application and licensing by the US Department of Commerce."

In 1984, Donald Rumsfeld, Reagan's newly appointed Middle East Envoy, visited Saddam Hussein to assure him of America's continuing friendship, despite Iraqi use of poison gas. When (in 1988) Hussein went so far as to use poison gas against civilian citizens of his own country in the Kurdish village of Halabja, the United States worked to prevent international condemnation of the act. Indeed US support for Saddam was so unconditional that he obtained the false impression that he had a free hand to do whatever he liked in the region.

On July 25, 1990, US Ambassador April Glaspie met with Saddam Hussein to discuss oil prices and how to improve US-Iraq relations. According to the transcript of the meeting, Ms Glaspie assured Saddam that the US "had no opinion on the Arab-Arab conflicts, like your border disagreement with Kuwait." She then left on vacation. Mistaking this conversation for a green light, Saddam invaded Kuwait eight days later.

By invading Kuwait, Hussein severely worried western oil companies and governments, since Saudi Arabia might be next in line. As George Bush senior said in 1990, at the time of the Gulf War, "Our jobs, our way of life, our own freedom and the freedom of friendly countries around the world would all suffer if control of the world's great oil reserves fell into the hands of Saddam Hussein."

On August 6, 1990, the UN Security Council imposed comprehensive economic sanctions against Iraq with the aim of forcing Iraq to withdraw from Kuwait. Meanwhile, US

Secretary of State James A. Baker III used arm-twisting methods in the Security Council to line up votes for UN military action against Iraq. In Baker's own words, he undertook the process of "cajoling, extracting, threatening and occasionally buying votes".

On November 29, 1990, the Council passed Resolution 678, authorizing the use of "all necessary means" (by implication also military means) to force Iraq to withdraw from Kuwait. There was nothing at all wrong with this, since the Security Council had been set up by the UN Charter to prevent states from invading their neighbors. However, one can ask whether the response to Saddam Hussein's invasion of Kuwait would have been so wholehearted if oil had not been involved.

There is much that can be criticized in the way that the Gulf War of 1990-1991 was carried out. Besides military targets, the US and its allies bombed electrical generation facilities with the aim of creating postwar leverage over Iraq. The electrical generating plants would have to be rebuilt with the help of foreign technical assistance, and this help could be traded for postwar compliance. In the meantime, hospitals and water-purification plants were without electricity. Also, during the Gulf War, a large number of projectiles made of depleted uranium were fired by allied planes and tanks. The result was a sharp increase in cancer in Iraq. Finally, both Shi'ites and Kurds were encouraged by the Allies to rebel against Saddam Hussein's government, but were later abandoned by the allies and slaughtered by Saddam.

The most terrible misuse of power, however, was the US and UK insistence the sanctions against Iraq should remain in place after the end of the Gulf War. These two countries used their veto power in the Security Council to prevent the removal of the sanctions. Their motive seems to have been the hope that the economic and psychological impact would provoke the Iraqi people to revolt against Saddam. However that brutal dictator remained firmly in place, supported by universal fear of his police and by massive propaganda. The effect of the sanctions was to produce more than half a million deaths of children under five years of age, as is documented by UNICEF data. The total number of deaths that the sanctions produced among Iraqi civilians probably exceeded a million, if older children and adults are included.

Ramsey Clark, who studied the effects of the sanctions in Iraq from 1991 onwards, wrote to the Security Council that most of the deaths "are from the effects of malnutrition including marasmas and kwashiorkor, wasting or emaciation which has reached twelve per cent of all children, stunted growth which affects twenty-eight per cent, diarrhea, dehydration from bad water or food, which is ordinarily easily controlled and cured, common communicable diseases preventable by vaccinations, and epidemics from deteriorating sanitary conditions. There are no deaths crueller than these. They are suffering slowly, helplessly, without simple remedial medication, without simple sedation to relieve pain, without mercy."

On the morning of September 11, 2001, two hijacked airliners were deliberately crashed into New York's World Trade Center, causing the collapse of three skyscrapers and the deaths of more than three thousand people. Almost simultaneously, another hijacked airliner was driven into the Pentagon in Washington DC, and a fourth hijacked plane crashed in a field in Pennsylvania. The fourth plane probably was to have made a suicide

attack on the White House or the Capitol, but passengers on the airliner became aware what was happening through their mobile telephones, and they overpowered the hijackers.

Blame for the September 11 attacks soon centered on the wealthy Saudi Arabian Islamic extremist, Osama bin Laden, and on his terrorist organization, al-Qaeda. In a later statement acknowledging responsibility for the terrorist attacks, bin Laden gave as his main reasons firstly the massive US support for Israel, a country that, in his view, was committing atrocities against the Palestinians, and secondly the presence of US troops in Saudi Arabia.

Like Saddam Hussein, Osama bin Laden was an ex-protegé of the CIA, by whom he had previously been armed, trained, and supported. The history of bin Laden's relationship with the CIA began in 1979, when the CIA, acting through Pakistan's Inter-Services Intelligence Agency, began to train and arm the Mujaheddin, an international force of Islamic fundamentalists who were encouraged to attack Afghanistan's secular socialist government.

US National Security Advisor Zbigniew Bryzinski anticipated that the Soviets would respond by sending troops to protect the socialist government of Afghanistan, and he believed that the resulting war would be the Soviet Union's version of Viet Nam: It would be a war that would fatally weaken the Soviet Union. Thus he saw the war that he was provoking in Afghanistan as an important step in the liberation of Eastern Europe. "What is most important in the history of the world?", Polish-born Bryzinski asked in a 1998 interview, "The Taliban, or the collapse of the Soviet empire? Some stirred-up Muslims, or the liberation of central Europe...?" It was, in fact, these same "stirred-up Muslims" who guided two hijacked aircraft into the Twin Towers on September 11, 2001.

During the spring of 2003, our television and newspapers presented us with the spectacle of an attack by two technologically superior powers on a much less industrialized nation, a nation with an ancient and beautiful culture. The ensuing war was one-sided. Missiles guided by laser beams and signals from space satellites were more than a match for less sophisticated weapons.

Speeches were made to justify the attack. It was said to be needed because of weapons of mass destruction (some countries are allowed to have them, others not). It was said to be necessary to get rid of a cruel dictator (whom the attacking powers had previously supported and armed). But the suspicion remained that the attack was resource-motivated. It was about oil.

Looking at the present and threatened conflicts in the Middle East against the background of this history, must we not ask: To what extent are they too about oil?

5.16 Concluding remarks

From the discussion presented above, we can see that our present economic system produces an endless series of resource-motivated wars. In addition to the enormous suffering, waste, injustice and ecological destruction produced by modern wars, we must recognize that in

an era of thermonuclear weapons, war has become prohibitively dangerous. Therefore we need a new economic system.

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Chapter 6

MONEY AND THE DEEP STATE

6.1 Edward Snowden's revelations

Can a government, many of whose operations are secret, be a democracy? Obviously this is impossible. The recent attempts of the United States to arrest whistleblower Edward Snowden call attention to the glaring contradiction between secrecy and democracy.

In a democracy, the power of judging and controlling governmental policy is supposed to be in the hands of the people. It is completely clear that if the people do not know what their government is doing, then they cannot judge or control governmental policy, and democracy has been abolished. There has always been a glaring contradiction between democracy and secret branches of the government, such as the CIA, which conducts its assassinations and its dirty wars in South America without any public knowledge or control.

The gross, wholesale electronic spying on citizens revealed by Snowden seems to be specifically aimed at eliminating democracy. It is aimed at instilling universal fear and conformity, fear of blackmail and fear of being out of step, so that the public will not dare to oppose whatever the government does, no matter how criminal or unconstitutional.

Henry Kissinger famously remarked: "The illegal we do at once. The unconstitutional takes a little longer". Well, Henry, that may have been true in your time, but today the unconstitutional does not take long at all.

The Magna Carta is trashed. No one dares to speak up. Habeas Corpus is trashed. No one dares to speak up. The United Nations Charter is trashed. No one dares to speak up. The Universal Declaration of Human Rights is trashed. No one dares to speak up. The Fourth Amendment to the US Constitution is trashed. No one dares to speak up. The President claims the right to kill both US and foreign citizens, at his own whim. No one dares to speak up.

But perhaps this is unjust. Perhaps some people would dare to protest, except that they cannot get their protests published in the mainstream media. We must remember that the media are owned by the same corporate oligarchs who own the government.

George Orwell, you should be living today! We need your voice today! After Snowden's revelations, the sale of Orwell's "1984" soared. It is now on the bestseller list. Sadly,

Orwell's dystopian prophesy has proved to be accurate in every detail.

6.2 The jaws of power

"Every government degenerates when trusted to the rulers of the people alone. The people themselves, therefore, are its only safe depositories." Thomas Jefferson, (1743-1826)

"The jaws of power are always open to devour, and her arm is always stretched out, if possible, to destroy the freedom of thinking, speaking, and writing." John Adams, (1735-1826)

According to the Nuremberg Principles, the citizens of a country have a responsibility for the crimes that their governments commit. But to prevent these crimes, the people need to have some knowledge of what is going on. Indeed, democracy cannot function at all without this knowledge.

What are we to think when governments make every effort to keep their actions secret from their own citizens? We can only conclude that although they may call themselves democracies, such governments are in fact oligarchies or dictatorships.

At the end of World War I, it was realized that secret treaties had been responsible for its outbreak, and an effort was made to ensure that diplomacy would be more open in the future. Needless to say, these efforts did not succeed, and diplomacy has remained a realm of secrecy.

Many governments have agencies for performing undercover operations (usually very dirty ones). We can think, for example of the KGB, the CIA, M5, or Mossad. How can countries that have such agencies claim to be democracies, when the voters have no knowledge of or influence over the acts that are committed by the secret agencies of their governments?

Nuclear weapons were developed in secret. It is doubtful whether the people of the United States would have approved of the development of such antihuman weapons, or their use against an already-defeated Japan, if they had known that these things were going to happen. The true motive for the nuclear bombings was also kept secret. In the words of General Groves, speaking confidentially to colleagues at Los Alamos, the real motive was "to control the Soviet Union".

The true circumstances surrounding the start of the Vietnam war would never have been known if Daniel Ellsberg had not leaked the Pentagon Papers. Ellsberg thought that once the American public realized that their country's entry into the war was based on a lie, the war would end. It did not end immediately, but undoubtedly Ellsberg's action contributed to the end of the war.

We do not know what will happen to Julian Assange. If his captors send him to the US, and if he dies there for the crime of publishing leaked documents (a crime that he shares with the New York Times), he will not be the first martyr to the truth. The ageing Galileo was threatened with torture and forced to recant his heresy - that the earth moves

around the sun. Galileo spent the remainder of his days in house arrest. Giordano Bruno was less lucky. He was burned at the stake for maintaining that the universe is larger than it was then believed to be. If Julian Assange becomes a martyr to the truth like Galileo or Bruno, his name will be honored by generations in the future, and the shame of his captors will be remembered too.

6.3 The deep state

What is the excuse for the massive spying reported by Snowden, spying not only on US citizens but also on the citizens of other countries throughout the world? “We want to protect you from terrorism.”, the government answers. But terrorism is not a real threat, it is an invented one. It was invented by the military-industrial complex because, at the end of the Cold War, this enormous money-making conglomerate lacked enemies.

Globally, the number of people killed by terrorism is vanishingly small compared to the number of children who die from starvation every year. It is even vanishingly small compared with the number of people who are killed in automobile accidents. It is certainly small compared with the number of people killed in wars aimed at gaining western hegemony over oil-rich regions of the world.

In order to make the American people really fear terrorism, and in order to make them willing to give up their civil liberties, a big event was needed, something like the 9/11 attacks on the World Trade Center.

There is strong evidence, available on the Internet for anyone who wishes to look at it, that the US government knew well in advance that the 9/11 attacks would take place, and that government agents made the disaster worse than it otherwise would have been by planting explosives in the buildings of the World Trade Center. For example, CIA insider Susan Lindauer has testified that the US government knew about the planned attacks as early as April, 2001. Other experts have testified that explosives must have been used to bring the buildings down.

Numerous samples of the dust from the disaster were collected by people in New York City, and chemical analysis of the dust has shown the presence of nanothermite, a compound that produces intense heat. Pools of recently-melted steel were found in the ruins of the buildings before these were sealed off from the public. An ordinary fire does not produce temperatures high enough to melt steel.

Thus it seems probable that the US government participated in the 9/11 attacks, and used them in much the same way that the Nazis used the Reichstag fire, to abridge civil liberties and to justify a foreign invasion. Soon afterward, the Patriot Act was passed. It’s Orwellian name is easily understood by anyone who has read “1984”.

But in Shelley’s words, “We are many; they are few!” The people who want democracy greatly outnumber those who profit from maintaining a government based on secrecy and fear. Let us “rise like lions after slumbers, in unvanquishable numbers”. Let us abolish governmental secrecy and reclaim our democracy.

Governmental secrecy is not something new. Secret diplomacy contributed to the out-



Figure 6.1: The sales of George Orwell's 1984 soared after Snowden's revelations.





Figure 6.2: Susan Lindauer

break of World War I, and the secret Sykes-Picot agreement later contributed to the bitterness of conflicts in the Middle East. However, in recent years, governmental secrecy has grown enormously.

The revelations of Edward Snowden and others have shown that the number of people involved in secret operations of the United States government is now as large as the entire population of Norway: roughly 5 million. The influence of this dark side of government has become so great that no president is able to resist it.

In a recent article, John Chuckman remarked that “The CIA is now so firmly entrenched and so immensely well financed (much of it off the books, including everything from secret budget items to the peddling of drugs and weapons) that it is all but impossible for a president to oppose it the way Kennedy did. Obama, who has proved himself to be a fairly weak character from the start, certainly has given the CIA anything it wants. The dirty business of ISIS in Syria and Iraq is one project. The coup in Ukraine is another. The pushing of NATO’s face right against Russia’s borders is another. Several attempted coups in Venezuela are still more. And the creation of a drone air force for extra-judicial killings in half a dozen countries is yet another. They don’t resemble projects we would expect from a smiley-faced intelligent man who sometimes wore sandals and refused to wear a flag pin on his lapel during his first election campaign.”¹

Of course the United States government is by no means alone in practicing excessive secrecy: Scott Horton recently wrote an article entitled *How to Rein in a Secretive Shadow Government Is Our National Security Crisis*. He dedicated the article to the Soviet dissident Andrei Sakharov because, as he said, “Sakharov recognized that the Soviet Union rested on a colossal false premise: it was not so much socialism (though Sakharov was cer-

¹<http://www.informationclearinghouse.info/article41222.htm>

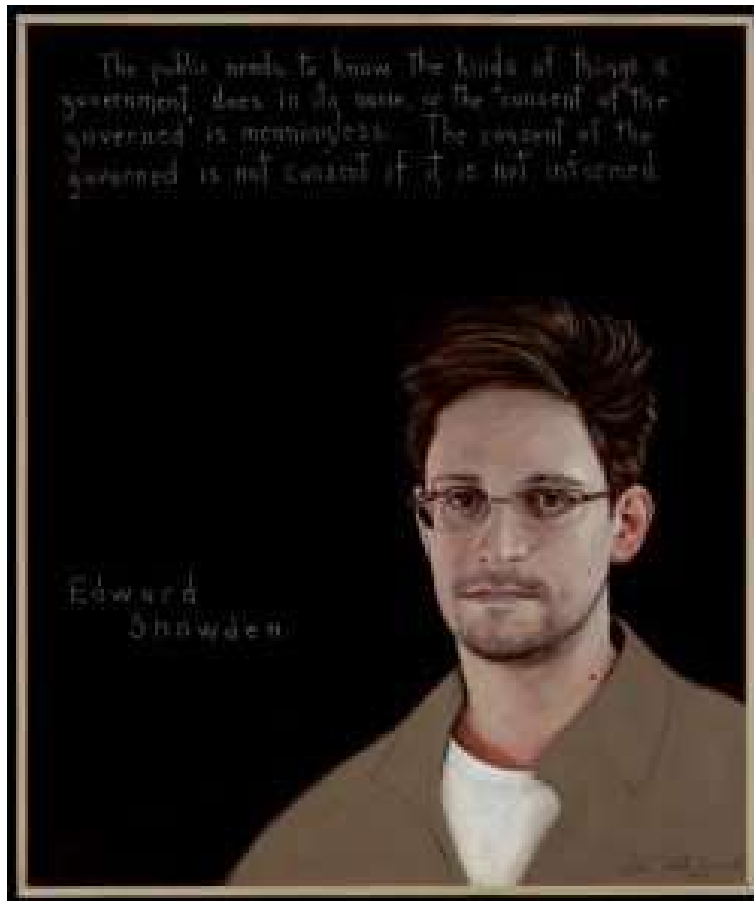


Figure 6.3: The revelations of Edward Snowden and others have shown that the number of people involved in secret operations of the United States government is now as large as the entire population of Norway: roughly 5 million.

tainly a critic of socialism) as it was the obsession with secrecy, which obstructed the search for truth, avoided the exposure of mistakes, and led to the rise of powerful bureaucratic elites who were at once incompetent and prone to violence.”

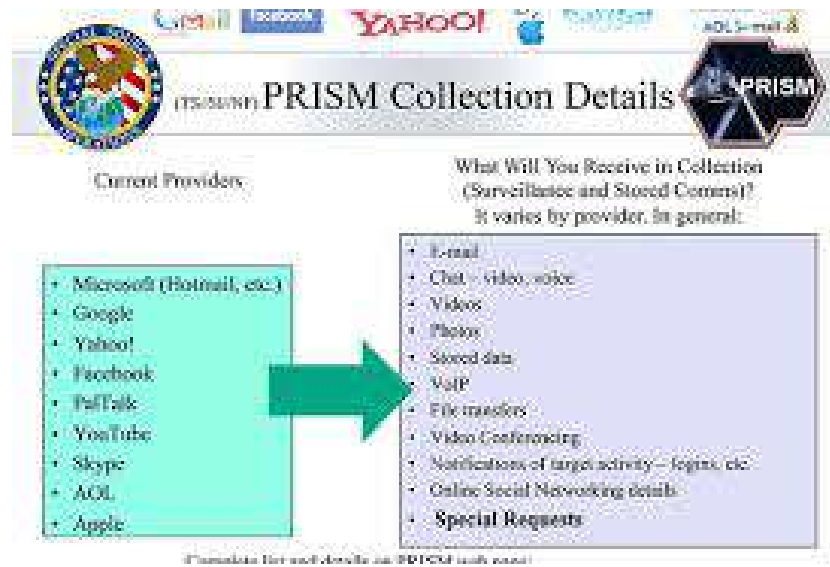


Figure 6.4: One of the power points used by NSA to sell their comprehensive collection of private data.



Figure 6.5: The data of major Internet corporations was stolen without their knowledge or consent.



Figure 6.6: These huge buildings in Fort Meade, Maryland, are the main headquarters of NSA.



Figure 6.7: Angela Merkel's telephone was bugged by NSA. In a cartoon depicting the incident, she says "Tell the Americans to stop listening to our telephone conversations". Her aide replies, "You just did".



Figure 6.8: Big Brother is watching you.

6.4 *The United States of Secrets*

A review by Variety

Here are some excerpts from *Variety's* review of the first two parts of the series:

“Methodical and comprehensive, *Frontline's* documentary *The United States of Secrets* offers a blow-by-blow account of the Bush administration's embrace of potentially illegal spying/eavesdropping techniques, President Obama's decision to continue them (despite campaign promises to the contrary) and, most compellingly, those who sought to blow the whistle on government overreach, culminating with Edward Snowden's unprecedented dump of classified documents. If the two-part project breaks little new ground, it's an utterly thorough primer on what transpired that almost plays like a John Le Carre thriller, with remarkably candid interviews from participants on all sides...

“*United States of Secrets* also details the role played by the Fourth Estate, as frustrated officials reluctantly began going to the press, feeling they had no other recourse to beat back constitutional intrusions. Yet the New York Times, after nailing down the story, ultimately balked at running it, at the urging of the Bush administration...”

A review by Network Knowledge

Another review, by *Network Knowledge*, makes the following comments:

“WSEC/PBS Springfield will premiere a compelling two-part series entitled FRONTLINE - United States of Secrets. These programs go behind the headlines to reveal the dramatic story of how the U.S. government came to monitor and collect the communications of millions of people around the world - including ordinary Americans - and the lengths they went to trying to hide the massive surveillance program from the public.

“In part one, premiering Tuesday, May 13 at 8PM on WSEC/PBS Springfield, FRONTLINE filmmaker Michael Kirk goes inside Washington and the National Security Agency,

piecing together the secret history of the unprecedented surveillance program that began in the wake of September 11 and continues today even after the revelations of its existence by NSA contractor Edward Snowden.

“Then, in part two, premiering Tuesday, May 20 at 9PM, veteran FRONTLINE filmmaker Martin Smith continues the story, exploring the secret relationship between Silicon Valley and the National Security Agency, and investigating how the government and tech companies have worked together to gather and warehouse your data.

“Part political thriller and part spy novel, *United States of Secrets* series is the definitive history of domestic surveillance in a post 9/11 world. With new revelations about government spying coming out almost daily, the series will be gripping viewing for those who want to understand the context of the Snowden affair and what it means for all Americans.”

6.5 Censorship of the news

Many modern governments have become very expert in manipulating public opinion through mass media. They only allow the public to hear a version of the “news” that has been handed down by powerholders. Of course, people can turn to the alternative media that are available on the Internet. But on the whole, the vision of the world presented on television screens and in major newspapers is the “truth” that is accepted by the majority of the public, and it is this picture of events that influences political decisions. Censorship of the news by the power elite is a form of secrecy, since it withholds information that is needed for a democracy to function properly.

6.6 Coups, torture and illegal killing

During the period from 1945 to the present, the US interfered, militarily or covertly, in the internal affairs of a large number of nations: China, 1945-49; Italy, 1947-48; Greece, 1947-49; Philippines, 1946-53; South Korea, 1945-53; Albania, 1949-53; Germany, 1950s; Iran, 1953; Guatemala, 1953-1990s; Middle East, 1956-58; Indonesia, 1957-58; British Guiana/Guyana, 1953-64; Vietnam, 1950-73; Cambodia, 1955-73; The Congo/Zaire, 1960-65; Brazil, 1961-64; Dominican Republic, 1963-66; Cuba, 1959-present; Indonesia, 1965; Chile, 1964-73; Greece, 1964-74; East Timor, 1975-present; Nicaragua, 1978-89; Grenada, 1979-84; Libya, 1981-89; Panama, 1989; Iraq, 1990-present; Afghanistan 1979-92; El Salvador, 1980-92; Haiti, 1987-94; Yugoslavia, 1999; and Afghanistan, 2001-present, Syria, 2013-present; Egypt, 2013-present, and Ukraine, 2013-present. Most of these interventions were explained to the American people as being necessary to combat communism (or more recently, terrorism), but an underlying motive was undoubtedly the desire to put in place governments and laws that would be favorable to the economic interests of the US and its allies.

For the sake of balance, we should remember that during the Cold War period, the Soviet Union and China also intervened in the internal affairs of many countries, for ex-



Figure 6.9: **Extrajudicial killing of civilians by means of drones is also shrouded by secrecy, and it too is a gross violation of democratic principles.**

ample in Korea in 1950-53, Hungary in 1956, Czechoslovakia in 1968, and so on; another very long list. These Cold War interventions were also unjustifiable, like those mentioned above. Nothing can justify military or covert interference by superpowers in the internal affairs of smaller countries, since people have a right to live under governments of their own choosing even if those governments are not optimal.

Many people in Latin America and elsewhere have been tortured: The long history of CIA torture was recently investigated, but only small portions of the 6000-page report are available to the public. The rest remains secret.

Extrajudicial killing of civilians by means of drones is also shrouded by secrecy, and it too is a gross violation of democratic principles.²

6.7 Secret trade deals

The Trans-Pacific Partnership is one of the trade deals that is currently being negotiated in secret. Not even the US congress is allowed to know the details of the document. However, enough information has been leaked to make it clear that if the agreement is passed, foreign corporations would be allowed to “sue” the US government for loss of profits because of (for example) environmental regulations. The “trial” would be outside the legal system, before a tribunal of lawyers representing the corporations. A similar secret trade deal with Europe, the Trans-Atlantic Trade and Investment Partnership (TTIP), is also being “fast-tracked”. One can hardly imagine greater violations of democratic principles.³

²<http://www.globalresearch.ca/lawless-drone-killings/5355535>

³<http://www.citizen.org/Page.aspx?pid=5411>

<https://www.transcend.org/tms/2015/03/world-at-a-crossroads-stop-the-fast-track-to-a-future-of-global-corporate-rule/>

<http://talkingpointsmemo.com/livewire/princeton-experts-say-us-no-longer-democracy>

We can also consider the “non-discrimination” principle adopted by GATT (the General Agreement on Tariffs and Trade). This principle states that participating countries “cannot discriminate between like products on the basis of the method of production”. This single principle allows multinational commerce to escape from all the humanitarian and environmental reforms that have been achieved since the start of the Industrial Revolution. No matter if the method of production involves destruction of a tropical rain forest, no matter if forced labor was used, we are not allowed to discriminate “on the basis of the method of production”.

The present situation is that agriculture, trade and industry have become global, but the world still lacks adequate institutions at the global level to watch over what is happening and to ensure respect for human needs and respect for the natural environment. Today’s global economic interdependence, instantaneous worldwide communication, and the need for peaceful resolution of international conflicts all call for strong governmental institutions at the global level, but the United Nations today lacks many things that would be necessary if it is to perform such a role: It lacks a legislature with the power to make laws binding on individuals and corporations. It lacks mechanisms for enforcing such laws. And it lacks a large and dependable source of income.

It would be logical to improve the United Nations by giving it the things just mentioned, and by giving it at the same time the task of regulating multinational corporations to ensure that they act in a socially and ecologically responsible manner. It would also be logical to entitle the UN to a fee for acting as a referee in relationships between multinationals and the developing countries. These reforms must come someday because of the logic of our present situation. I hope that they will come soon.

The CEO’s of Wall Street call for less government, more deregulation and more globalization. They are delighted that the work of the reform movement is being undone in the name of “freedom”. But is this really what is needed? We need instead to reform our economic system and to give it both a social conscience and an ecological conscience. Governments already accept their responsibility for education. In the future they must also accept the responsibility for ensuring that their citizens can make a smooth transition from education to secure jobs. The free market alone cannot do this the powers of government are needed. Let us restore democracy! Let us have governments that work for the welfare of all their citizens, rather than for the enormous enrichment of the few!

6.8 Secrecy, democracy and nuclear weapons

Nuclear weapons were developed in secret. The decision to use them on the civilian populations of Hiroshima and Nagasaki in an already-defeated Japan was made in secret. Since 1945, secrecy has surrounded all aspects of nuclear weapons, and for this reason it is clear that they are essentially undemocratic.

Nuclear disarmament has been one of the core aspirations of the international community since the first use of nuclear weapons in 1945. A nuclear war, even a limited one, would have global humanitarian and environmental consequences, and thus it is a responsibility

of all governments, including those of non-nuclear countries, to protect their citizens and engage in processes leading to a world without nuclear weapons.

Now a new process has been established by the United Nations General Assembly, an Open Ended Working Group (OEWG) to Take Forward Multilateral Nuclear Disarmament Negotiations. The OEWG convened at the UN offices in Geneva on May 14, 2013. Among the topics discussed was a Model Nuclear Weapons Convention.

The Model Nuclear Weapons Convention prohibits development, testing, production, stockpiling, transfer, use and threat of use of nuclear weapons. States possessing nuclear weapons will be required to destroy their arsenals according to a series of phases. The Convention also prohibits the production of weapons usable fissile material and requires delivery vehicles to be destroyed or converted to make them non-nuclear capable.

Verification will include declarations and reports from States, routine inspections, challenge inspections, on-site sensors, satellite photography, radionuclide sampling and other remote sensors, information sharing with other organizations, and citizen reporting. Persons reporting suspected violations of the convention will be provided protection through the Convention including the right of asylum.

Thus we can see that the protection of whistleblowers is an integral feature of the Model Nuclear Weapons Convention now being discussed. As Sir Joseph Rotblat (1908-2005, Nobel Laureate 1995) frequently emphasized in his speeches, societal verification must be an integral part of the process of “going to zero” (i.e, the total elimination of nuclear weapons). This is because nuclear weapons are small enough to be easily hidden. How will we know whether a nation has destroyed all of its nuclear arsenal? We have to depend on information from insiders, whose loyalty to the whole of humanity prompts them to become whistleblowers. And for this to be possible, they need to be protected.

In general, if the world is ever to be free from the threat of complete destruction by modern weapons, we will need a new global ethic, an ethic as advanced as our technology. Of course we can continue to be loyal to our families, our localities and our countries. But this must be supplemented by a higher loyalty: a loyalty to humanity as a whole.

6.9 Freedom from fear

In order to justify secrecy, enormous dark branches of government and mass illegal spying, governments say: “We are protecting you from terrorism”. But terrorism is not a real threat, since our chances of dying from a terrorist attack are vanishingly small compared to (for example) preventable disease or an automobile accident. If we are ever to reclaim our democracy, we must free ourselves from fear.

6.10 *Inside Job*

Peter Bradshaw's review in *The Guardian*

"If you're growing, you're not in recession ... right?" The speaker is Hank Paulson, the former US treasury secretary, and, as it happens, the former CEO of Goldman Sachs. In Charles Ferguson's documentary about the great financial crash, Paulson's shrugging remark sums up the attitude of the super-rich banking apparatchiks and their eager political supporters. As long as the bubble's getting bigger, there's no worry about the bubble contracting ... right? But that is not what happens to bubbles. In 2008, the pop was heard around the world.

This film is as gripping as any thriller. Aided by some fascinating interviews, Ferguson lays out an awful story. In the 1980s, the markets and financial services were deregulated, and the driving force for this liberalization was Alan Greenspan, formidable chairman of the US federal reserve board from 1987 to 2006. Banks and loan companies were freer to gamble with their depositors' money; they were themselves freer to borrow more; they were free to offer investors dizzyingly complex financial instruments, with income streams from different debts bundled up, including high-interest home loans offered to high-risk borrowers - the so-called "sub-prime" market that offered mouthwateringly high returns.

The good times rolled. The banks ballooned. They offered their traders mind-blowing bonuses to encourage risk-taking chutzpah, corporate loyalty, and a neurotically driven pursuit of profit. Ferguson argues that crucially, the banks were allowed to insure against bad debts with credit default swaps - any number of these insurance policies could be purchased against one particular risk. Chillingly, the banks now had a vested interest in selling insanely risky products, as they themselves were lavishly insured with these swaps.

Perhaps the most sensational aspect of this film is Ferguson's contention that the crash corrupted the discipline of economics itself. Distinguished economists from America's Ivy League universities were drafted in by banks to compose reports sycophantically supporting reckless deregulation. They were massively paid for these consultancies. The banks bought the prestige of the academics, and their universities' prestige, too. Ferguson speaks to many of these economists, who clearly thought they were going to be interviewed as wry, dispassionate observers. It is really something to see the expression of shock, outrage and fear on their faces as they realize they're in the dock. One splutters with vexation; another gives vent to a ripe Freudian slip. Asked by Ferguson if he has any regrets about his behaviour, he says: "I have no comments ... uh, no regrets."

This is what Ferguson means by "inside job". There is a revolving door between the banks and the higher reaches of government, and to some extent

the groves of academe. Bank CEOs become government officials, creating laws convenient for their once and future employers.

Perhaps only the pen of Tom Wolfe could do justice to these harassed, bald, middle-aged masters of the universe, as they appear in Ferguson's film. The director shows how their body-language is always the same: somehow more guilty-looking when they are in the White House rose garden in their career pomp, being introduced to the press, than when they are facing openly hostile Senate hearings. They look uneasy, shifty, in weirdly ill-fitting suits, as if they are oppressed by the scrutiny, and worn out, possibly, by the strain of suppressing their own scruples. Their financial capacity far outstrips their capacity for enjoying themselves. They look very unhappy. Occasionally, British figures including Mervyn King and Alistair Darling are to be glimpsed in these photos, reminding us that we Brits have been ardent deregulators, as well.

One of Ferguson's interviewees is Charles Morris, author of *The Two Trillion Dollar Meltdown*, who amusingly discusses the effects this mega-windfall has on the individual banker's mind. He became absurdly rich and "he thought it was because he was smart".

I was reminded of Michael Lewis's *Liar's Poker*, his very funny book about the financial mentality of the 80s boom. He noted that if a regular person won the lottery, he might roll around on the floor, kicking his legs up with glee, but when bankers won their arbitrary lottery, they instead became solemn, pompous, overwhelmed with their own importance and stateliness. Their recklessness and excess coexisted with an almost priestly sense of worth. Even more than rich lawyers, rich bankers felt that their money proved their superior cleverness and also moral worthiness as the generators of prosperity. Yet that prosperity didn't trickle down very far.

Generally, this is the sort of film that is praised because it is not as wacky and tricky as Michael Moore. Yet it is clearly influenced by him - it's like a Moore film with the gags and stunts removed. And it's worth noting that without Moore's pioneering work, this documentary could not have been made.

Once again, the phrase that comes to mind is Milton Friedman's: socialism for the rich, free enterprise for the rest. An ordinary person defaults on his debt, he gets to live in his car. A banker defaults, and the taxpayer can be relied on to bail him out. No wonder the bonuses are back. But what can be done about all this? Ferguson has no answers, other than a faintly unedifying hint that bankers could be brought low if rumors about their systemic addiction to drugs and prostitutes could be made to stick legally - like Al Capone's tax evasion. But only a new political mood for regulation will do, and this still seems far away.

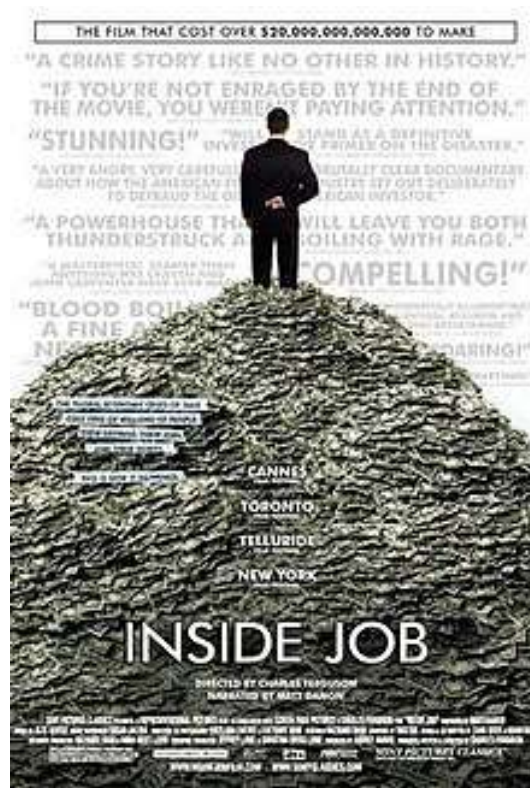


Figure 6.10: A poster advertising the Academy-Award-winning documentary film *Inside Job*.

Suggestions for further reading

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Chapter 7

MONEY AND THE MASS MEDIA

7.1 Media in the service of powerholders

Throughout history, art was commissioned by rulers to communicate, and exaggerate, their power, glory, absolute rightness etc, to the populace. The pyramids gave visual support to the power of the Pharaoh; portraits of rulers are a traditional form of propaganda supporting monarchies; and palaces were built as symbols of power.

Modern powerholders are also aware of the importance of propaganda. Thus the media are a battleground where reformers struggle for attention, but are defeated with great regularity by the wealth and power of the establishment. This is a tragedy because today there is an urgent need to make public opinion aware of the serious problems facing civilization, and the steps that are needed to solve these problems. The mass media could potentially be a great force for public education, but often their role is not only unhelpful - it is negative.

It is certainly possible to find a few television programs and newspaper articles that present the facts about climate change in a realistic way. For example *The Guardian* gives outstanding climate change coverage. However, the mass media could do very much more. One has to conclude that the media are neglecting their great responsibilities at a time of acute crisis for human civilization and the biosphere. The same can be said of our educational systems at both the primary and advanced levels. We urgently need much more public education about the severe dangers that we face today.

7.2 Television as a part of our educational system

In the mid-1950's, television became cheap enough so that ordinary people in the industrialized countries could afford to own sets. During the infancy of television, its power was underestimated. The great power of television is due to the fact that it grips two senses simultaneously, both vision and hearing. The viewer becomes an almost-hypnotized captive of the broadcast.

In the 1950's, this enormous power, which can be used both for good and for ill, was

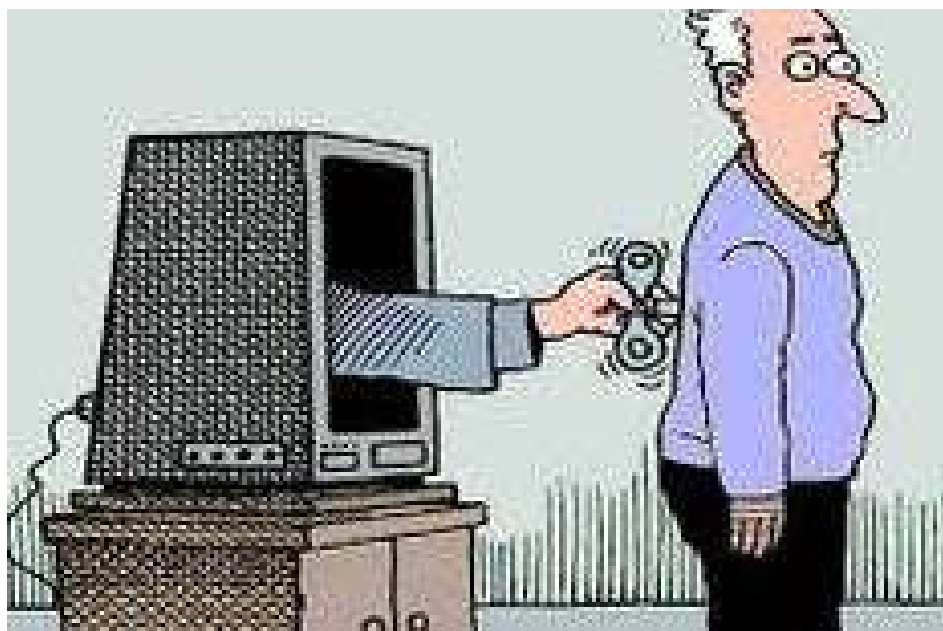


Figure 7.1: **The role of the media.**

not yet fully apparent. Thus insufficient attention was given to the role of television in education, in setting norms, and in establishing values. Television was not seen as an integral part of the total educational system. It is interesting to compare the educational systems of traditional cultures with those of modern industrial societies.

In traditional societies, multigenerational families often live together in the same dwelling. In general, there is a great deal of contact between grandparents and grandchildren, with much transmission of values and norms between generations. Old people are regarded with great respect, since they are considered to be repositories of wisdom, knowledge, and culture.

By contrast, modern societies usually favor nuclear families, consisting of only parents and children. Old people are marginalized. They live by themselves in communities or homes especially for the old. Their cultural education knowledge and norms are not valued because they are “out of date”. In fact, during the life of a young person in one of the rapidly-changing industrial societies of the modern world, there is often a period when they rebel against the authority of their parents and are acutely embarrassed by their parents, who are “so old-fashioned that they don’t understand anything”.

Although the intergenerational transmission of values, norms, and culture is much less important in industrial societies than it is in traditional ones, modern young people of the West and North are by no means at a loss over where to find their values, fashions and role models. With every breath, they inhale the values and norms of the mass media. Totally surrounded by a world of television and film images, they accept this world as their own.



Figure 7.2: Liberty?

7.3 Neglect of climate change in the mass media

The predicament of humanity today has been called “a race between education and catastrophe”: How do the media fulfil this life-or-death responsibility? Do they give us insight? No, they give us pop music. Do they give us an understanding of the sweep of evolution and history? No, they give us sport. Do they give us an understanding of the ecological catastrophes that threaten our planet because of unrestricted growth of population and industries? No, they give us sit-coms and soap operas. Do they give us unbiased news? No, they give us news that has been edited to conform with the interests of powerful lobbys. Do they present us with the urgent need to leave fossil fuels in the ground? No, they do not, because this would offend the powerholders. Do they tell of the danger of passing tipping points after which human efforts to prevent catastrophic climate change will be useless? No, they give us programs about gardening and making food.

A consumer who subscribes to the “package” of broadcasts sold by a cable company can often search through all 95 channels without finding a single program that offers insight into the various problems that are facing the world today. What the viewer finds instead is a mixture of pro-establishment propaganda and entertainment. Meanwhile the neglected global problems are becoming progressively more severe.

In general, the mass media behave as though their role is to prevent the peoples of the world from joining hands and working to change the world and to save it from thermonuclear war, environmental catastrophes and threatened global famine. The television viewer sits slumped in a chair, passive, isolated, disempowered and stupefied. The future of the world hangs in the balance, the fate of children and grandchildren hangs in the balance, but the television viewer feels no impulse to work actively to change the world or to save it. The Roman emperors gave their people bread and circuses to numb them into political

inactivity. The modern mass media seem to be playing a similar role.

7.4 Climate change denial in mass media

The Wikipedia article on climate change denial describes it with the following words: “Although scientific opinion on climate change is that human activity is extremely likely to be the primary driver of climate change, the politics of global warming have been affected by climate change denial, hindering efforts to prevent climate change and adapt to the warming climate. Those promoting denial commonly use rhetorical tactics to give the appearance of a scientific controversy where there is none.”

It is not surprising that the fossil fuel industry supports, on a vast scale, politicians and mass media that deny the reality of climate change. The amounts of money at stake are vast. If catastrophic climate change is to be avoided, coal, oil and natural gas “assets” worth trillions of dollars must be left in the ground. Giant fossil fuel corporations are desperately attempting to turn these “assets” into cash.

Preventing an ecological apocalypse

Here are some excerpts from an article entitled “**Only Rebellion will prevent an ecological apocalypse**” by George Monbiot, which was published on April 15 2019 in The Guardian¹:

No one is coming to save us. Mass civil disobedience is essential to force a political response.

Had we put as much effort into preventing environmental catastrophe as we’ve spent on making excuses for inaction, we would have solved it by now. Everywhere I look, I see people engaged in furious attempts to fend off the moral challenge it presents...

As the environmental crisis accelerates, and as protest movements like YouthStrike4Climate and Extinction Rebellion make it harder not to see what we face, people discover more inventive means of shutting their eyes and shedding responsibility. Underlying these excuses is a deep-rooted belief that if we really are in trouble, someone somewhere will come to our rescue: “they” won’t let it happen. But there is no they, just us.

The political class, as anyone who has followed its progress over the past three years can surely now see, is chaotic, unwilling and, in isolation, strategically incapable of addressing even short-term crises, let alone a vast existential predicament. Yet a widespread and wilful naivety prevails: the belief that voting is the only political action required to change a system. Unless it is

¹<https://www.theguardian.com/commentisfree/2019/apr/15/rebellion-prevent-ecological-apocalypse-civil-disobedience>



Figure 7.3: Network administrators have noticed that programs about climate change often have low viewer ratings. Since they see delivering high viewer ratings to their advertisers as their primary duty, these executives seldom allow programs dealing with the danger of catastrophic climate change. The duty to save the earth from environmental catastrophe is neglected for the sake of money. As Al Gore said, “Instead of having a well-informed electorate, we have a well-amused audience”.



accompanied by the concentrated power of protest - articulating precise demands and creating space in which new political factions can grow - voting, while essential, remains a blunt and feeble instrument.

The media, with a few exceptions, is actively hostile. Even when broadcasters cover these issues, they carefully avoid any mention of power, talking about environmental collapse as if it is driven by mysterious, passive forces, and proposing microscopic fixes for vast structural problems. The BBC's Blue Planet Live series exemplified this tendency.

Those who govern the nation and shape public discourse cannot be trusted with the preservation of life on Earth. There is no benign authority preserving us from harm. No one is coming to save us. None of us can justifiably avoid the call to come together to save ourselves...

Predatory delay

Here are some excerpts from a May 3 2019 article by Bill Henderson entitled "Neoliberalism, Solution Aversion, Implicatory Denial and Predatory Delay"²:

Looking back at the history, that it's not really a failure of human beings and human nature that's the problem here. It's a hijacking of our political and economic system by the fossil fuel industry and a small number of like-minded people. It was our bad luck that this idea that markets solve all problems and that government should be left to wither away crested just at the moment when it could do the most damage.

Despite the urgent need to reduce greenhouse gas emissions globally if we are to lower the risks of catastrophic climate change, wealthy industrialized nations persist with a widespread public silence on the issue and fail to address climate change. This is despite there being ever more conclusive evidence of its severity. Why is there an undercurrent of inaction, despite the challenge of climate change being ever more daunting? One element is denial.

George Marshall discovered that there has not been a single proposal, debate or even position paper on limiting fossil fuel production put forward during international climate negotiations. From the very outset fossil fuel production lay outside the frame of the discussions and, as with other forms of socially constructed silence, the social norms among the negotiators and policy specialists kept it that way.

Global climate leadership is being redefined. There is a growing recognition that you cannot be a climate leader if you continue to enable new fossil fuel production, which is inconsistent with climate limits. If no major producers step up to stop the expansion of extraction and begin phasing out existing

²<https://countercurrents.org/2019/05/03/neoliberalism-solution-aversion-implicatory-denial-and-predatory-delay-bill-henderson/>

fields and mines, the Paris goals will become increasingly difficult to achieve. Wealthy fossil fuel producers have a responsibility to lead, and this must include planning for a just and equitable managed decline of existing production.

The (emissions reduction) curve we've been forced onto bends so steeply, that the pace of victory is part of victory itself. Winning slowly is basically the same thing as losing outright. We cannot afford to pursue past strategies, aimed at limited gains towards distant goals. In the face of both triumphant denialism and predatory delay, trying to achieve climate action by doing the same things, the same old ways, means defeat. It guarantees defeat.

A fast, emergency-scale transition to a post-fossil fuel world is absolutely necessary to address climate change. But this is excluded from consideration by policymakers because it is considered to be too disruptive. The orthodoxy is that there is time for an orderly economic transition within the current short-termist political paradigm. Discussion of what would be safe - less warming than we presently experience - is non-existent. And so we have a policy failure of epic proportions. Policymakers, in their magical thinking, imagine a mitigation path of gradual change, to be constructed over many decades in a growing, prosperous world...

7.5 Showing unsustainable lifestyles in mass media

Television and other mass media contribute indirectly to climate change denial by showing unsustainable lifestyles. Television dramas show the ubiquitous use of gasoline-powered automobiles and highways crowded with them. Just as though there did not exist an urgent need to transform our transportation systems. Motor racing is shown. A program called "Top Gear" tells viewers about the desirability of various automobiles. In general, cyclists are not shown. In television dramas, the protagonists fly to various parts of the world for their holidays. The need for small local self-sustaining communities is not shown.

Advertisements in the mass media urge us to consume more, to fly, to purchase large houses, and to buy gasoline-driven automobiles, just as though such behavior ought to be the norm. Such norms are leading us towards environmental disaster.

7.6 Alternative media

Luckily, the mass media do not have a complete monopoly on public information. With a little effort, citizens who are concerned about the future can find alternative media. These include a large number of independent on-line news services that are supported by subscriber donations rather than by corporate sponsors. *YouTube* videos also represent an extremely important source of public information.



7.7 Outstanding voices calling for climate action

The Guardian

There are exceptions to the general rule that the mass media downplay or completely ignore the climate emergency. The Guardian is a newspaper with absolutely outstanding coverage of all issues related to climate change. No praise can be strong enough for the courageous environmental editorial policy of this famous old British newspaper.

Al Gore

Albert Arnold Gore Jr. served as the 45th Vice President of the United States from January 1985 to January 1993. He then ran for the office of President, but was defeated by George W. Bush in a controversial election whose outcome was finally decided by the US Supreme Court³.

Al Gore is the founder and current Chairman of the Alliance for Climate Protection. He was one of the first important political figures to call attention to the problem of steadily increasing CO₂ levels in the atmosphere and the threat of catastrophic climate change. He produced the highly influential documentary film *An Inconvenient Truth*⁴. Because of his important efforts to save the global environment, Al Gore shared the 2007 Nobel Peace Prize with the Intergovernmental Panel on Climate Change.

³Many people believe that Al Gore won the election.

⁴<https://www.youtube.com/watch?v=I-SV13UQXdk>

Al Gore's TED talk: The Case for Optimism on Climate Change

In 2016, Al Gore gave an important talk to a TED audience⁵. in which he pointed out the an economic tipping point has just been passed. Solar energy and wind energy are now cheaper than energy form fossil fuels. This means that economic forces alone can drive a rapid transition to 100% renewable energy. Investors will realize that renewables represent an unparalleled investment opportunity.

Sir David Attenborough

In a 2011 interview in The Guardian, Sir David Attenborough was asked: “What will it take to wake people up about climate change?”. He replied “Disaster. It’s a terrible thing to say, isn’t it? And even disaster doesn’t always do it. I mean, goodness me, there have been disasters in North America, with hurricanes, and one thing and another, and floods; and still a lot of people would deny it, and say it’s nothing to do with climate change. Well it visibly has to do with climate change!”

Sir David Attenborough’s almost unbelievably enormous and impressive opus of television programs about the natural world have helped to raise public awareness of the importance of the natural environment. He also has made a number of television programs specifically related to questions such as saving threatened species, the dangers of exploding global human populations, and the destruction of forests for the sake of palm oil plantations.

Let us return to The Guardian’s 2011 interview with Sir David. Had it been made in the autumn of 2017, the interview would certainly have included a discussion of recent hurricanes of unprecedented power and destructiveness, such as Harvey, Irma and Maria, as well as 2017’s wildfires and Asian floods. It is possible that such events, which will certainly become more frequent and severe during the next few years, will provide the political will needed to silence climate change denial, to stop fossil fuel extraction, and to promote governmental policies favoring renewable energy.

Although the mass media almost have entirely neglected the link between climate change and recent disastrous hurricanes, floods droughts and wildfires, many individuals and organizations emphasized the cause and effect relationship. For example, UK airline billionaire Sir Richard Branson, whose Caribbean summer residence was destroyed by Hurricane Irma said:

“Look, you can never be 100 percent sure about links, But scientists have said the storms are going to get more and more and more intense and more and more often. We’ve had four storms within a month, all far greater than that have ever, ever, ever happened in history, Sadly, I think this is the start of things to come. Climate change is real. Ninety-nine percent of scientists know it’s real. The whole world knows it’s real except for maybe one person in the White House.”

May Boeve, executive director of the NGO 350.org, said “With a few exceptions, the major TV networks completely failed to cover the scientifically proven ways that climate

⁵<https://www.youtube.com/watch?v=I-SV13UQXdk>

change is intensifying extreme weather events like hurricanes Harvey and Irma. That's not just disappointing, it's dangerous. We won't be able to turn this crisis around if our media is asleep at the wheel."

Commenting on the destruction of Puerto Rico by Hurricane Maria, historian Juan Cole wrote: "When you vote for denialist politicians, you are selecting people who make policy. The policy they make will be clueless and will actively endanger the public. Climate change is real. We are causing it by our emissions. If you don't believe that, you are not a responsible steward of our infrastructure and of our lives."

When interviewed by Amy Goodman of *Democracy Now*, musician Stevie Wonder said: "... we should begin to love and value our planet, and anyone who believes that there is no such thing as global warming must be blind or unintelligent."

Another well-known musician, Beyoncé, added: "The effects of climate change are playing out around the world every day. Just this past week, we've seen devastation from the monsoon in India...and multiple catastrophic hurricanes. Irma alone has left a trail of death and destruction from the Caribbean to Florida to Southern United States. We have to be prepared for what comes next..."

In her September 2017 publication *Season of Smoke*⁶, prizewinning author Naomi Klein wrote:

"We hear about the record-setting amounts of water that Hurricane Harvey dumped on Houston and other Gulf cities and towns, mixing with petrochemicals to pollute and poison on an unfathomable scale. We hear too about the epic floods that have displaced hundreds of thousands of people from Bangladesh to Nigeria (though we don't hear enough). And we are witnessing, yet again, the fearsome force of water and wind as Hurricane Irma, one of the most powerful storms ever recorded, leaves devastation behind in the Caribbean, with Florida now in its sights.

"Yet for large parts of North America, Europe, and Africa, this summer has not been about water at all. In fact it has been about its absence; it's been about land so dry and heat so oppressive that forested mountains exploded into smoke like volcanoes. It's been about fires fierce enough to jump the Columbia River; fast enough to light up the outskirts of Los Angeles like an invading army; and pervasive enough to threaten natural treasures, like the tallest and most ancient sequoia trees and Glacier National Park.

"For millions of people from California to Greenland, Oregon to Portugal, British Columbia to Montana, Siberia to South Africa, the summer of 2017 has been the summer of fire. And more than anything else, it's been the summer of ubiquitous, inescapable smoke.

"For years, climate scientists have warned us that a warming world is an extreme world, in which humanity is buffeted by both brutalizing excesses and stifling absences of the core elements that have kept fragile life in equilibrium for millennia. At the end of the summer of 2017, with major cities submerged in water and others licked by flames, we are currently living through Exhibit A of this extreme world, one in which natural extremes

⁶<https://theintercept.com/2017/09/09/in-a-summer-of-wildfires-and-hurricanes-my-son-asks-why-is-everything-going-wrong/>



Figure 7.4: Sir David Attenborough: “Disaster. It’s a terrible thing to say, isn’t it?”

come head-to-head with social, racial, and economic ones.”

It seems likely that the climate-linked disasters of 2019 and 2020 will be even more severe than those that we have witnessed during 2017 and 2018. But will such disasters be enough to wake us up?

The BBC has recently announced that Sir David Attenborough is currently producing a new series, *Blue Planet II*, which will focus on environmental issues.⁷

“My hope is that the world is coming to its senses ... I’m so old I remember a time when ... we didn’t talk about climate change, we talked about animals and species extermination,” Sir David told Greenpeace in an interview, “For the first time I’m beginning to think there is actually a groundswell, there is a change in the public view. I feel many more people are concerned and more aware of what the problems are. Young people - people who’ve got 50 years of their life ahead of them - they are thinking they ought to be doing something about this. That’s a huge change.”

Climate Change, The Facts

Now Sir David Attenborough has completed a new one-hour BBC program on the danger of catastrophic climate change. Here are some excerpts from an April 18 2019 review of the program by Rebecca Nicholson in *The Guardian*:

The Facts is a rousing call to arms. It is an alarm clock set at a horrifying volume. The first 40 minutes are given over to what Attenborough calls, without hyperbole, “our greatest threat in thousands of years”. Expert af-

⁷<http://www.bbcearth.com/blueplanet2/>



Figure 7.5: Speaking at the opening ceremony of COP24, the universally loved and respected naturalist Sir David Attenborough said: “If we don’t take action, the collapse of our civilizations and the extinction of much of the natural world is on the horizon.”

ter expert explains the consequences of rising CO₂ levels, on the ice caps, on coastal regions, on weather and wildlife and society itself. The most powerful moments are in footage shot not by expert crews who have spent years on location, but on shaky cameras, capturing the very moment at which the reality of our warming planet struck the person holding the phone. In Cairns, Australia, flying foxes are unable to survive the extreme temperatures; rescuers survey the terrible massacre, and we learn that while 350 were saved, 11,000 died. A man and his son talk through their escape from raging wildfires, over the film they took while attempting to drive through a cavern of blazing red trees. These are horror movies playing out in miniature. It is difficult to watch even five minutes of this and remain somehow neutral, or unconvinced.

Yet as I kept on, scribbling down an increasingly grim list of statistics, most of which I knew, vaguely, though compiled like this they finally sound as dreadful as they truly are - 20 of the warmest years on record happened in the last 22 years; Greenland’s ice sheet is melting five times faster than it was 25 years ago - I started to wonder about responsibility, and if and where it would be placed. This would be a toothless film, in the end, if it were hamstrung by political neutrality, and if its inevitable “it’s not too late” message rested solely on individuals and what relatively little tweaks we might make as consumers. What about corporations? What about governments?

Then, at that exact moment, having played the despair through to its crescendo, the experts served up unvarnished honesty. They lined up to lay out the facts, plain and simple. Fossil fuel companies are the most profitable businesses man has ever known, and they engage in PR offensives, using the same consultants as tobacco companies, and the resulting uncertainty and denial, designed to safeguard profits, has narrowed our window for action. It is unforgivable. I find it hard to believe that anyone, regardless of political affiliation, can watch footage of Trump calling climate change “a hoax ... a money-making industry” and not be left winded by such staggering ignorance or astonishing deceit, though it is, more likely, more bleakly, a catastrophic combination of the two. At least Nigel Lawson only appears here in archive footage, and his argument sounds limp, to put it kindly.

Climate Change: The Facts should not have to change minds, but perhaps it will change them anyway, or at least make this seem as pressing as it needs to be. With the Extinction Rebellion protests across London this week, disrupting day-to-day business, and this, on primetime BBC One, maybe the message will filter through. At the very least, it should incite indignation that more was not done, sooner, and then urgency and a decision to both change and push for change at a much higher level. Because there is, for a brief moment, just possibly, still time.

Greta Thunberg meets Pope Francis

On 19 April 2019, Greta Thunberg met briefly with Pope Francis at the end of his general audience. “Continue, continue!” the Pope told her, “Go on, go ahead!” Greta answered Pope Francis with the words: “Thank you for standing up for the climate, for speaking the truth. It means a lot.” Greta’s father, Svante Thunberg, expressed his gratitude to the pope: “Thank you so much for what you are doing. It means everything. Everything.”

The Pope has made fighting climate change and caring for God’s creation a pillar of his papacy. He wrote an entire encyclical about it, blaming a thirst for money for turning the Earth into a wasteland and demanding immediate action to curb global warming.

While in Rome, Greta Thunberg will also address the Italian Parliament and participate in a school strike for action to avoid catastrophic climate change.

In June, 2015, His Holiness Pope Francis I addressed the climate crisis in an encyclical entitled “*Laudato Si’*”⁸. Here are a few excerpts from this enormously important encyclical, which is addressed not only to the world’s 1.2 billion Catholics, but also to concerned people of all faiths. After reviewing the contributions of his predecessors. Pope Francis makes the following points:

23. The climate is a common good, belonging to all and meant for all. At the global level, it is a complex system linked to many of the essential conditions

⁸<https://unfccc.int/news/pope-francis-releases-encyclical-on-climate-and-environment>

for human life. A very solid scientific consensus indicates that we are presently witnessing a disturbing warming of the climatic system. In recent decades this warming has been accompanied by a constant rise in the sea level and, it would appear, by an increase of extreme weather events, even if a scientifically determinable cause cannot be assigned to each particular phenomenon. Humanity is called to recognize the need for changes of lifestyle, production and consumption, in order to combat this warming or at least the human causes which produce or aggravate it. It is true that there are other factors (such as volcanic activity, variations in the earth's orbit and axis, the solar cycle), yet a number of scientific studies indicate that most global warming in recent decades is due to the great concentration of greenhouse gases (carbon dioxide, methane, nitrogen oxides and others) released mainly as a result of human activity. As these gases build up in the atmosphere, they hamper the escape of heat produced by sunlight at the earth's surface. The problem is aggravated by a model of development based on the intensive use of fossil fuels, which is at the heart of the worldwide energy system. Another determining factor has been an increase in changed uses of the soil, principally deforestation for agricultural purposes.

24. Warming has effects on the carbon cycle. It creates a vicious circle which aggravates the situation even more, affecting the availability of essential resources like drinking water, energy and agricultural production in warmer regions, and leading to the extinction of part of the planet's biodiversity. The melting in the polar ice caps and in high altitude plains can lead to the dangerous release of methane gas, while the decomposition of frozen organic material can further increase the emission of carbon dioxide. Things are made worse by the loss of tropical forests which would otherwise help to mitigate climate change. Carbon dioxide pollution increases the acidification of the oceans and compromises the marine food chain. If present trends continue, this century may well witness extraordinary climate change and an unprecedented destruction of ecosystems, with serious consequences for all of us. A rise in the sea level, for example, can create extremely serious situations, if we consider that a quarter of the world's population lives on the coast or nearby, and that the majority of our megacities are situated in coastal areas.

25. Climate change is a global problem with grave implications: environmental, social, economic, political and for the distribution of goods. It represents one of the principal challenges facing humanity in our day. Its worst impact will probably be felt by developing countries in coming decades. Many of the poor live in areas particularly affected by phenomena related to warming, and their means of subsistence are largely dependent on natural reserves and ecosystemic services such as agriculture, fishing and forestry. They have no other financial activities or resources which can enable them to adapt to climate change or to



Figure 7.6: Greta Thunberg had the privilege of meeting Pope Francis. Both are outstanding voices for climate action.

face natural disasters, and their access to social services and protection is very limited. For example, changes in climate, to which animals and plants cannot adapt, lead them to migrate; this in turn affects the livelihood of the poor, who are then forced to leave their homes, with great uncertainty for their future and that of their children. There has been a tragic rise in the number of migrants seeking to flee from the growing poverty caused by environmental degradation. They are not recognized by international conventions as refugees; they bear the loss of the lives they have left behind, without enjoying any legal protection whatsoever. Sadly, there is widespread indifference to such suffering, which is even now taking place throughout our world. Our lack of response to these tragedies involving our brothers and sisters points to the loss of that sense of responsibility for our fellow men and women upon which all civil society is founded.

At a London event arranged by The Guardian, Greta Thunberg was asked whether she believed that a general strike could alert politicians to the urgency of the climate emergency. She replied “yes”. Here are some of her other comments:



Figure 7.7: Of the fossil fuels, all are bad, but coal is the worst.



Figure 7.8: Speaking to a crowd of many thousands at Marble Arch, London, on April 21, 2019, Greta Thunberg said: “For way too long the politicians and the people in power have gotten away with not doing anything ... But we will make sure that they will not get away with it any longer, We will never stop fighting, we will never stop fighting for this planet, for ourselves, our futures and for the futures of our children and grandchildren.”

This is not just young people being sick of politicians. It's an existential crisis. It is something that will affect the future of our civilization. It's not just a movement. It's a crisis and we must take action accordingly.

At a later meeting with members of the U.K. Parliament, Greta Thunberg said:

The U.K.'s active current support of new exploitation of fossil fuels, like for example the U.K. shale gas fracking industry, the expansion of its North Sea oil and gas fields, the expansion of airports, as well as the planning permission for a brand new coalmine, is beyond absurd.

This ongoing irresponsible behavior will no doubt be remembered in history as one of the greatest failures of humankind. .

Leonardo DiCaprio

Leonardo DiCaprio has won many awards for his work as an actor, writer and producer in both television and films. These include 50 awards from 167 nominations. DiCaprio has been nominated for six Academy Awards, four British Academy Film Awards and nine Screen Actors Guild Awards, winning one award each from them and three Golden Globe Awards from eleven nominations.

In accepting his Best Actor award at the 2016 Oscars ceremony, DiCaprio said: "Climate change is real, it is happening right now. It is the most urgent threat facing our entire species, and we need to work collectively together and stop procrastinating. We need to support leaders around the world who do not speak for the big polluters, but who speak for all of humanity, for the indigenous people of the world, for the billions and billions of underprivileged people out there who would be most affected by this. For our children's children, and for those people out there whose voices have been drowned out by the politics of greed."

Leonardo DiCaprio has used his great success as an actor in the service of environmental causes. In 1997, following the box office success of *Titanic*, he set up the Leonardo DiCaprio Foundation, which is devoted to environmental causes. He chaired the national Earth Day celebrations in 2000 during which he interviewed US President Bill Clinton, with whom he discussed the actions needed to avoid catastrophic climate change. In 2007 he had a major role in *The 11th Hour*, a documentary about people's relationship to nature and global warming. He also co-produced and co-wrote the film.

DiCaprio's most influential film on climate change is *Before the Flood*⁹. This film, released in 2016, is a 1 hour and 36 minute documentary in which Leonardo DiCaprio travels to many countries to let viewers observe the already visible effects of global warming. He also talks with many of the world's leaders, including Pope Francis I, US Presidents Bill Clinton and Barack Obama, and UN Secretary General Ban Ki-moon.

⁹<http://www.get.filmovie.us/play.php?movie=tt5929776t>



Figure 7.9: Leonardo DiCaprio at a press conference in 2000 (Wikipedia).



Figure 7.10: **Thom Hartmann speaks to the 2010 Chicago Green Festival (Wikipedia).**

Thom Hartmann

Thom Hartmann was born in 1951 in Lansing Michigan. He worked as a disk jockey during his teens, and, after a highly successful business career, he sold his businesses and devoted his energies to writing, humanitarian projects and public education. His influential book, *Last Hours of Ancient Sunlight* was published by Three Rivers Press in 1997 and republished in a revised edition in 2004. In 2013, Hartmann published another extremely important book on the same theme: *The Last Hours of Humanity: Warming the World To Extinction*¹⁰.

Hartmann has hosted a nationally syndicated radio show, The Thom Hartmann Program, since 2003 and a nightly television show, The Big Picture, since 2008.

Concerning Hartmann's radio show, Wikipedia states that "As of March 2016, the show was carried on 80 terrestrial radio stations in 37 states as well as on Sirius and XM satellite radio. A community radio station in Africa, Radio Builsa in Ghana, also broadcasts the show. Various local cable TV networks simulcast the program. In addition to Westwood One, the show is now also offered via Pacifica Audioport to non-profit stations in a non-profit compliant format and is simulcast on Dish Network channel 9415 and DirecTV channel 348 via Free Speech TV. The program is carried on Radio Sputnik in London, England."

"Sen. Bernie Sanders (I-VT) appears every Friday during the first hour of the show titled 'Brunch with Bernie'. Ellen Ratner of the Talk Radio News Service provides Washington commentary daily. Victoria Jones who is the White House correspondent for Talk

¹⁰<https://www.amazon.com/Last-Hours-Humanity-Warming-Extinction/dp/1629213640>

Radio News Service appears occasionally as does Dr. Ravi Batra an economics professor at SMU.”

Together with Leonardo DiCaprio, Thom Hartman recently produced and narrated an extremely important short film entitled *Last Hours*¹¹. This film, draws a parallel between the Permian-Triassic mass extinction, and the danger of a human-induced 6th mass extinction. Various experts who appear in the film confirm that our release of CO₂ into the atmosphere is similar to the greenhouse gasses produced by volcanic eruptions prior to the Permian event. The methane hydrate feedback loop is also discussed. The film should be seen by everyone concerned with the future of human civilization and the biosphere. Concerned citizens should also urgently see Hartman and DiCaprio’s short films *Carbon*, *Green World Rising* and *Reforestation*, also available on YouTube .

James Hansen

James Hansen was born in 1941 in Denison, Iowa. He was educated in physics, mathematics and astronomy at the University of Iowa in the space sciences program initiated James Van Allen. He graduated with great distinction. The studies of the atmosphere and temperature of Venus which Hansen made under Van Allen’s supervision lead him to become extremely concerned about similar effects in the earth’s atmosphere.

From 1962 to 1966, James Hansen participated in the National Aeronautical and Space Administration graduate traineeship and, at the same time, between 1965 and 1966, he was a visiting student at the Institute of Astrophysics at the University of Kyoto and in the Department of Astronomy at the University of Tokyo. Hansen then began work at the Goddard Institute for Space Studies in 1967. He began to work for the Goddard Institute for Space Studies in 1967. Between 1981 and 2013, he was head of the Goddard Institute of Space Studies in New York, and since 2014, he has been the director of the Program on Climate Science, Awareness and Solutions at Columbia University’s Earth Institute.

Hansen continued his work with radiative transfer models, attempting to understand the Venusian atmosphere. Later he applied and refined these models to understand the Earth’s atmosphere, in particular, the effects that aerosols and trace gases have on Earth’s climate. Hansen’s development and use of global climate models has contributed to the further understanding of the Earth’s climate. In 2009 his first book, *Storms of My Grandchildren*, was published.

James Hansen has refined climate change models, focusing on the balance between aerosols and greenhouse gases. He believes that there is a danger that climate change will become much more rapid if the balance shifts towards the greenhouse gases.

Hansen’s Congressional testimony leads to broad public awareness of the dangers

In 1988, Prof. Hansen was asked to testify before the US Congress on the danger of uncontrolled climate change. The testimony marked the start of broad public awareness

¹¹<https://www.youtube.com/watch?v=2bRrg96UtMc>



Figure 7.11: **Prof. James Hansen**

of the seriousness of the danger, and it was reported in a front page article by the New York Times. However, Hansen believes that governmental energy policies still favor fossil fuels. Therefore he has participated in public demonstrations and he was even arrested in 2011 together with more than a thousand other activists for protesting outside the White House.

James Hansen's TED talk and book

In 2012 he presented a TED Talk: *Why I Must Speak Out About Climate Change*. This talk is easily available on the Internet, and it should be required viewing for everyone who is concerned with the earth's future.

Hansen's book, *Storms of My Grandchildren: The Truth About The Coming Climate Catastrophe, and Our Last Chance To Save Humanity* was published in New York by Bloomsbury Publishing in 2009.

7.8 A culture of violence

Links with the entertainment industry

Here are a few films that glorify war:

- Black Hawk Down
- Top Gun
- Behind Enemy Lines
- Red Dawn (1984)



Figure 7.12: Tom Cruise in “Top Gun”.



Figure 7.13: A culture of violence supports the Devil's Dynamo.

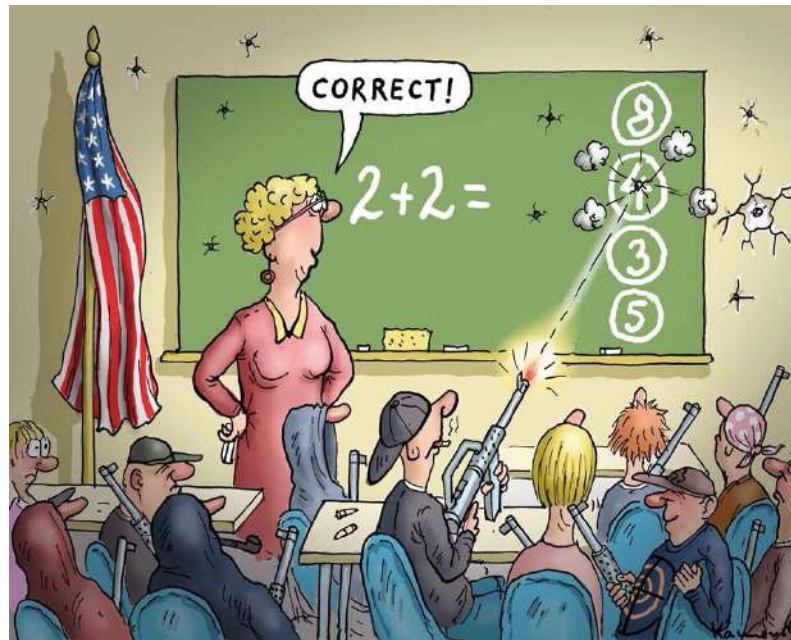


Figure 7.14: **A culture of violence:** In the United States the National Rifle Association has proposed guns in schools as the answer to the epidemic of school shootings.

- American Sniper
- Iron Eagle
- Pearl Harbor
- Act of Valor
- We Were Soldiers
- The Green Berets

Making a game of killing

The mass media are an important part of our educational system. Perhaps it is time to look more closely at the values that they are transmitting. In particular, we should perhaps look at computer games designed for young boys. They often give the strongest imaginable support to a culture of violence.

For example, a game entitled “Full Spectrum Warrior” was recently reviewed in a Danish newspaper. According to the reviewer, “...An almost perfect combination of graphics, sound, band design, and gameplay makes it seem exactly like the film Black Hawk Down - with the player as the main character. This is not just a coincidence, because the game is based on an army training program... Full Spectrum Warrior is an extremely intense experience, and despite the advanced possibilities, the controls are simple enough so that young children can play it... The player is completely drawn into the screen, and remains there until the end of the mission.” The reviewer gave the game six stars (the maximum).

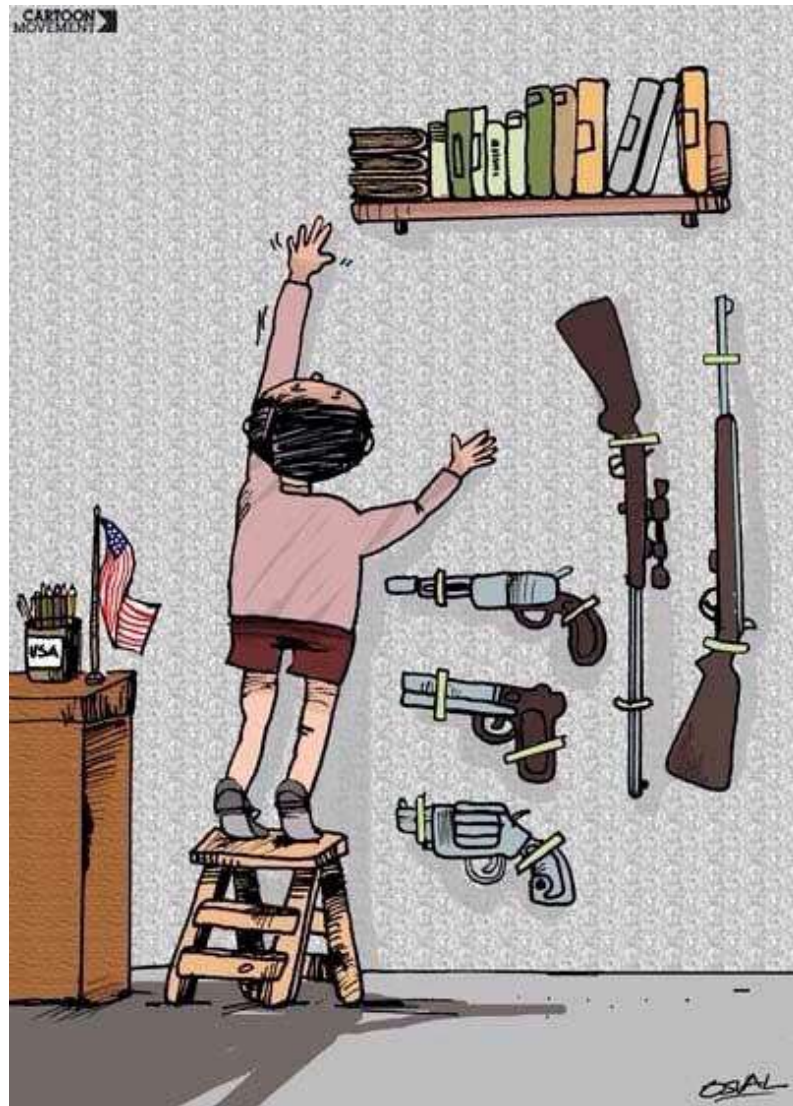


Figure 7.15: A culture of violence. Guns in schools?

Another genre of computer games has to do with building empires, ignoring the fact that imperialism is morally indefensible. For example, “Forge of Empires” is a browser-based strategy game. It is described as follows: “The game offers a single-player campaign for players to explore and conquer several provinces, gaining resources and new technology as they progress.” Conquering countries for the sake of gaining their resources is an all-too-familiar feature of the modern world. In the game “Forge of Empires”, our young people are indoctrinated with the ethos of resource wars.

During his trial, the Norwegian mass-murderer Anders Behring Breivik described how he trained for his attack on young people on the Island of Utøya using the computer game “Call of Duty: Modern Warfare”. The court also heard how he took what he called a “sabbatical” for a year between the summers of 2006 and 2007. During this year, he played a game called “World of Warcraft” full-time, in the bedroom of his mother’s Oslo flat, spending up to 16 hours a day using the game to distance himself from the human and moral significance of killing.

Is this not similar to the frame of mind of drone operators, sitting in comfort in their Nevada bunkers, distanced from the reality of killing? They are playing a computer game that kills targeted individuals and their families, in remote countries, by remote control. There is no need to look into the eyes of the victims. They are just abstract symbols in a computer game.

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Chapter 8

MONEY AND THE GREEN NEW DEAL

8.1 Cutting military budgets

The cost of US wars since 2001

According to the National Priorities Project¹, the total cost of US wars between November 11, 2001 and April 8, 2019 has been 4.77 trillion US dollars, or written out in detail \$4,773,527,023,293.00. Every hour US taxpayers are paying 32.08 million dollars for the total costs of war. Globally, the world spent 1.9 trillion dollars on military budgets in 2018, according to the Stockholm International Peace Research Institute.

Every war is a war against children

War was always madness, always immoral, always the cause of unspeakable suffering, economic waste and widespread destruction, and always a source of poverty, hate, barbarism and endless cycles of revenge and counter-revenge. It has always been a crime for soldiers to kill people, just as it is a crime for murderers in civil society to kill people. No flag has ever been wide enough to cover up atrocities. Every war is a war against children.

But today, the development of all-destroying modern weapons has put war completely beyond the bounds of sanity and elementary humanity. The danger of a catastrophic nuclear war casts a dark shadow over the future of our species. It also casts a very black shadow over the future of the global environment. The environmental consequences of a massive exchange of nuclear weapons have been treated in a number of studies by meteorologists and other experts from both East and West. Scientists believe that the “nuclear winter” effect could kill a large proportion of the plants, animals and humans on earth.

¹<https://www.nationalpriorities.org/cost-of/war/>

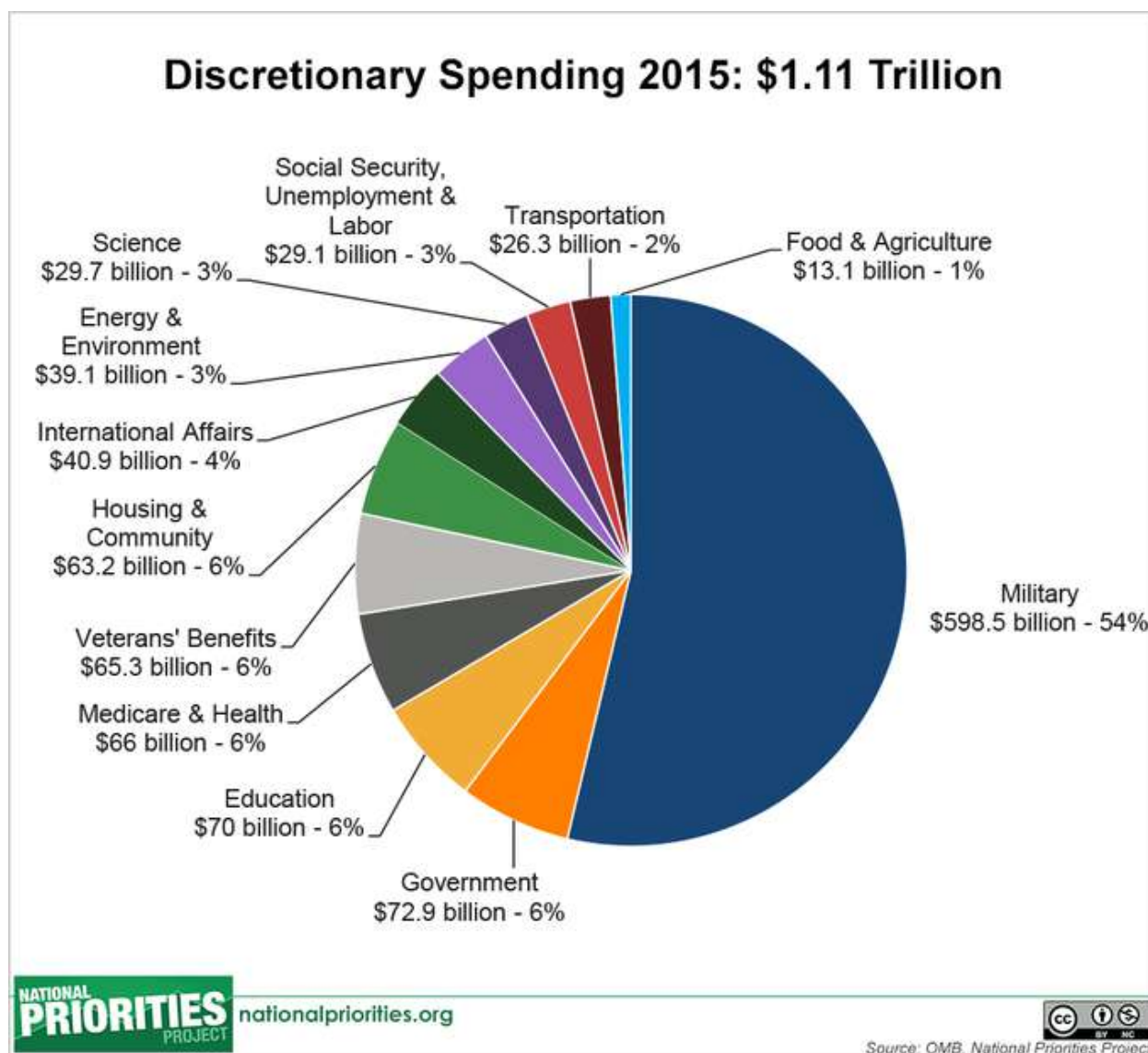


Figure 8.1: In the fiscal year US 2015, military spending accounted for 54 percent of all federal discretionary spending, a total of \$598.5 billion. Military spending includes: all regular activities of the Department of Defense; war spending; nuclear weapons spending; international military assistance; and other Pentagon-related spending.

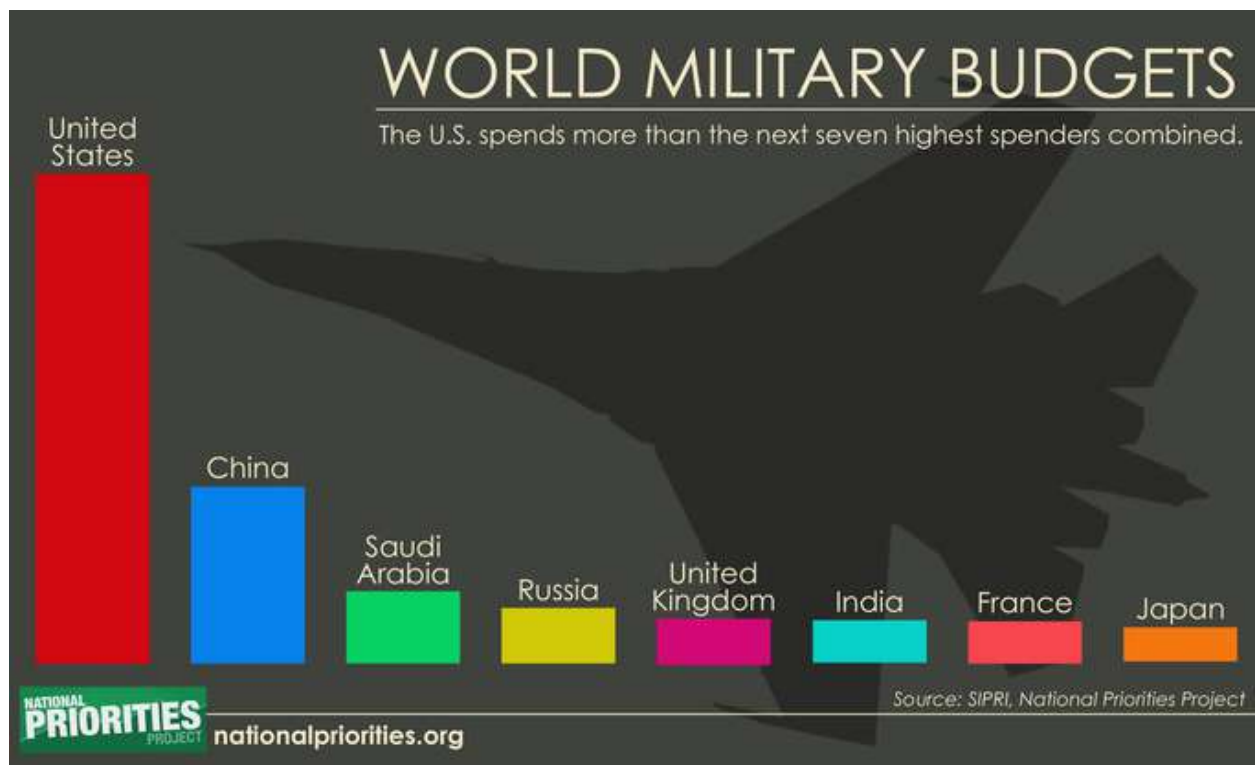


Figure 8.2: U.S. military spending dwarfs the budget of the #2 country - China. For every dollar China spends on its military, the U.S. spends \$2.77. The U.S. outpaces all other nations in military expenditures. World military spending totaled more than \$1.6 trillion in 2015. The U.S. accounted for 37 percent of the total. U.S. military expenditures are roughly the size of the next seven largest military budgets around the world, combined.



Figure 8.3: An attempt was made to audit Pentagon spending, but the firm entrusted with this task eventually pronounced it impossible because of confusing records and lack of records. Trillions of dollars are unaccounted for.



Figure 8.4: No War! No Warming! There are two important connections between war and global warming. Firstly, military organizations run on oil and are the largest single users of fossil fuels. Secondly, and even more importantly, money saved by slashing military budgets would be more than enough to carry out programs to avoid catastrophic climate change.



Figure 8.5: Military-industrial complexes want war. Ordinary people do not want it. According to the Stockholm International Peace Research Institute, global military expenses in 2018 amounted to 1.8 trillion dollars. This almost unimaginable river of money is the basic reason why the terrible suffering and waste of war is inflicted on the world's people.

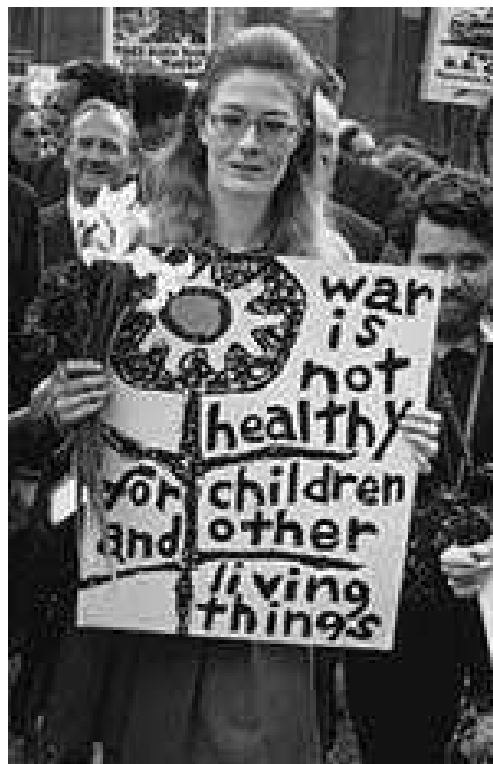


Figure 8.6: The actress Vanessa Redgrave was part of a 1968 protest against the Vietnam War.



Figure 8.7: We must do whatever is necessary to save the future.



Figure 8.8: Young protesters from the Sunrise Movement call on leaders to back the Green New Deal.

8.2 The Extinction Rebellion

In an open letter to governments, reported in *The Guardian* ², leaders of the environmental movement said:

In our complex, interdependent global ecosystem, life is dying, with species extinction accelerating. The climate crisis is worsening much faster than previously predicted. Every single day 200 species are becoming extinct. This desperate situation can't continue.

Political leaders worldwide are failing to address the environmental crisis. If global corporate capitalism continues to drive the international economy, global catastrophe is inevitable.

Complacency and inaction in Britain, the US, Australia, Brazil, across Africa and Asia - all illustrate diverse manifestations of political paralysis, abdicating humankind's grave responsibility for planetary stewardship.

International political organizations and national governments must foreground the climate-emergency issue immediately, urgently drawing up comprehensive policies to address it. Conventionally privileged nations must voluntarily fund comprehensive environment-protection policies in impoverished nations, to compensate the latter for foregoing unsustainable economic growth, and paying recompense for the planet-plundering imperialism of materially privileged nations.

With extreme weather already hitting food production, we demand that governments act now to avoid any risk of hunger, with emergency investment in agro-ecological extreme-weather-resistant food production. We also call for an urgent summit on saving the Arctic icecap, to slow weather disruption of our harvests.

We further call on concerned global citizens to rise up and organize against current complacency in their particular contexts, including indigenous people's rights advocacy, decolonization and reparatory justice - so joining the global movement that's now rebelling against extinction (eg Extinction Rebellion in the UK).

We must collectively do whatever's necessary non-violently, to persuade politicians and business leaders to relinquish their complacency and denial. Their "business as usual" is no longer an option. Global citizens will no longer put up with this failure of our planetary duty.

Every one of us, especially in the materially privileged world, must commit to accepting the need to live more lightly, consume far less, and to not only uphold human rights but also our stewardship responsibilities to the planet.

The letter was signed by 100 academics, authors, politicians and campaigners from

²<https://www.theguardian.com/environment/2018/dec/09/act-now-to-prevent-an-environmental-catastrophe>



Figure 8.9: Young protesters in London demanding action to prevent catastrophic climate change.

across the world. Among them were Vandana Shiva, Noam Chomsky, Naomi Klein and Bill McKibben.

8.3 The cost of inaction

In a sense, the cost of inaction is incalculably high. At stake is the entire future of human civilization and the biosphere. Our children's future and our grandchildren's future will be lost if we do not take rapid action to avoid catastrophic climate change. Nevertheless, scientists studying two of the most dangerous feedback loops, the albedo effect from melting of Arctic sea ice, and the release of methane from melting permafrost, have attempted to put a price tag on the cost of inaction under various scenarios. Their results were recently published in *Nature*³, and reported in *The National Geographic*⁴.

The *National Geographic* article, written by Stephen Leahey and published on April

³<https://www.nature.com/articles/s41467-019-09863-x>

⁴<https://www.msn.com/en-us/weather/topstories/a-warming-arctic-could-cost-the-world-trillions-of-dollars/ar-BBWcxsz?li=BBnbcA1>

GLOBAL ATMOSPHERIC CARBON DIOXIDE SETS NEW RECORD HIGH IN 2017

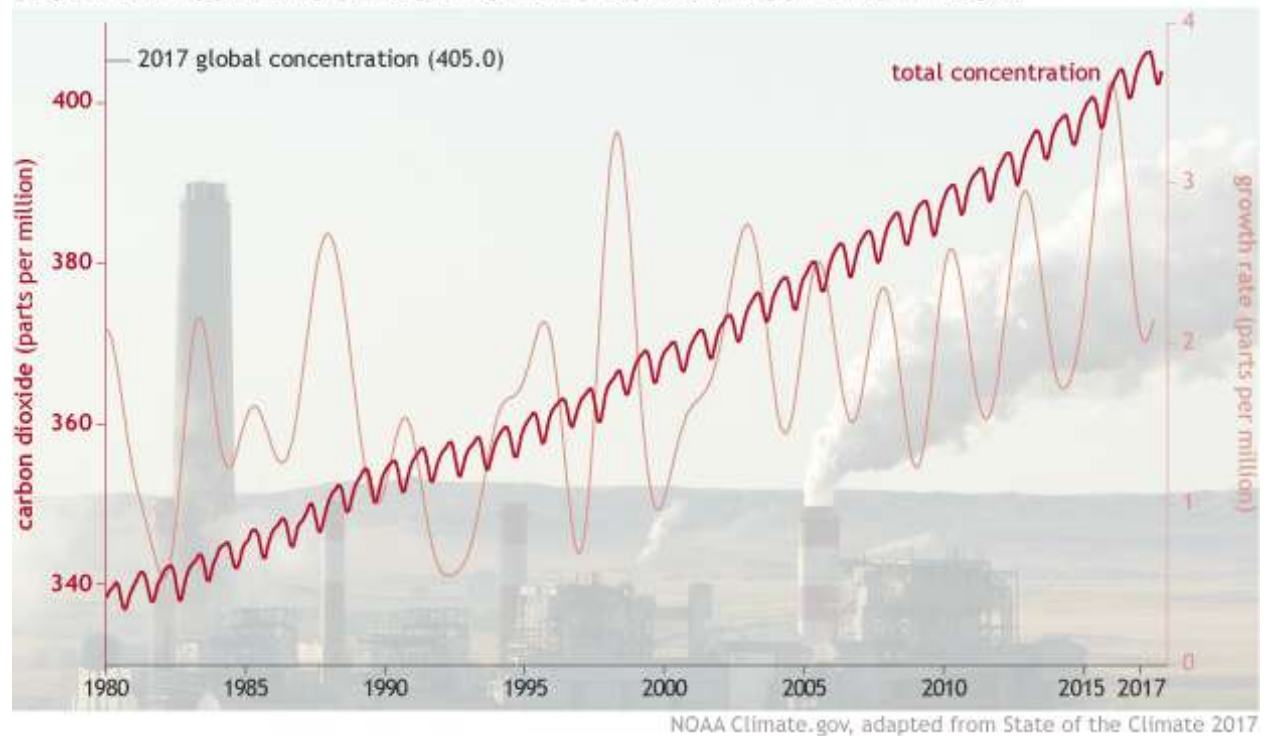


Figure 8.10: Today the atmospheric concentration of CO₂ is 413 ppm., roughly double the pre-industrial concentration. The last time that it was this high was in the Pliocene Epoch 5.3 to 2.6 million years ago. Sea levels were then 20 meters higher than they are right now, and trees were growing at the South Pole. Unless we quickly lower carbon emissions, most coastal cities and low-lying countries will be lost to rising seas.

24, 2019, states the following:

Scientists have long warned that climate change is likely to bring expensive impacts, from rising seas to stronger storms. And a new study comes with a hefty price tag.

A warming Arctic is shifting from white to dark as sea ice melts and land-covered snow retreats, and that means it can absorb even more of the sun's heat. Plus, the Arctic's vast permafrost area is thawing, releasing more heat-trapping carbon and methane. These climate-change-driven feedbacks in the Arctic are accelerating warming even faster and may add nearly \$70 trillion to the overall costs of climate change - even if the world meets the Paris Agreement climate targets, a new study says.

However, if efforts can be made to keep climate change limited to 2.7 degrees Fahrenheit (1.5C), the extra cost of Arctic warming drops to \$25 trillion, new research published in *Nature Communications* reports. A trillion is a thousand billion. For comparison, the global GDP in 2016 was around \$76 trillion.

"Massive changes are underway in the Arctic. Permafrost and loss of sea ice and snow are two known tipping elements in the climate system," said lead author Dmitry Yumashev of the Pentland Centre for Sustainability in Business, Lancaster University in the United Kingdom.

"We wanted to know what Arctic warming could do to the rest of the world," said Yumashev.

Climate "tipping elements" are also known as tipping points or feedbacks, where a change in a natural system triggers further warming. Last year, a study documented ten tipping points and noted that these can act like a row of dominoes, one pushing another system over. Once started, these tipping points are nearly impossible to stop and risk what researchers called a "Hothouse Earth" state - in which the global average temperature is 4 to 5 degrees Celsius higher, with regions like the Arctic averaging 10 degrees C higher than today.

The Arctic is warming at least twice as fast as the global average. Sea ice has been in decline since the 1990s, exposing a million square miles of ocean. As more solar energy is absorbed it creates what's called the surface albedo feedback...

The \$25 to \$70 trillion cost of Arctic warming adds four to six percent to the total cost of climate change - which is estimated to reach \$1,390 trillion by the year 2300 if emissions cuts are not better than the Paris Agreement. However, the costs of the current business-as-usual path could be more than \$2,000 trillion.

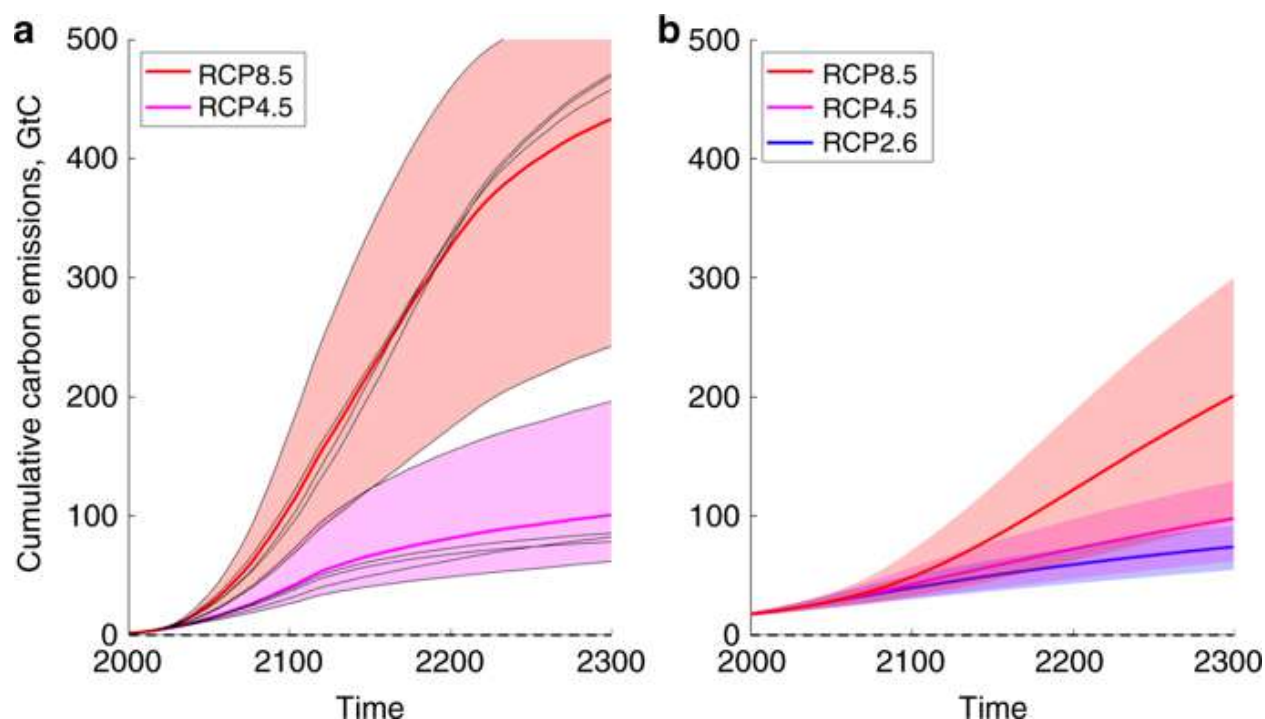


Figure 8.11: Cumulative carbon emissions in gigatons under various scenarios.

Global carbon debt increasing by \$16 trillion annually

Another estimate of the cost of climate inaction has been made by Dr. Gideon Polya in an article entitled “Inescapable \$200-250 Trillion Global Carbon Debt Increasing by \$16 Trillion Annually”⁵. Here are some quotations from the article:

Carbon Debt is simply the damage-related cost of greenhouse gas (GHG) pollution that if not addressed now will inescapably have to be paid by future generations. However GHG emissions continue to rise inexorably and there is no global program to draw down CO₂ and other GHGs from the atmosphere. While young people are now vociferously demanding massive climate action, inescapable global Carbon Debt is \$200-\$250 trillion and increasing by \$16 trillion each year.

Unlike Conventional Debt that can be variously expunged by bankruptcy, printing money or default, Carbon Debt is inescapable - thus, for example, national commitments to GHG pollution reduction made to the 2015 Paris Climate Conference amount to a temperature rise of over 3 degrees Centigrade (3C) , and unless huge sea walls are built Netherlands-style , coastal cities of the world housing hundreds of millions of people will be submerged by rising

⁵<https://countercurrents.org/2019/04/27/inescapable-200-250-trillion-global-carbon-debt-increasing-by-16-trillion-annually-gideon-polya/>

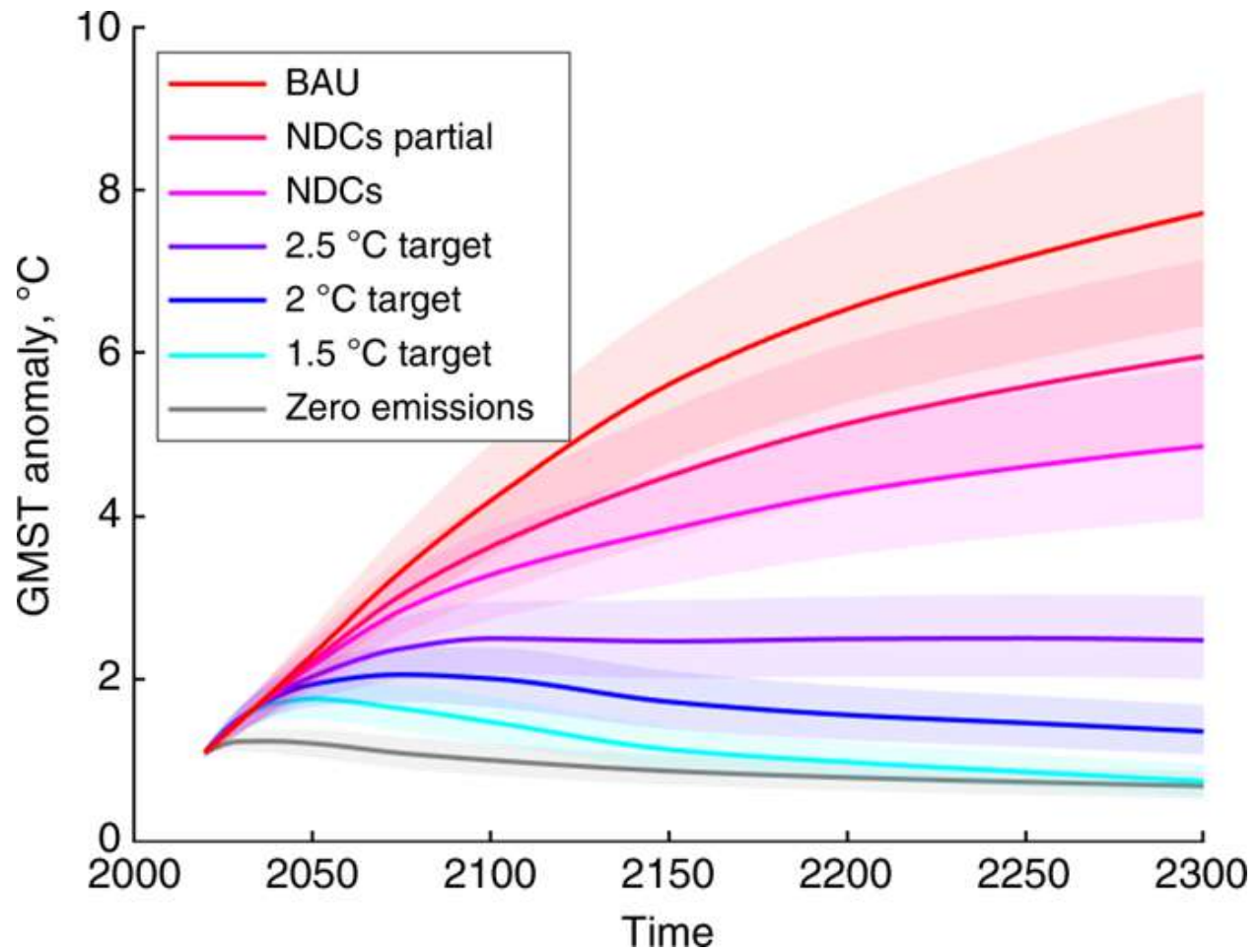


Figure 8.12: Global mean temperature simulations under the range of climate scenarios considered. BAU stands for “Business As Usual”.

sea levels (notably in Asia), mega-delta agricultural lands vital for feeding Humanity will be subject to inundation and salinization, and low-lying Island States will cease to exist

While outright, anti-science climate change denialism is politically entrenched in climate criminal Trump America and its climate criminal lackey Australia, most governments around the world are politically committed to effective climate change denialism through climate change inaction. That climate change inaction is most clearly quantitated in terms of Carbon Debt, but the very term has been white-washed out of public perception by US owned or subverted Mainstream media. Thus the Australian ABC (the taxpayer-funded Australian equivalent of the UK BBC) is self-assertedly “progressive” but a Search of the ABC for the term “Climate Debt” reveals zero (0) reportage. A Search of the self-assertedly “ethical” UK BBC for the term “Climate Debt” yields 9 items with none later than 2009, defining the term or quantifying global or national Carbon Debt.

Explanations for this extraordinary mainstream media lying by omission over Carbon Debt can be variously advanced, ranging from entrenched mendacity by US- and corporate- subverted media to cognitive dissonance in the face of a worsening climate emergency. However I am confident in predicting that if governments do not take action on the world’s massive Carbon Debt then intergenerational justice action by the utterly betrayed and robbed young people of the world will make the present Extinction Rebellion climate demonstrations in London look like a proverbial Teddy Bear’s Picnic. A young people-led Climate Revolution (non-violent one hopes) is coming...

Up to one million species face extinction

According to a recent United Nations report⁶

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report warns of “an imminent rapid acceleration in the global rate of species extinction.”

The pace of loss “is already tens to hundreds of times higher than it has been, on average, over the last 10 million years,” it notes.

“Half-a-million to a million species are projected to be threatened with extinction, many within decades.”

⁶<https://news.yahoo.com/one-million-species-risk-extinction-due-humans-draft-131407174.html>

Refugees from climate change

The United Nations High Commission on Refugees

In an article on *Climate Change and Disasters* the United Nations High Commission on Refugees makes the following statement:

“The Earth’s climate is changing at a rate that has exceeded most scientific forecasts. Some families and communities have already started to suffer from disasters and the consequences of climate change, forced to leave their homes in search of a new beginning.

“For UNHCR, the consequences of climate change are enormous. Scarce natural resources such as drinking water are likely to become even more limited. Many crops and some livestock are unlikely to survive in certain locations if conditions become too hot and dry, or too cold and wet. Food security, already a concern, will become even more challenging.

“People try to adapt to this situation, but for many this will mean a conscious move to another place to survive. Such moves, or the effects of climate change on natural resources, may spark conflict with other communities, as an increasing number of people compete for a decreasing amount of resources.

“Since 2009, an estimated one person every second has been displaced by a disaster, with an average of 22.5 million people displaced by climate- or weather-related events since 2008 (IDMC 2015). Disasters and slow onsets, such as droughts in Somalia in 2011 and 2012, floods in Pakistan between 2010 and 2012, and the earthquake in Nepal in 2015, can leave huge numbers of people traumatized without shelter, clean water and basic supplies.”

Populations displaced by sea level rise

In a recent article⁷ discussed the long-term effects of sea level rise and the massive refugee crisis that it might create. By 2060, about 1.4 billion people could be climate change refugees, according to the paper, and that number could reach 2 billion by 2100.

The lead author, Prof. Emeritus Charles Geisler of Cornell University says: “The colliding forces of human fertility, submerging coastal zones, residential retreat, and impediments to inland resettlement is a huge problem. We offer preliminary estimates of the lands unlikely to support new waves of climate refugees due to the residues of war, exhausted natural resources, declining net primary productivity, desertification, urban sprawl, land concentration, ‘paving the planet’ with roads and greenhouse gas storage zones offsetting permafrost melt.”

We should notice that Prof. Geisler’s estimate of 2 billion climate refugees by 2100 includes all causes, not merely sea level rise. However, the number of refugees from sea level rise alone will be very large, since all the world’s coastal cities, and many river deltas will be at risk.

⁷Geisler C. et al., *Impediments to inland resettlement under conditions of accelerated sea level rise*, Land Use Policy, Vol 55, July 2017, Pages 322-330

Populations displaced by drought and famine

Climate change could produce a refugee crisis that is "unprecedented in human history", Barack Obama has warned as he stressed global warming was the most pressing issue of the age.

Speaking at an international food conference in Milan, the former US President said rising temperatures were already making it more difficult to grow crops and rising food prices were "leading to political instability".

If world leaders put aside "parochial interests" and took action to reduce greenhouse gas emissions by enough to restrict the rise to one or two degrees Celsius, then humanity would probably be able to cope.

Failing to do this, Mr Obama warned, increased the risk of "catastrophic" effects in the future, "not only real threats to food security, but also increases in conflict as a consequence of scarcity and greater refugee and migration patterns".

"If you think about monsoon patterns in the Indian subcontinent, maybe half a billion people rely on traditional rain patterns in those areas,"

Populations displaced by rising temperatures

A new study published in *Nature: Climate Change* has warned that up to 75% of the world's population could face deadly heat waves by 2100 unless greenhouse gas emissions are rapidly controlled.⁸ The following is an excerpt from the article:

"Here we conducted a global analysis of documented lethal heat events to identify the climatic conditions associated with human death and then quantified the current and projected occurrence of such deadly climatic conditions worldwide. We reviewed papers published between 1980 and 2014, and found 783 cases of excess human mortality associated with heat from 164 cities in 36 countries.

"Based on the climatic conditions of those lethal heat events, we identified a global threshold beyond which daily mean surface air temperature and relative humidity become deadly. Around 30% of the world's population is currently exposed to climatic conditions exceeding this deadly threshold for at least 20 days a year.

"By 2100, this percentage is projected to increase to 48% under a scenario with drastic reductions of greenhouse gas emissions and 74% under a scenario of growing emissions. An increasing threat to human life from excess heat now seems almost inevitable, but will be greatly aggravated if greenhouse gases are not considerably reduced." ⁹

⁸Mora, C. et al., *Global risk of deadly heat*, *Nature: Climate Change*, 19 June 2017

⁹See also <https://phys.org/news/2017-08-deadly-south-asia-century.html> and <https://cleantechnica.com/2017/09/28/extreme-heatwaves-like-recent-lucifer-heatwave-become-normal-europe-2050s/>

Populations displaced by war

A recent article in *The Guardian*¹⁰ discusses the relationship between climate change and war, Here are some excerpts from the article:

“Climate change is set to cause a refugee crisis of ‘unimaginable scale’, according to senior military figures, who warn that global warming is the greatest security threat of the 21st century and that mass migration will become the ‘new normal’.

“The generals said the impacts of climate change were already factors in the conflicts driving a current crisis of migration into Europe, having been linked to the Arab Spring, the war in Syria and the Boko Haram terrorist insurgency.

“Military leaders have long warned that global warming could multiply and accelerate security threats around the world by provoking conflicts and migration. They are now warning that immediate action is required.

“‘Climate change is the greatest security threat of the 21st century,’ said Maj Gen Muniruzzaman.

“Muniruzzaman, chairman of the Global Military Advisory Council on climate change and a former military adviser to the president of Bangladesh. He said one meter of sea level rise will flood 20% of his nation. ‘We’re going to see refugee problems on an unimaginable scale, potentially above 30 million people.’

“Previously, Bangladesh’s finance minister, Abul Maal Abdul Muhith, called on Britain and other wealthy countries to accept millions of displaced people.

“Brig Gen Stephen Cheney, a member of the US Department of State’s foreign affairs policy board and CEO of the American Security Project, said: ‘Climate change could lead to a humanitarian crisis of epic proportions. We’re already seeing migration of large numbers of people around the world because of food scarcity, water insecurity and extreme weather, and this is set to become the new normal’.

Political reactions to migration

Brexit

Across the developed world, the reaction to threatened migration of refugees from climate change has been less than generous, to say the least. The recent decision of Britain to leave the European Union was motivated largely by the fear of British workers that EU laws would force their country to accept large numbers of refugees.

Swings to the right in Europe

In Germany, Angela Merkel’s generous policies towards refugees have cost her votes, while an openly racist party, the Alternative for Germany (AfD) party, has gained in strength. Frauke Petry, 40, the party’s leader, has said border guards might need to turn guns on

¹⁰Thursday, 1 December, 2016

anyone crossing a frontier illegally. The party's policy platform says "Islam does not belong in Germany" and calls for a ban on the construction of mosques.

In September, 2017, eight people from the neo-Nazi Freital Group were put on trial in Dresden for bomb attacks on homes for asylum applicants. Hundreds of similar assaults occur in Germany every year, but they had never before been tried as terrorism in a federal court.

In the German election, which took place on Sunday, October 1, 2017, Angela Merkel won a fourth term as Chancellor, but her party won only 33% of the votes, a percentage much reduced from the 41% won in the election of 2013. Angela Merkel was paying a high price for her refugee-friendly policies.

Meanwhile the far right anti-immigration AfD party made a historic breakthrough, winning 13.5% of the vote, thus becoming the first overtly nationalist party to sit in the Bundestag in 60 years. The Greens have already complained that "Nazis have returned to parliament". In fact, members of the AfD party have begun to say that Germans should stop being ashamed of their country's Nazi past.

In France, the National Front is a nationalist party that uses populist rhetoric to promote its anti-immigration and anti-European Union positions. The party favors protectionist economic policies and would clamp down on government benefits for immigrants.

Similarly, in the Netherlands, the anti-European Union, anti-Islam Party for Freedom has called for closing all Islamic schools and recording the ethnicity of all Dutch citizens. In early November, the party was leading in polls ahead of next year's parliamentary elections.

Other far-right anti-immigrant parties in Europe include Golden Dawn (Greece), Jobbic (Hungary), Sweden Democrats (Sweden), Freedom Party (Austria), and People's Party - Our Slovakia (Slovakia). All of these parties have gained in strength because of the widespread fear of immigration.

Populism in the United States

The election of Donald Trump, who ran for President in 2016 on an openly racist and anti-immigrant platform, can also be seen as the result of fear of immigration, especially on the part of industrial workers.

A more humane response to the refugee crisis

In the long-term future, climate change will make the refugee crisis much more severe. Heat and drought will make large regions of the world uninhabitable, and will threaten many populations with famine. The severity of the refugee crisis will depend on how quickly we reduce greenhouse gas emissions.

While making many parts of the world uninhabitable, long-term climate change will make other regions more suitable for human habitation and agriculture. For example, farming will become more possible in Siberia, Greenland, the Canadian Arctic, Alaska and

Patagonia. A humane response to the refugee crisis could include the generous opening of these regions to refugees.

The global population of humans is currently increasing by almost a billion people every decade. Global population must be stabilized, and in the long run, gradually reduced. Money currently wasted (or worse than wasted) on armaments could be used instead to promote universal primary health care, and with it, universal access to the knowledge and materials needed for family planning.

Finally, reduced consumption of meat, particularly beef, would shorten the food chain thus make more food available for famine relief.

8.4 Social systems in Scandinavia

The Green New Deal can simultaneously address the climate crisis and the problem of excessive economic inequality. In this context, it is interesting to look at the social and economic systems of the Scandinavian countries, Norway, Sweden, Finland, Denmark and Iceland. In these countries the contrast between the rich and poor has been very much reduced. It is almost true to say that poverty has been eliminated in these countries. At the same time, the Scandinavians have strong policies to address the climate emergency. Thus Scandinavian successes are a counter-argument to those who say that the Green New Deal cannot be put into practice.¹¹

The Danish system today

In 2017, Denmark ranked 2nd in the world (after Norway) in the World Happiness Report. In a number of other years, Denmark has ranked 1st. In compiling the report, researchers ask people in a given country whether they are happy, and record how many say “yes”. Interestingly, in Denmark, women are the most happy of all. It is therefore relevant to look at the Danish social and political system of today, and to examine the reasons why women are so satisfied with it.

Denmark has very high taxes, but in return for these, its citizens receive many social services, such as free health care. If they qualify for university education, the tuition is free, and students are given an allowance for their living expenses. Mothers or alternatively fathers, can take paid leave of up to 52 weeks after the birth of a child. After that, a *vuggestue* (cresch) is always available, so that mothers can return to their jobs. When the child become too old for the *cresch*, day care centers are always available. For children of school age, after-school clubs are available where children can practice arts and crafts or other activities under supervision until their parents come home from work.

It is illegal in Denmark to fire a woman because she has become pregnant, or to deny her work because the employer fears that she may become pregnant. Thus, Danish women grow up expecting to find jobs outside the home. Danish women are happy to have careers, but it is also a necessity, because with taxes so high that a single income is not enough

¹¹But, of course, it cannot be put into practice while maintaining an economic oligarchy.

to give a family the desired standard of living. Husbands are grateful to their wives for helping to support the family. In the case of single mothers, support is given by the state.

The number of births per woman-life reached a low of 1.38 in 1983, but since that time the number has gradually risen and in 2017 the fertility rate was 1.77, still less than the replacement level. The other Scandinavian countries have very similar systems, and they all have high human development indices, as well as a high degree of economic equality. When US Senator Bernie Sanders declared that he is a socialist, he made the statement more precise by saying that he is in favor of the Scandinavian social and political system.

Renewable energy in Denmark

Here are some excerpts from a recent report by the Danish Ministry of Energy, Utilities and Climate:¹²

Denmark's success in transforming into a sustainable, green society is widely recognized. Denmark is at the forefront of numerous international initiatives and collaborative endeavors. In 2017, for the second consecutive year in a row, Denmark won the World Energy Council award for the world's best energy system.

Denmark's energy and climate policy was also high lighted in 2017 by the International Energy Agency (IEA), as an international model because the country produces wind turbines, provides record low energy prices and good electricity connections to neighboring countries.

In 2017, Denmark achieved a world record of 43.4% power produced solely by wind turbines.

Denmark can cover the largest share of its electricity production with green power from wind turbines.

Denmark is also a European leader in the export of energy technology, as exports of energy equipment account for a larger share of total exports than in any other EU country.

The government has set ambitious goals that few other countries can match:

- At least 50% of Denmark's energy needs must be covered by renewable energy by 2030.
- Coal must be completely phased out of the power supply by 2030.
- Moratorium on all exploration and drilling activities for oil, gas and shale gas on land and inland waters of Denmark.
- Denmark must be a low-emission society independent of fossil fuels in 2050.

¹²Denmark: Energy and climate pioneer. Status of the green transition



Figure 8.13: Senator Bernie Sanders, the popular candidate for the US Presidency in 2016 and 2020, says that he is a socialist. When asked to explain this in detail, Senator Sanders said that he believes that the United States would benefit from a social system similar to the systems in present-day Scandinavia.



Figure 8.14: A day-care center in Sweden. In the Scandinavian countries, most women work, and state-provided day-care centers for pre-school children make this possible.

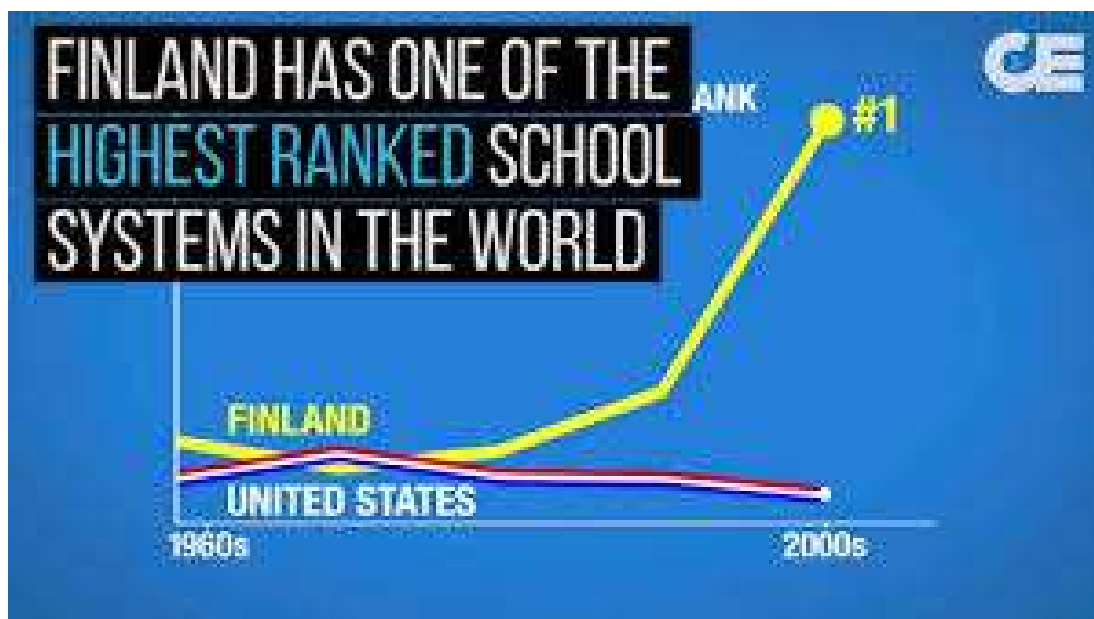


Figure 8.15: Finland has the best school system in the world. One reason for this is that the teachers are very highly selected and highly paid. Another reason is that the children are given frequent short rest periods, during which they may go outdoors and breath fresh air. They return from these small breaks with improved concentration.



Figure 8.16: The long-serving Danish Prime Minister Thorvald Stauning (1873-1942). He was the architect of the Danish social and economic system, which combines a free-market economy with such social benefits as universal free health care, state-provided day-care centers and free higher education. Thanks to Stauning's initiatives, those who qualify for college or university in Denmark are not only given free tuition, but also a stipend to support their living expenses. A high progressive income tax in Denmark pays for these benefits and reduces economic inequality. Stauning forged a coalition that united both labor and employers behind his reforms.

8.5 Roosevelt saves his nation and the world

Born into a very wealthy Dutch-American family Franklin Delano Roosevelt (1882-1945) attended Groton School, Harvard College and Columbia Law School. After practicing law in New York, he was elected to the NY State Senate. During World War I, he served as Assistant Secretary of the Navy. In 1920 he was the Democratic Party's Candidate for US Vice President, but he and James G. Cox were defeated by Warren Harding's ticket.

In 1921, FDR contracted polio and lost the use of his legs. His mother urged him to leave politics and return to the family estate at Hyde Park, but he vigorously resisted this suggestion and struggled to continue despite his handicap. In 1928, Roosevelt was elected Governor of New York. As Governor, he instituted many reforms to combat the economic problems that had followed the 1929 Black Friday stock market crash.

After winning a second term as Governor of New York State in 1930, FDR became the front-running candidate for the US Presidency in 1932. In accepting the Democratic Party nomination at the Chicago convention, he said: "I pledge you, I pledge myself to a new deal for the American people... This is more than a political campaign. It is a call to arms."

Here are some excerpts from FDR's First Inaugural Address, Saturday, March 4th, 1933:

I am certain that my fellow Americans expect that on my induction into the Presidency I will address them with a candor and a decision which the present situation of our Nation impels. This is preeminently the time to speak the truth, the whole truth, frankly and boldly. Nor need we shrink from honestly facing conditions in our country today. This great Nation will endure as it has endured, will revive and will prosper. So, first of all, let me assert my firm belief that the only thing we have to fear is fear itself - nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance. In every dark hour of our national life a leadership of frankness and vigor has met with that understanding and support of the people themselves which is essential to victory. I am convinced that you will again give that support to leadership in these critical days.

In such a spirit on my part and on yours we face our common difficulties. They concern, thank God, only material things. Values have shrunk to fantastic levels; taxes have risen; our ability to pay has fallen; government of all kinds is faced by serious curtailment of income; the means of exchange are frozen in the currents of trade; the withered leaves of industrial enterprise lie on every side; farmers find no markets for their produce; the savings of many years in thousands of families are gone.

More important, a host of unemployed citizens face the grim problem of existence, and an equally great number toil with little return. Only a foolish optimist can deny the dark realities of the moment. ..

Recognition of the falsity of material wealth as the standard of success goes

hand in hand with the abandonment of the false belief that public office and high political position are to be valued only by the standards of pride of place and personal profit; and there must be an end to a conduct in banking and in business which too often has given to a sacred trust the likeness of callous and selfish wrongdoing. Small wonder that confidence languishes, for it thrives only on honesty, on honor, on the sacredness of obligations, on faithful protection, on unselfish performance; without them it cannot live.

Restoration calls, however, not for changes in ethics alone. This Nation asks for action, and action now.

Our greatest primary task is to put people to work. This is no unsolvable problem if we face it wisely and courageously. It can be accomplished in part by direct recruiting by the Government itself, treating the task as we would treat the emergency of a war, but at the same time, through this employment, accomplishing greatly needed projects to stimulate and reorganize the use of our natural resources.

Hand in hand with this we must frankly recognize the overbalance of population in our industrial centers and, by engaging on a national scale in a redistribution, endeavor to provide a better use of the land for those best fitted for the land. The task can be helped by definite efforts to raise the values of agricultural products and with this the power to purchase the output of our cities. It can be helped by preventing realistically the tragedy of the growing loss through foreclosure of our small homes and our farms. It can be helped by insistence that the Federal, State, and local governments act forthwith on the demand that their cost be drastically reduced. It can be helped by the unifying of relief activities which today are often scattered, uneconomical, and unequal. It can be helped by national planning for and supervision of all forms of transportation and of communications and other utilities which have a definitely public character. There are many ways in which it can be helped, but it can never be helped merely by talking about it. We must act and act quickly.

Roosevelt's New Deal programs aimed at "the three R's": **relief** of the poor, **reform** of financial institutions, and **recovery** of confidence. New Deal programs aimed at employing people on infrastructure projects that included the following:

- The Civilian Conservation Corps
- The Civil Works Administration
- The Farm Security Administration
- The National Industrial Recovery Act of 1933
- The Social Security Administration
- The Works Progress Administration of 1937 (WPA)

Wikipedia states that "The WPA financed a variety of projects such as hospitals, schools and roads, and employed more than 8.5 million workers who built 650,000 miles of highways and roads, 125,000 public buildings as well as bridges, reservoirs, irrigation systems, parks, playgrounds and so on."



Figure 8.17: Franklin Delano Roosevelt (FDR) in 1933. Wikipedia says of him: “Roosevelt is widely considered to be one of the most important figures in American history, as well as among the most influential figures of the 20th century. Though he has been subject to substantial criticism, he is generally rated by scholars as one of the three greatest U.S. presidents, along with George Washington and Abraham Lincoln.”



Figure 8.18: Eleanor and Franklin with two of their children in 1908. Eleanor was called Roosevelt even before her marriage. She was the niece of US President Theodore Roosevelt, a distant cousin of Franklin. She is remembered as an outstanding advocate of racial equality, journalistic freedom and human rights.



Figure 8.19: A photograph of FDR with his dog Fala and Ruthie Bie, the daughter of caretakers at his Hyde Park estate. Roosevelt was careful never to be seen using his wheelchair in public. Although disabled, he managed to give a public impression of buoyant energy and confidence. One of his slogans, which he used to end the depression, was “The only thing that we have to fear is fear itself!”

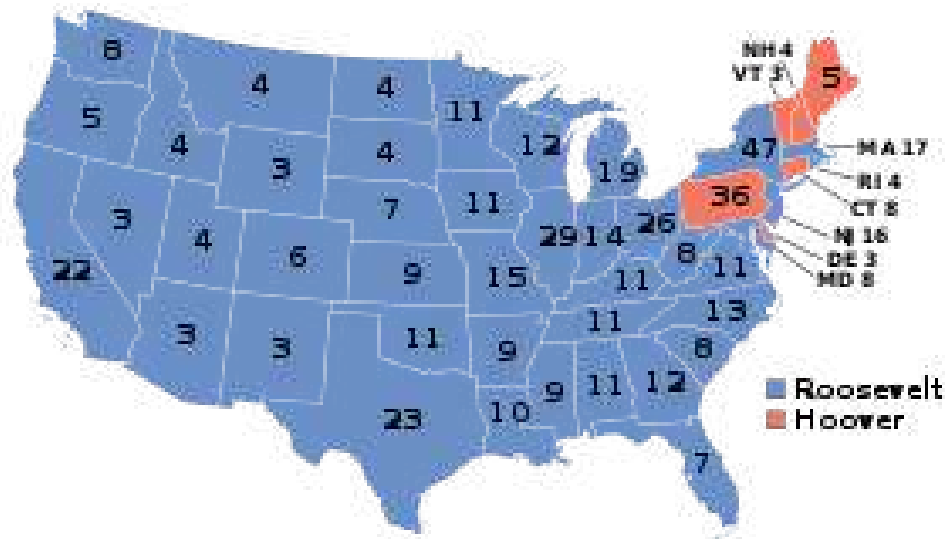


Figure 8.20: The 1932 electoral vote. Roosevelt also won landslide victories in 1936, 1940 and 1944. FDR died in office, shortly before the end of World War II. His administration's support for England during the the dark hours of the Battle of Britain had prevented Hitler's forces from invading the UK. In 1945, Eleanor Roosevelt helped to carry through FDR's plans for setting up the United Nations, and she was one of the two main drafters of the Universal Declaration of Human Rights.



Figure 8.21: A photo of Eleanor Roosevelt with Charles Malik and their grandchildren. Malik and Eleanor Roosevelt worked together to draft the Universal Declaration of Human Rights.



Figure 8.22: Pete Seeger entertaining Eleanor Roosevelt (center), honored guest at a racially integrated Valentine's Day party marking the opening of a Canteen of the United Federal Labor, CIO, in then-segregated Washington, D.C., 1944.

Roosevelt's New Deal serves a model for a Green New Deal that can save human civilization and the biosphere from catastrophic climate change, an emergency even more severe than those faced by Roosevelt. We can afford the Green New Deal. What we cannot afford is inaction.

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Chapter 9

SOME CONCLUDING REMARKS

9.1 Money continues to dominate politics

9.2 Speeches at the opening of COP26

Excerpts from Boris Johnson's speech

“Good afternoon, everybody. Welcome to COP. Welcome to Glasgow and to Scotland, whose most globally famous fictional son is almost certainly a man called James Bond, who generally comes to the climax of his highly lucrative films, strapped to a doomsday device, desperately trying to work out which colored wire to pull to turn it off, while a red digital clock ticks down remorselessly to a detonation that will end human life as we know it. And we are in roughly the same position, my fellow global leaders, as James Bond today. Except that the tragedy is this is not a movie, and the doomsday device is real. And the clock is ticking to the furious rhythm of hundreds of billions of pistons and turbines and furnaces and engines with which we are pumping carbon into the air faster and faster, record outputs, and quilting the earth in an invisible and suffocating blanket of CO₂, raising the temperature of the planet with a speed and an abruptness that is entirely man-made. And we know what the scientists tell us, and we have learned not to ignore them.

“Two degrees more, and we jeopardize the food supply for hundreds of millions of people as crops, wither locusts swarm. Three degrees and you can add more wildfires and cyclones, twice as many, five times as many droughts, and 36 times as many heat waves. Four degrees, and we say goodbye to whole cities. Miami, Alexandria, Shanghai, all lost beneath the waves. And the longer we fail to act, the worse it gets and the higher the price when we are eventually forced, by catastrophe, to act. Because humanity has long since run down the clock on climate change. It's one minute to midnight on that doomsday clock, and we need to act now. If we don't get serious about climate

change today, it will be too late for our children to do so tomorrow.

“I was there with many of you in Copenhagen 11 years ago, when we acknowledged we had a problem. I was there in Paris six years ago when we agreed to net zero, and to try to restrain the rise in the temperature of the planet to 1.5 degrees. And all those promises will be nothing but ‘blah, blah, blah,’ to coin a phrase, and the anger and the impatience of the world will be uncontrollable unless we make this COP26 in Glasgow the moment when we get real about climate change.

“And we can. We can get real on coal, cars, cash, and trees. We have the technology to deactivate that ticking doomsday device. Not all at once. I’m afraid it’s too late for that. But one by one, and with ever greater speed and efficiency, we can begin to close down those billions of hydrocarbon combustion chambers that you find currently in every corner of the planet...”

Excerpts from Antonio Guterres’ speech

The six years since the Paris Climate Agreement have been the six hottest years on record. Our addiction to fossil fuels is pushing humanity to the brink.

We face a stark choice. Either we stop it - or it stops us.

It’s time to say ‘enough’. Enough of brutalizing biodiversity, killing ourselves with carbon, treating nature like a toilet, burning, and drilling and mining our way deeper... We are digging our own graves-

G20 countries have a particular responsibility as they represent around 80 per cent of emissions.

We need maximum ambition - from all countries on all fronts - to make Glasgow a success.

Excerpts from Prince Charles’ speech

“Prime Minister, thank you for inviting me to address this immensely important meeting. You have many pressing issues of the day but none is more pressing than the future health of our planet and of the people who inhabit it. The planet’s health today will dictate the health, happiness and economic prosperity of generations to come - hence our overwhelming responsibility to generations yet unborn.

“Now after, I suppose, very nearly fifty years of trying to raise awareness of the growing climate and environmental crisis, I am at last sensing a change in attitudes and the build-up of positive momentum.

“As you know, listening is often more important than speaking and I have listened closely to leaders of many countries, particularly Commonwealth nations, whose communities are some of the most climate-vulnerable on this Earth. It is also impossible not to hear the despairing voices of young people who see you, ladies and gentlemen, as the stewards of the planet, holding the

viability of their future in your hands. And I have listened to those leaders of the private sector who are now more and more anxious to invest in the projects and new technologies that could establish a more rapid transition to sustainability. Some 300 of the world's top C.E.O.'s from every sector of the economy, including financial services, representing well over sixty trillion dollars of assets under management, joined my Sustainable Markets Initiative and demonstrated how acutely sensitive they are to the way both consumers, who control more than sixty per cent of global G.D.P., and shareholders who are now demanding changes in the way businesses behave. Which is why they want to make a big difference with the kind of investment only they can provide.

"Following the recent COP15 Biodiversity meeting in China and with this week's COP26 Climate Change conference in the United Kingdom, it is only too clear that we will need trillions of dollars of investment every year to create the necessary new infrastructure and meet the vital 1.5 degree climate target that will save our forests and farms, our oceans and our wildlife. No government has those sorts of sums - which is why I have spent so much time over the past nineteen months trying to form a global alliance amongst the private sector, as I have long believed it holds the ultimate key to the solutions we seek. That is why, Prime Minister, I am so grateful to you for recognizing this central truth and for bringing them in; giving them a seat at this most important table so that climate change can be tackled in partnership. It is why I also wish President Widodo every possible success when you pass the baton to him in a month's time..."

Excerpts from Sir David Attenborough's speech

Sir David spoke for seven minutes alongside screens showing a graph that tracked the rise of carbon concentration in the Earth's atmosphere. He began by describing an era before the Earth's climate was stable, describing it as a "brutal world." But he said that by 10,000 years ago the temperature had stabilized, which led to a period that allowed civilizations to flourish - and that situation had stayed the same, "until now."

"As you spend the next two weeks debating, negotiating, persuading, and compromising as you surely must, it's easy to forget that ultimately the emergency of the climate comes down to a single number - the measure of carbon dioxide in our atmosphere.

"Our burning of fossil fuels, our destruction of nature, our approach to industry, construction and learning, are releasing carbon into the atmosphere at an unprecedented pace and scale,.. We are already in trouble.

"If working apart we are a force powerful to destabilize our planet, surely working together we are powerful enough to save it...

"Today the ones that did the least to cause this crisis are the ones experiencing the most impact..."



Figure 9.1: 95-year-old British broadcaster and naturalist Sir David Attenborough speaks during the opening ceremony of the COP26 U.N. Climate Summit, in Glasgow, Scotland, Nov. 1, 2021. His speech drew a standing ovation from the other delegates.

“In my lifetime I’ve witnessed a terrible decline. In yours, you could and should witness a wonderful recovery.”

9.3 Xi Jinping and Putin absent from COP26

China: the world’s largest greenhouse gas emitter

Today, China is the world’s largest emitter of greenhouse gasses. This is mainly due to the massive Chinese use of coal to power the country’s industries. Large deposits of coal lie near to the surface throughout the country, and the temptation to use it has been irresistible. One result has been a terrible air pollution problem. which causes hundreds of thousands of deaths per year.

The Chinese economy is currently growing at the rate of roughly 5% per year. If the earth is to be saved from catastrophic climate change, both China’s greenhouse gas emissions and its enormous rate of economic growth must stop quickly, but the political will for these changes is lacking. The ordinary people of China have been lifted out of poverty by China’s rapidly growing economy, and they have no wish to slow that growth.

Before very long, China’s economic growth must certainly stop, simply because the endless growth of anything physical on a finite planet is a logical impossibility.

The Russian economy depends on gas and oil

Russia supplies Europe with gas

During a televised meeting on October 27, 2021, Vladimir Putin told Gazprom CEO Aleksei Miller to finish filling underground gas storage facilities in Russia by November 8, and to then “start gradually increasing the volume of gas” in the company’s storage facilities in Austria and Germany.

Russian extraction of oil

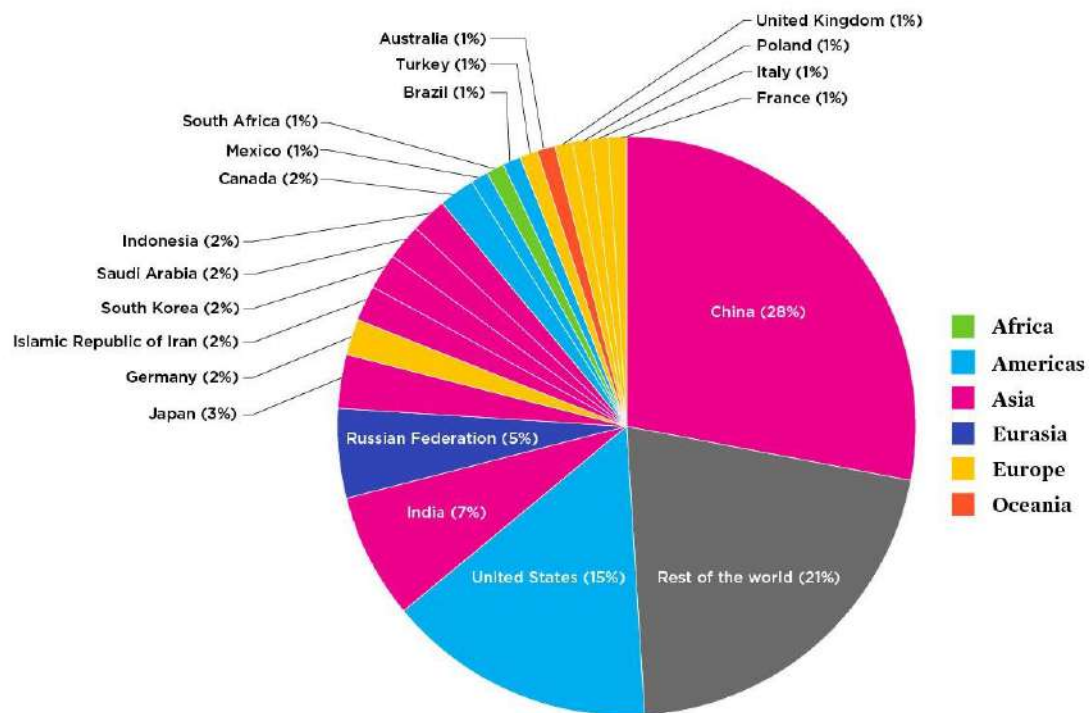
Russia is the third-largest producer of oil worldwide, accounting for over 12 percent of global crude oil production.

Wildfires in Siberia

On one level, the Siberian fires are part of an annual cycle. But many climate experts see the staggering scope of this year’s fires as another sign of greater fire risks on a warming planet that is potentially being made even hotter by huge carbon emissions from the blazes.



Figure 9.2: Air pollution from the burning of coal has become a serious problem in China.



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Data: Earth Systems Science Data 11, 1783–1838, 2019

Figure 9.3: China, India, the United States and Russia, together, emit more greenhouse gases than the rest of the world.

9.4 Joe Biden's climate hypocrisy exposed

Biden asked OPEC to increase oil production

On Wednesday, August 11, 2021, US President Joe Biden asked the OPEC nations to increase their oil production. He did this because of rising petroleum prices in the United States, but the move contradicts his promises to act boldly to save the earth from catastrophic climate change.

Biden continues to grant oil exploration leases

7

Here are some quotations from an article by Kenny Stancil, published on November 3, 2021, in Truthout:

“As U.S. President Joe Biden professed Washington’s alleged commitment to decarbonization during the ongoing COP26 climate summit, the White House on Tuesday authorized more fossil fuel pollution - advancing its plan to sell oil and gas leases on public lands even after concluding that the resultant emissions could generate billions of dollars in social and ecological damage.

“Environmental advocates denounced the Biden administration’s decision, which came the same day the U.S. rejoined the so-called High Ambition Coalition, as ‘scientifically ignorant and legally indefensible.’

“ ‘While President Biden is talking a good talk on climate action, the reality is his administration is actively working to fan the flames of the climate crisis by selling more public lands for fracking,’ Jeremy Nichols, climate and energy program director for WildEarth Guardians, said in a statement. ‘This isn’t just hypocritical, it’s outright deceitful and it truly calls into question whether the Biden administration’s climate agenda is nothing but broken promises’.”

9.5 Tasks for the future

Modern science has, for the first time in history, offered humankind the possibility of a life of comfort, free from hunger and cold, and free from the constant threat of death through infectious disease. At the same time, science has given humans the power to obliterate their civilization with nuclear weapons, or to make the earth uninhabitable through overpopulation and pollution. The question of which of these paths we choose is literally a matter of life or death for ourselves and our children.

Will we use the discoveries of modern science constructively, and thus choose the path leading towards life? Or will we use science to produce more and more lethal weapons, which sooner or later, through a technical or human failure, may result in a catastrophic nuclear war? Will we thoughtlessly destroy our beautiful planet through unlimited growth

of population and industry? The choice among these alternatives is ours to make. We live at a critical moment of history - a moment of crisis for civilization.

No one living today asked to be born at such a moment, but by an accident of birth, history has given us an enormous responsibility, and two daunting tasks: If civilization is to survive, we must not only stabilize the global population but also, even more importantly, we must eliminate the institution of war. We face these difficult tasks with an inherited emotional nature that has not changed much during the last 40,000 years. Furthermore, we face the challenges of the 21st century with an international political system based on the anachronistic concept of the absolutely sovereign nation-state. However, the human brain has shown itself to be capable of solving even the most profound and complex problems. The mind that has seen into the heart of the atom must not fail when confronted with paradoxes of the human heart.

The problem of building a stable, just, and war-free world is difficult, but it is not impossible. The large regions of our present-day world within which war has been eliminated can serve as models. There are a number of large countries with heterogeneous populations within which it has been possible to achieve internal peace and social cohesion, and if this is possible within such extremely large regions, it must also be possible globally.

We must replace the old world of international anarchy, chronic war and institutionalized injustice, by a new world of law. The United Nations Charter, the Universal Declaration of Human Rights and the International Criminal Court are steps in the right direction, but these institutions need to be greatly strengthened and reformed.

We also need a new global ethic, where loyalty to one's family and nation will be supplemented by a higher loyalty to humanity as a whole.

Creating the future

The chorus of a popular song repeats a message of comforting (but irresponsible) fatalism: *Que Sera Sera. Whatever will be, will be. The future's not ours to see. Que Sera Sera. What will be will be.* But can we allow ourselves the luxury of fatalism, especially today, when our future is darkened by the twin threats of catastrophic climate change and thermonuclear war.?

Must we not accept our responsibility for both the near future and the distant future. We must do all that is within our power to make our world one in which our children and their descendants can survive? We must save the environment. We must save plants and animals from extinction.

What has happened to the global environment is a human creation. Its very name, the anthropocene, indicates that we made it. What will happen in the future will also be our creation, the sum of the choices that we make.

War is a human creation. Just as we abolished slavery, we can also abolish the institution of war. It is our responsibility to do so.

The tribal tendencies of human nature are not inevitable. Racism is not inevitable. Nationalist Chauvinism is not inevitable. The dark side of human nature can be overwritten

by education and ethics. It is our responsibility to create a global ethical system that matches our advanced technology. We must create an ethic of universal human solidarity.

Global anarchy is not inevitable. We can extend the methods used to avoid war within nations to the entire world. We can reform the United Nations and create a global federation capable of effectively achieving the goals that we desire.

Our economic system is a human creation. The laws of the market are not really laws: They are choices. If we choose we could maximize human happiness, rather than maximizing production and profits.

The population explosion is not inevitable. It is a result of human choices. The threat of an extremely severe worldwide famine resulting from climate change, exploding populations and end of the fossil fuel era is not inevitable. If such a famine comes, it will be the result of human choices.

The decay of democracy is not inevitable. Oligarchy is not inevitable. These evils are the result of neglect and political irresponsibility. As citizens, we must have the courage to restore democracy in countries where it has disappeared, and to create it in countries where it never existed.

We live in a special time, a time of crisis. Here are the responsibilities that history has given to our generation:

- We need system change, not climate change!
- We need a new economic system, a new society, a new social contract, a new way of life.
- We must achieve a steady-state economic system. Limitless growth on a finite planet is a logical absurdity.
- We must restore democracy in countries where it has decayed, and create it in countries where it never existed.
- We must decrease economic inequality.
- We must break the power of corporate greed.
- We must leave fossil fuels in the ground.
- We must stabilize and ultimately reduce global population to a level that can be supported by sustainable agriculture.
- We must abolish the institution of war before modern weapons destroy us.
- And finally, we must develop a mature ethical system to match our new technology.

No one is exempt from these responsibilities. No one can achieve these goals alone; but together we can create the future that we choose.

The Nobel laureate biochemist Albert Szent-Györgyi once wrote:

“The story of man consists of two parts, divided by the appearance of modern science.... In the first period, man lived in the world in which his species was born and to which his senses were adapted. In the second, man stepped into a new, cosmic world to which he was a complete stranger.... The forces at man’s disposal were no longer terrestrial forces, of human dimension, but were cosmic forces, the forces which shaped the universe. The few hundred Fahrenheit degrees of our flimsy terrestrial fires were exchanged for the ten million degrees of the atomic reactions which heat the sun.”

“This is but a beginning, with endless possibilities in both directions - a building of a human life of undreamt of wealth and dignity, or a sudden end in utmost misery. Man lives in a new cosmic world for which he was not made. His survival depends on how well and how fast he can adapt himself to it, rebuilding all his ideas, all his social and political institutions.”

“...Modern science has abolished time and distance as factors separating nations. On our shrunken globe today, there is room for one group only - the family of man.”



Figure 9.4: Cultural activities strengthen internationalism, use very few resources, and produce almost no waste.

Compassion and Greed: Two sides of Human Nature

Humans are capable of great compassion and unselfishness. Mothers and fathers make many sacrifices for the sake of their families. Kind teachers help us through childhood, and show us the right path. Doctors and nurses devote themselves to the welfare of their patients.

Sadly there is another, side to human nature, a darker side. Human history is stained with the blood of wars and genocides. Today, this dark, aggressive side of human nature threatens to plunge our civilization into an all-destroying thermonuclear war.

Humans often exhibit kindness to those who are closest to themselves, to their families and friends, to their own social group or nation. By contrast, the terrible aggression seen in wars and genocides is directed towards outsiders. Human nature seems to exhibit what might be called “tribalism”: altruism towards one’s own group; aggression towards outsiders. Today this tendency towards tribalism threatens both human civilization and the biosphere.

Greed, in particular the greed of corporations and billionaire oligarchs, is driving human civilization and the biosphere towards disaster.

The greed of giant fossil fuel corporations is driving us towards a tipping point after which human efforts to control climate change will be futile because feedback loops will have taken over. The greed of the military industrial complex is driving us towards a Third World War that might develop into a catastrophic thermonuclear war. The greed of our financial institutions is also driving us towards economic collapse, as we see in the case of Greece.

Until the start of the Industrial Revolution in the 18th and 19th centuries, human society maintained a more or less sustainable relationship with nature. However, with the beginning of the industrial era, traditional ways of life, containing elements of both social



Figure 9.5: **Greed is driving us towards disaster.**

and environmental ethics, were replaced by the money-centered, growth-oriented life of today, from which these vital elements are missing.

According to the followers of Adam Smith (1723-1790), self-interest (even greed) is a sufficient guide to human economic actions. The passage of time has shown that Smith was right in many respects. The free market, which he advocated, has turned out to be the optimum prescription for economic growth. However, history has also shown that there is something horribly wrong or incomplete about the idea that self-interest alone, uninfluenced by ethical and ecological considerations, and totally free from governmental intervention, can be the main motivating force of a happy and just society. There has also proved to be something terribly wrong with the concept of unlimited economic growth.

The Industrial Revolution marked the start of massive human use of fossil fuels. The stored energy from several hundred million years of plant growth began to be used at roughly a million times the rate at which it had been formed. The effect on human society was like that of a narcotic. There was a euphoric (and totally unsustainable) surge of growth of both population and industrial production. Meanwhile, the carbon released into the atmosphere from the burning of fossil fuels began to duplicate the conditions which led to the 5 geologically-observed mass extinctions, during each of which more than half of all living species disappeared forever.



Figure 9.6: ... but compassion can save us.

The Stern Review Discussion Paper of 2006 stated that “Melting of permafrost in the Arctic could lead to the release of huge quantities of methane. Dieback of the Amazon forest could mean that the region starts to emit rather than to absorb greenhouse gases. These feedbacks could lead to warming that is at least twice as fast as current high-emission projections, leading to temperatures higher than seen in the last 50 million years.”

The greed of giant fossil fuel corporations has recently led them to conduct large-scale advertising campaigns to convince the public that anthropogenic climate change is not real. These corporations own vast oil, coal and gas reserves that must be kept in the ground if we are to avoid catastrophic global warming. It does not seem to bother the fossil fuel giants that if the earth is made uninhabitable, future generations of both humans and animals will perish.

When the United Nations was established in 1945, the purpose of the organization was to abolish the institution of war. This goal was built into many of the articles of the UN Charter. Accordingly, throughout the world, many War Departments were renamed and became Departments of Defense. But the very name is a lie. In an age of nuclear threats and counter-threats, populations are by no means protected. Ordinary citizens are just hostages in a game for power and money. It is all about greed.

Why is war continually threatened? Why is Russia threatened? Why is war with Iran threatened? Why fan the flames of conflict with China? Is it to “protect” civilians? Absolutely not! In a thermonuclear war, hundreds of millions of civilians would die horribly

everywhere in the world, also in neutral countries. What is really being protected are the profits of arms manufacturers. As long as there are tensions; as long as there is a threat of war, military budgets are safe; and the profits of arms makers are safe. The people in several “democracies”, for example the United States, do not rule at the moment. Greed rules.

Greed and lack of ethics are built into the structure of corporations. By law, the Chief Executive Officer of a corporation must be entirely motivated by the collective greed of the stockholders. He must maximize profits. Nothing must count except the bottom line. If the CEO abandons this single-minded chase after corporate profits for ethical reasons, or for the sake of humanity or the biosphere or the future, he (or she) must, by law, be fired and replaced.

Occasionally, for the sake of their public image, corporations seem to do something for other motives than their own bottom line, but it is usually window dressing. For example, Shell claims to be supporting research on renewable energy. Perhaps there is indeed a small renewable energy laboratory somewhere in that vast corporation; but the real interest of the organization is somewhere else. Shell is sending equipment on a large scale to drill for more and more environment-destroying oil in the Arctic.

What does Christianity say about greed? Wikipedia states that “The seven deadly sins, also known as capital vices or cardinal sins, is a classification of vices (part of Christian ethics) that has been used since early Christian times to educate and instruct Christians concerning fallen humanity’s tendency to sin. In the currently recognized version, the sins are usually given as wrath, greed, sloth, pride, lust, envy and gluttony. Each is a form of Idolatry-of-Self wherein the subjective reigns over the objective.”

Saint Thomas Aquinas wrote: “Greed is a sin against God, just as all mortal sins, in as much as man condemns things eternal for the sake of temporal things”.

In the New Testament, we can find many passages condemning greed, for example:

“For the love of money is the root of all evil: which while some coveted after, they have erred from the faith, and pierced themselves through with many sorrows.” Timothy 6:10

“Lay not up for yourselves treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal.” Mathew 6:19

In his encyclical *Laudato Si'*, and on his recent visit to South America, Pope Francis has spoken strongly against economic activity that lacks both social and environmental ethics.

Much depends on whether we are able to break the power that corporations and extremely rich oligarchs now hold over our governments and our mass media. Pope Francis has shown by example what a world leader of courage and honesty can do. Most of us are not in such a position, but each person can do his or her best to restore democracy where it has been lost to corporate money and greed. If the mass media have sold themselves to the highest bidder, we can make our own media. If most politicians are corrupt, we can make our own political movements. As Shelly said, “We are many, they are few”.

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