

# The **Podium** Volume VI • Edition I





Photo taken by Belmont Hill Communications

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Cover Design: Kevin Jiang '22



Dear Reader,

Volume VI - Edition I of The Podium Magazine is even larger and more varied than the last, including our newest Student Art Section inspired by Mrs. Kaplan and the Art Department. Almost one year exactly since Belmont Hill first shut its doors under the clouds of the pandemic, the student experience has changed in almost every dimension. As always, we're still committed to offering students and faculty alike a place to share sound opinions and research with the School in the tradition of the magazine, now in its sixth year.

Edition I will begin with three op-ed winners: Daniel Bittner, Jack Kendall, and Arec Keomurjian. Daniel writes about the Capitol insurrection on January 6th and potential surveillance laws thereafter; Jack and Arec took different perspectives to the issue of standardized testing and its role in the college admissions process, now dramatically changed during the pandemic. Congratulations to these three winners -- each will receive a print version of the magazine and a gift-card reward.

Our research section spans from autonomy in Taiwan to the origins of the French Revolution and Northern tactics in the Civil War. This edition's Featured Person, by senior Abe Tolkoff, illustrates the unlikely political origin story of Senator Joe Manchin (D-WV) and his tight-rope walk between party lines. Lawrence Tang and Jason Wong explore the benefits and challenges of the new school schedule, and what should stay into next year. Last, Will Seward argues for a five-day in-person school week even during the pandemic and Luke Carroll describes the history of Senator Warren's anti-corruption legislation in Congress.

This edition's Polling Project asked the school to share its opinion on President Biden's first thirty days in office and his Cabinet appointees, including quotes from respondents. The Student Art Section includes ceramic pieces, woodwork, and other art from students across grade levels.

See the new Podium Online website at <a href="https://the-podium.org/">https://the-podium.org/</a>

Luke Carroll '22 | **President** 

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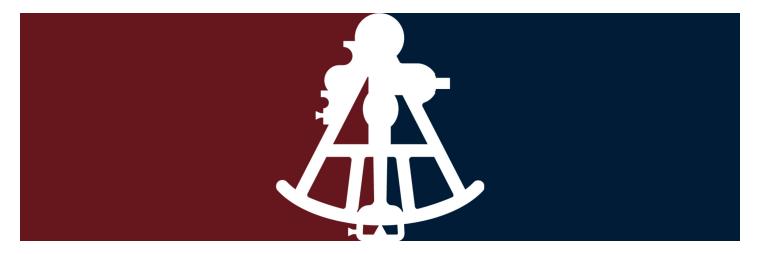
## **Nominations** For Research Papers and Essays

Charlie March '22

Jimmy Kennedy '22 Howard Huang '22

Cooper Nelson '23

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Thank you to the History and Art Departments for their assistance in identifying strong essays, papers, and artwork. Their dedication to The Podium is vital to the success of the final publication.

### Op-Ed

Submissions

College Debt Relief: No Easy Answer Domestic Surveillance Laws Standardized Testing

Form IV AP Euro History French Revolution

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# **Opinion Pieces**

## How to Prevent Jan. 6th



Author- Daniel Bittner '22 can could quickly discover that at a min-Section-Op-ed Winners

On January 6, 2021, Americans throughout the nation gazed at their tele- lance laws to gather more detailed public visions in fear and distress as they witnessed one of the most egregious attacks on federal property in recent memory. Although this insurrection on the United States Capitol represented a horrifying breach of a supposedly secured building, presenting a major threat to elected Congressmen and governmental officials, the events of that day do not warrant new or stricter domestic surveillance laws on the American public. Rather, in examining the intelligence failures of the insurrection, the only plausible modification in legislation should be in considering whether to redistribute the power to deploy state and federal troops.

Despite the insurrection initially seeming like a secret and well coordinated event, no detailed surveillance beyond what would be accessible by any ordinary citizen was necessary to predict and forsee the potential magnitude of the attack. In fact, any individual throughout the United States with an electronic device and access to social media platforms could multiple months by even the most promhave witnessed the numerous tweets and posts foreshadowing the event. On multiple occasions throughout the months and days prior to the attack, President Trump on his public Twitter account announced that he expected a large crowd of supporters to gather in Washington DC on January 6th just a walking distance away from the Capitol. Additionally, Trump on numerous occasions even retweeted statements from his supporters who described in militaristic terms that a "cavalry" of the President's presumably violent supporters would arrive there according to his lead. Furthermore, just by following any request from the mayor of DC to this simple trail of the President and his supporters' tweets, any ordinary Ameri-

imum the Capitol building, in which the counting of the electoral votes would occur, would require extra security personnel on January 6th. Thus, stricter surveilinformation would not have prevented the failure to recognize the magnitude of the attack.

In fact, it can be clearly inferred that if governmental officials had done only a basic amount of research regarding the event, they could have deployed extra and adequate personnel. For example, despite lacking one singular leader such as the President and being planned only a few days prior, governmental officials had no problem deciphering when and where Black Lives Matter protests would occur. During these protests, which were much more frequent and numerous, and thus should have each received less individual attention from the federal government, state and federal officials were able to adequately prepare for and deploy extra security personnel in each state. However, in the attack of the Capitol, which was much more predictable by being promoted on numerous social media platforms over the course of inent individual in the nation himself, governmental officials were strangely unable to adequately prepare.

Furthermore, neither a lack of governmental insight nor an inability to adequately deploy troops were the cause of the security failure. Rather, one major reason that the Capitol was unprepared for the attack pertains to the distribution of power to deploy troops in DC and on federal grounds. As opposed to most states, in which the governors essentially have the power to deploy the national guard, since DC is not considered a state, deploy the district's national guard must pass through multiple layers of presidentially-appointed federal authorities. While in order to deploy troops in the actual city of Washington DC, the DC mayor must first pass her request through the Secretary of the Army and the Secretary of Defense who are essentially under the command of the President of the United States, the mayor lacks any major power on federal grounds such as the capitol, as instead the Secretary of Defense who is subject to the President's orders controls the deployment of troops. This complex and convoluted system of power, in which federal authorities who are eclipsed by the President's jurisdiction have ultimate control over the national guard, prevented an unbiased official from making a rational decision on January 6th against the insurrection.

Thus, to prevent such an event from repeating itself, there are two potential legislative solutions. The first solution is to remove the president's ability to control the DC national guard by instead granting the power to deploy troops directly to the major of DC. Thus, an official directly elected by the district itself can control the national guard instead of the President of the United States, who may have ulterior and potentially unjustified motives. Such a redistribution in power, which would have to be approved by Congress in order to come to fruition, would resolve this issue in a decisive manner that would likely prove popular not only in DC, but also in the entire nation.

However, another more audacious and perhaps unpopular solution to this issue would be to grant statehood to the District of Columbia. As a multitude of individuals in DC have fought for statehood for many years, this issue of unbalanced distribution of power could propel such advocates to victory, as by obtaining statehood, the power to deploy the local national guard would be immediately directed to the local government. While this latter solution would likely be more controversial, it represents one additional remedy to preventing such a domestic catastrophe from repeating itself.



An attack by Trump supporters on the Capitol on January 6th shocked the nation. Associated Press

## The Controversy over Standardized Testing

#### Author-Jack Kendall '22 Section-Op-ed Winners

While standardized testing is remarkably important in the college admissions process, the process is highly flawed and needs improvement. The test exists solely to compare the academic successes of separate students applying to various colleges. While standardized testing is still important in the college process, the testing can not accurately compare students based on their scores, as there are several concerns about fairness and equal opportunity.

Standardized testing is indeed necessary for the college process but needs immense improvement. Some colleges may not be able to receive all required information solely off a student's GPA and high school transcript. A top student at a less academically rigorous school will most likely have a higher GPA and transcript as opposed to a regular student at a highly challenging academic institution. Colleges need to differentiate these students fairly and equally, as their respective transcripts and GPAs do not necessarily represent their intelligence. Standardized testing represents a universal measure of intelligence, taken under identical conditions.

While there are some important factors to having standardized testing, the current system is highly flawed. A major concern is that standardized testing is a representation of familial wealth rather than intelligence. A 2009 New York Times study found that there is a direct correlation between the wealth of a family and SAT scores. Families making upwards of 200,000 dollars gross income per year scored an average of 560 on the writing section of the SAT, while Families making under 20,000 scored an average of 430. As gross annual income increased in the families, so did the scores of the students. Therefore the current method of standardized testing is a representation of wealth, not necessarily intelligence. Families who can afford to send their children to test preparation classes and private tutors are going to see better results

on the SAT and ACT than families who can not afford this luxury.

Furthermore, standardized testing is not entirely fair to certain types of students. While there are some accommodations in place for those with learning disabilities, there is still a lack of help provided to students with other mental struggles. The tests are designed for a specific type of student, and all students who stray from that norm are automatically at a disadvantage.

Finally, standardized testing does not necessarily predict future success at colleges, one of the main points it aims to achieve. A 2019 Los Angeles Times study found that The six-year graduation rate for those with SAT scores between 900 and 1090 was 81% compared with 83% for those with SAT scores between 1100 and 1600, the highest score possible. The rate of students returning for a second year was 91% for those with the lower scores and 94% for those with the highest scores. This data shows no real discrepancy between students earning a mediocre 1100 on the SAT and students earning a perfect score of 1600. Therefore the test is not an accurate depiction of future success at colleges.

Overall, standardized testing is a necessary part of college admissions. Colleges must be able to interpret the intelligence of different students and compare them on a fair, equal, universal standard; however, the SAT and ACT are too flawed to continue having an impact on college admissions, as it is mainly a measure of financial wealth not current and future academic success. Both of these tests need to be reformed largely to ensure that all students are fairly treated.

## The SAT is a Necessity

#### Author-Arec Keomurjian '22 Section-Op-ed Winners

As more and more colleges and universities go test-optional, standardized testing has become less significant for college admissions and applications. Although the SAT Subject Tests and SAT Essay were recently abolished, standardized testing should still remain a part of the college admissions process.

Though Grade-Point Average has been evidenced to be a greater indicator of a student's success in college than standardized testing, a committee from the University of California collected data that undermines this existing research, concluding that SAT scores are, in fact, equally as good of indicators. The report states, "for any given high school GPA, a student admitted with a low SAT score is between two and five times more likely to drop out after one year, and up to three times less likely to complete their degree compared to a student with a high score." Standardized testing also provides students who are more disadvantaged or who have access to fewer resources with the ability to demonstrate their academic caliber at a relatively lower cost in comparison to joining a sports team or taking up an instrument.

Furthermore, without test scores, the college admission process would be more heavily reliant on high school GPA, which may provide teachers and schools incentive to dole out better grades or conduct grade inflation. If grade inflation were to occur more prevalently across the country, students' GPAs would lose their merit as it would no longer accurately measure their academic performance. Standardized tests thus serve as methods to combat possible grade inflation. Also, the difficulty of school curricula varies from school to school; straight A's at a public school may coincide with B's at a more rigorous private school. Standardized tests thus provide an opportunity for students at more challenging schools to compete through their test scores against students at less demanding schools who might have better GPAs. Finally, with the discontinuation of SAT Subject Tests, the AP exams remain as the only standardized test for specific subjects. The AP's also provide students with college credit and exposure to what college classes are like, which is an indispensable experience.

Some believe standardized testing is not a good indicator of academic merit; they argue it tests the ability to look for certain patterns in the questions or cram before their test date. However, if SAT and ACT requirements are relinquished, an opportunity for students who attend more difficult schools or those who are more disadvantaged to illustrate their academic ability to colleges. Though they do have shortcomings, such as cheating scandals, standardized tests are essential to the college admissions process. With possible modifications to the current tests or with the establishment of alternative testing opportunities, an improved standardized test can be established.

# **⑦** CollegeBoard

SAT



# Research Papers



## The Oil Weapon

decisive victory. As the fighting dragged on, the war expanded to include troops

from three more nations all on the side

of the Arab coalition - Saudi Arabia, Iraq,

Author- Sreetej Digumarthi '21 Section-Research Papers

Twenty minutes after President and Jordan.<sup>6</sup> Seeing its ally, Israel, struggle Richard Nixon finished his breakfast in his against a coalition that was also backed by Key Biscayne, Florida compound, dubbed Soviet arms, the United States began to the "Winter White House," on October 6, assist the Israelis, supplying them with 1973, he received distressing information 100 fighter jets and over 55,000 tons of from Henry Kissinger, his National Secu- military equipment, including artillery, rity Advisor and the United States Secre- tanks, and ammunition, through airlifts tary of State.<sup>1</sup> In a 9:25 a.m. call from New and sealifts.<sup>7</sup> With America's entrance York, Kissinger informed Nixon about an into the conflict came an unexpected shift unanticipated development in the Middle in momentum as the Israelis pushed past East: "Fighting has broken out on the Go- their prewar boundaries, quickly advanclan Heights and along the Sinai."<sup>2</sup>

The Yom Kippur War, named after capital of Cairo and within twenty-one the Jewish holiday it started on, began miles of the Syrian capital of Damascus.8 when Egypt and Syria opened a two-front, Thus, realizing that force of arms could surprise assault on their neighboring coun- not dislodge Israel from its occupation of try, Israel. The two Arab nations sought to Arab territory, especially with the Israelis recapture territories that they had lost to receiving support from America, the Arab the Israelis six years earlier in 1967's Six- oil-producing nations, led by Saudi Ara-Day War, namely the Golan Heights for bia, sought to force the United States into Syria and the Sinai Peninsula for Egypt.<sup>3</sup> a more neutral position by attacking the The initial attack came as a surprise to US economy with a joint oil embargo.<sup>9</sup> the Israelis as they misinterpreted intelli-The oil embargo imposed on the gence that suggested an attack was immi- United States by the Organization of Arab nent and as their means of communication Petroleum Exporting Countries (OAPEC) and transportation were shut down due eventually led to an unlikely friendship to the religious holiday.<sup>4</sup> As a result, the between democratic America and motwo Arab nations had great initial success. narchical Saudi Arabia. However, the Pushing from the south, the Egyptians, as embargo first strained the relationship a part of Operation Badr, crossed the Suez between the two countries. It not only Canal into the Sinai Peninsula, territory severed their economic ties, which were that they had possessed just six years pri- almost exclusively based on the trade of or, and gained control of the Bar Lev Line, oil, but also brought the two nations to a series of Israeli fortifications on the east the brink of war.<sup>10</sup> As the embargo continside of the Suez. From the north, the Syr- ued, however, the US Secretary of State, ians also pushed into Israeli territory and Henry Kissinger, realized the importance gained control of Israel's Eye, a strategical- of Saudi Arabia and its oil to America and ly important vantage point perched 6,500 started to engage in "shuttle diplomacy" feet high on Mount Hermon.<sup>5</sup> with the belligerents of the Yom Kippur

Despite the strong start of Egypt and War, resulting in the removal of the em-Syria, the mobilization of two Israeli mili- bargo on March 18, 1974.<sup>11</sup> The period that tary divisions and American involvement followed would see the rapid mending in the conflict on behalf of the Israelis and strengthening of the broken US-Sausoon shattered Arab dreams of a quick and di relationship through greater econom-



ic cooperation, arms sales, and development projects.<sup>12</sup> Although the OAPEC oil embargo initially destroyed relations between Saudi Arabia and the United States, it played a key role in the development of their economic, political, and military partnership.

#### **Background: US-Saudi Relations and OAPEC**

Since the US formally recognized the Kingdom of Hejaz and Nejd, later the Kingdom of Saudi Arabia (KSA), on May 1, 1931, American interests in the desert kingdom have revolved around its copious oil resources, despite cultural and political differences.<sup>13</sup> In 1938, an American corporation, Standard Oil Company of California, discovered oil in the country five years after beginning to explore for it. Six years later, in 1944, Standard Oil of California, along with Texas Oil Company (Texaco), formed the Arabian American Oil Company (ARAMCO), and Mobil and Exxon later joined them.<sup>14</sup> Over time, as ARAMCO grew, the company became the largest American investment abroad, and the Saudis became the world's largest exporter of oil; however, the US maintained near-full control over the Saudi oil fields.15

In December 1972, Saudi Arabia, under King Faisal, began to push back against America's complete ownership of ARAMCO, now the wealthiest oil company in the world. Controlling 95% of the KSA's oil facilities and fields, including the planet's most productive field, ARAMCO, with its infrastructure alone worth \$1.2 billion, was so massive that it was likened to a "country within a country" in a 1974 New York Times article penned by Leonard Mosley.<sup>16</sup> After 28 years of US dominance over ARAM-CO and months of negotiations with the four American oil corporations, the Saudis acquired a 25% participation stake in the company in 1972, and, with it, greater control over their oil resources.<sup>17</sup> The four companies that constituted ARAMCO also agreed to gradually expand Saudi ownership to 51% by 1982.<sup>18</sup>

Despite this Saudi demonstration of power, however, the US continued to ignore the KSA's growing influence and still viewed the kingdom merely as a source of oil. Henry Kissinger epitomized America's attitude towards the Saudis in a July 20, 1973 meeting among top government officials regarding US policy in the Middle East, saying, "We wouldn't give a damn about Saudi Arabia if it didn't have most of the oil in the region."<sup>19</sup>

The developments in Saudi Arabia served as a microcosm for the changes occurring throughout the Middle East. In 1960, after ARAMCO slashed oil prices and consequently decreased Saudi petroleum revenue by \$30 million, the KSA led the formation of the Organization of Petroleum Exporting Countries (OPEC).<sup>20</sup> Initially joined by Iraq, Iran, Kuwait, and Venezuela, the Saudis hoped to use the organization to give its members more control over the production and pricing of their oil.<sup>21</sup>

Eight years later, in 1968, the Saudis co-founded a second group, this time exclusive to the Middle East: the Organization of Arab Petroleum Exporting Countries (OAPEC). OAPEC differed from OPEC not only in its members but also its aims. While OPEC's goals were exclusively economically motivated, the members of OAPEC had political motives as well.<sup>22</sup> The organization's constituent nations shared a common animosity towards Israel that stemmed from the creation of the Jewish state in half of Arab Palestine's territory in 1947 and Israel's occupation of three-quarters of Palestine's remaining territory in 1949. In the decades following Israel's creation, Egyptian President Gamal Abdel Nasser promoted pan-Arabism in the Middle East, and calls for Arab unity, centered around the plight of Palestine, grew.<sup>23</sup> This unity manifested in the form of a joint oil embargo imposed on the United States by five future OAPEC members in response to American support for Israel during 1967's Six-Day War. Although the embargo was ineffective due to insufficient Arab participation and the high rate of domestic oil production in the US at the time, it represented the first concerted Arab effort to use the "oil weapon" to achieve their political goals.<sup>24</sup>

As OPEC gained members through the decade, it also gained dominance over the global oil market. By 1970, the organization was responsible for 86% of world oil exports and half of the world's oil production, and its Arab bloc produced the vast majority of this oil.<sup>25</sup> However, the Arab nations, several of which were now unified under OAPEC, felt that they were being exploited by the foreign companies operating within them that dictated the production and pricing of their oil.<sup>26</sup>

In the early 1970s, OAPEC reached a breaking point as it felt prices were too low and began to assert itself over the multinational oil companies. Oil prices had massive implications for the economies of the organization's members. In the case of Saudi Arabia, the oil industry contributed 90% of its governmental budget and 64% of its gross domestic product (GDP).<sup>27</sup> With their economies so dependent on oil, the Arab nations pushed for price hikes and succeeded due to their unity and dominance over the global oil market. In the February 14, 1971 Tehran Agreement and the April 2, 1971 Tripoli Agreement, foreign corporations agreed to raise oil prices over the course of five years, and, between 1970 and 1973, OAPEC drove these companies to lift the price of oil up from \$1.80 per barrel to \$3.07 per barrel. OAPEC also raised its share of oil profits from 50% to 55%. Regarding this assertion of power by the Arab members of the organization, an OPEC official later commented, "After the Tehran agreement, OPEC got muscles."28

While some world leaders feared the growing influence of OAPEC, President Nixon and much of his administration did not. British Prime Minister Ted Heath warned Nixon about the "growing peril" of the organization and told him that "All the signs are that this situation is going to get worse, not better." Washington D.C., however, considered concerns of OAPEC's growing power "overly alarmist." Nixon himself believed that, if the organization continued to increase prices and assert control over multinationals, "the inevitable result is that they will lose their markets." However, the President would later find out that he had misread the situation by underestimating his country's reliance on Middle Eastern oil. Nixon's misjudgment, combined with shifting energy and economic policies and a rising demand for oil, created a perfect-storm scenario for the Saudis and OAPEC to exert more control over oil pricing and use the oil weapon for a second time, this time successfully.<sup>29</sup>

#### Background: US Reliance on Foreign Oil

While OAPEC was realizing its collective power abroad, America was growing increasingly reliant on foreign oil and, consequently, more vulnerable to the oil weapon. In the years leading up to the OAPEC oil embargo, United States oil consumption rose dramatically as the nation's energy demands rapidly increased. In 1950, the US consumed 6.5 million barrels of oil per day (mbd) and relied on coal for 38% of the country's energy needs. Twenty years later, in 1970, American consumption of oil rose 126% to 14.7 mbd. By 1972, production of coal had stagnated, and it only fulfilled 17% of the country's energy needs. The Clean Air Act, under President Lyndon B. Johnson contributed to this shift from coal to liquid fossil fuels. The act discouraged the burning of coal in favor of alternative sources of energy such as oil. Furthermore, a 1965 amendment to the act created new emission standards for cars, ushering in a new generation of car engines that polluted less but consumed 10% more gas. Thus, control of the US economy was ceded to oil, which fulfilled 42% of American energy demands and became the country's largest source of energy.<sup>30</sup>

Although American consumption and reliance on oil was increasing, much of this oil was not being produced domestically. In the decades leading up to the OAPEC embargo, the US had a surplus of oil due in part to governmental policies that protected the domestic oil industry by limiting imports. The nation had such an excess that domestic oil production was artificially lowered, and some even encouraged oil to be wasted by driving more than needed. However, the aforementioned rapidly rising demand for oil along with the growing influence of environmentalists and the domestic policy of President Nixon soon turned this surplus into a shortage. Environmentalists opposed deepwater ports that would have allowed the US to hold supertankers that transported as much as 500,000 tons of oil rather than tankers that transported 80,000 tons,

delayed the construction of the Trans-Alaska pipeline, and fought against offshore drilling in US waters. As a result, they severely inhibited the expansion of the domestic oil industry, which consequently could not meet the nation's growing energy demands. Furthermore, governmental protection of the domestic oil industry ended. In 1971, President Nixon enacted price controls that set a maximum price for oil in the country, a stark contrast from his predecessors who kept prices high by limiting imports. Not only did the guaranteed low prices encourage Americans to consume more oil, but they also disincentivized production by American companies due to lower profits and discouraged companies from finding new sites for domestic oil production.<sup>31</sup>

Thus, with oil consumption rising to meet increasing energy needs and domestic production of oil decreasing due to environmentalism and new governmental policies, the stage was set for American overreliance on foreign oil. Between October 1970 and October 1973, United States oil imports more than tripled from 1.19 mbd to 3.74 mbd, and OPEC accounted for 2.56 mbd of this total, amounting to 68% of all US imports.<sup>32</sup> America was growing especially reliant on Saudi Arabian oil. In 1973, US imports of Saudi oil rose from 351,000 barrels per day in January to 744,000 just nine months later in October.33 As a result of the increase in imports as well as newly raised oil prices, American spending on foreign oil soared 515% from \$3.9 billion to \$24 billion between 1972 and 1973.34

President Nixon's ending of the Bretton Woods system on November 15, 1971 also contributed to increased American spending on foreign oil as it compelled OAPEC to seek higher prices.<sup>35</sup> The Bretton Woods system, which had been in place since 1944, had fixed the prices of foreign currencies to the US dollar, which, in turn, was fixed to the price of gold at \$35 per ounce.<sup>36</sup> Two decades later, however, due in part to American military spending and foreign aid, the United States did not have enough gold to back up its currency, resulting in its overvaluation. This overvaluation led to over-speculation of the dollar abroad and weakened America's place in world trade. President Nixon's predecessors had enacted various measures attempting to combat the overvaluation, such as discouraging foreign investments, but did so to no avail. By the time of Nixon's presidency, the situation had deteriorated further, and he decided to take the US off the gold standard, resulting in the devaluation of the dollar.<sup>37</sup> As America's currency devalued between 1971 and 1973, the value of OAPEC revenues, derived from oil priced in terms of a US dollar that was now less valuable in relation to other currencies, diminished as well, influencing the organization to demand higher oil prices to compensate for decreased profits.<sup>38</sup>

On October 16, 1973, in the midst of the Yom Kippur War, multinational companies proposed to raise oil prices by 15% in an attempt to placate OAPEC, but the organization rebuked the offer. Instead, it set the price of oil on its own accord for the first time in its history, increasing it by 70% from \$3.01 per barrel to \$5.11 per barrel. Building upon the increased Arab assertiveness that secured Saudi Arabia a 25% participation stake in ARAMCO just ten months prior, OAPEC was now enacting concrete policies for its own financial benefit. From this watershed moment, Saudi Arabia and OAPEC gained newfound confidence in their collective influence, setting the stage for a second use of the oil weapon for political purposes just four days later.<sup>39</sup>

#### The Brink of War:

On October 20, 1973, America's 42-year relationship with Saudi Arabia entered its darkest period ever, as the Saudis wielded the oil weapon a second time, breaking the two nations' economic bond and soon bringing them to the brink of war. Two days prior, the KSA had cut back production of oil by 10% and had warned that "[it would] stop supplying the United States with oil" if America continued to support Israel in the Yom Kippur War.<sup>40</sup> Again undaunted by Saudi oil power, President Richard Nixon asked Congress for a \$2.2-billion aid package to bolster the Israelis in the conflict.<sup>41</sup> In response, OAPEC imposed an oil embargo on the US that severed the oil-based economic ties between Saudi Arabia and America.<sup>42</sup>

After two failed United Nations Security Council (UNSC) ceasefire resolutions, the Yom Kippur War finally ended nineteen days after its start on October 25, but tensions between the United States and Saudi Arabia persisted. In addition to a ceasefire, the final UNSC resolution required Egypt, Israel, and Syria to return to their October 22 positions and sent UN peacekeepers and observers to the region to ensure that the combatants followed these terms.<sup>43</sup> Despite the war's end, Saudi Arabia and the United States remained at odds. The two countries had been on opposite sides of the same war, with 8,000 Saudi soldiers battling against American weaponry, and Israel still occupied the territories that the Arab coalition had fought to recover. Now, as the embargo continued to withhold oil from the US, the economic bond between the countries was in danger of becoming irreparably damaged.<sup>44</sup>

On November 7, hopes of mending the broken economic relationship further diminished. In response to the oil weapon, President Richard Nixon announced a bold new energy plan to the country, dubbed Project Independence, that called for complete American energy self-sufficiency through increased domestic production of oil as well as increased use of coal and nuclear power. However, American energy independence would spell the end of US-Saudi economic relations, which were almost exclusively based in the oil trade. Nixon's overconfidence about potential energy independence also re-enforced his unwillingness to deal with Saudi grievances towards Israel, further inflaming KSA officials.45

As the political divide between the two countries widened, the Saudis continued to pressure the US into giving into OAPEC demands. On November 9, Secretary of State Henry Kissinger met with Saudi officials, including King Faisal, to convince them to either remove or loosen the embargo. The Saudis, however, rebuffed Kissinger and linked the removal of the embargo to an Israeli withdrawal to their pre-1967 borders. Faisal also wanted the US to bring the Israelis to the negotiating table for peace talks with Egypt and Syria.<sup>46</sup> At the time of Kissinger's demand, the KSA had cut oil production 25% from 8.3 mbd in September to 6.2 mbd, a level 32% lower than the pre-embargo forecast of 9.1 mbd.<sup>47</sup> Although America was not receiving any OAPEC oil due to the embargo, the Saudis hoped that these cutbacks would make US allies, who still relied on the organization's oil, pressure the United States into pursuing a more favorable policy towards the Arabs.<sup>48</sup>

Over the next ten days, the Saudis, with increased confidence in the power of their oil weapon, added two more items to their list of demands. On November 17, King Faisal insisted that the US oppose Israeli authority over Jerusalem, a major city that the Arabs had lost in the Six-Day War.<sup>49</sup> Two days later, in an interview with the Middle East Economic Survey, the Saudi oil minister, Sheikh Ahmed Zaki Yamani, demanded that the four US constituent corporations of ARAMCO give the Saudis a majority stake in the company. The Saudis owned 25% of the company, with the rest split between Exxon, Texaco, Mobil, and Standard Oil of California, but now wanted an additional 26% to be given to them immediately, nine years earlier than was scheduled in their 1972 agreement.50

As Saudi demands and pressures accumulated, the kingdom brought itself dangerously close to armed conflict with the US. In a press conference held on November 21, two days after the newest Saudi demand, when questioned whether or not the United States would consider a strike on the Middle East, Henry Kissinger replied, "It is clear that if pressures continue unreasonably and indefinitely, that then the United States will have to consider what countermeasures it may have to take."51 In his 1982 memoir titled Years of Upheaval, Kissinger wrote about the situation retrospectively and explained, "These were not empty threats. I ordered a number of studies from the key departments on countermeasures against Arab members of OPEC if the embargo continued. By the end of the month, several contingency studies had been completed."52

The Saudis, recognizing that America's need for oil could lead to a potential invasion,



were also preparing for violence. In a November 22 interview in Copenhagen, Denmark, Sheikh Yamani responded to Kissinger's threat of "countermeasures" and stated, "If the Americans are thinking of a military action ... this is a suicide. There are some sensitive areas in the oil fields in Saudi Arabia, which will be immediately blown up ... Now you can imagine what kind of gambling this could be."<sup>53</sup> Aware that they could not defeat America in a military conflict, the Saudis knew that they still posed a major threat to the US as they could destroy their own oil resources and cripple the American economy.

Nevertheless, Kissinger was not the only senior American official who viewed an invasion as a potential solution to the national security threat that the Saudi oil embargo presented. James Schlesinger, responsible for America's national defense policy in his role as the Secretary of Defense, also had a plan in place for a military engagement with the Saudis. In a November 29 meeting between top Washington D.C. officials regarding the US approach to the embargo, Schlesinger bluntly stated, "We have been talking about using the Marines."54 The Secretary of Defense conveyed a similar sentiment to the British Ambassador to the United States, telling him, "It was no longer obvious ... that the United States could not use force." Schlesinger's comment prompted Britain to prepare for potential US military action. The British government determined that the most likely approach for a possible US invasion of the KSA was for the United States to attack Saudi Arabia, seize its oil fields, and occupy the country for ten years.<sup>55</sup>

Even with war on the horizon, Henry Kissinger did not make an honest attempt to cool tensions, equating compromise with weakness.<sup>56</sup> Although he publicly stated that he was "hopeful" that there would not be conflict, he seemed unwilling to end the embargo with diplomacy in private.<sup>57</sup> On November 25, 1973, speaking to the Deputy Assistant to the President for National Security Affairs, Brent Scowcroft, about Nixon's wish to send a diplomat to Saudi Arabia, Kissinger said, "He does that and he is in deep trouble with me," as it would put the United States "in the position of the supplicant."<sup>58</sup> Instead, Kissinger resolved to engage in diplomacy and initiate peace talks between Israel, Egypt, and Syria only if OAPEC removed the embargo. In the aforementioned November 29 meeting among top Washington D.C. officials, Kissinger stated, "I have been telling the President that we should say to the Arabs that we will make progress when you lift the embargo – not that the embargo will be lifted as we make progress." However, the Secretary of State would later find out that the United States was in no position to link peace talks with the embargo and that he had misjudged the situation more broadly.<sup>59</sup>

Kissinger thought that his strategy would succeed as he assumed that the Arabs needed the Americans more than the Americans needed the Arabs, but the opposite was true. The Secretary of State believed that, since the Israelis had relied on American weaponry during the Yom Kippur War, only the US could bring them to the negotiating table. As a result, he was convinced that the United States was in the dominant negotiating position as only his country could fulfill the Arab demand for peace talks. Through his linkage of peace talks with the oil embargo, Kissinger also aimed to frame the KSA as the root of instability in the Middle East as, if the Saudis did not repeal the embargo, they would seem to be the ones delaying peace talks. In reality, Kissinger himself was the one delaying talks, with the Near East Bureau saying that his actions and foreign policy were making "it more difficult if not impossible for the US to use its influence on behalf of a peace settlement."60

In less than a month, the embargo revealed the American economy's dependence on Saudi oil, dictating a shift in tone from some American policymakers. Oil access, not optics, represented the more pressing matter. On December 9, Sheikh Yamani announced that the oil embargo would most likely be removed sometime in 1974.<sup>61</sup> Although the statement hinted at a cooling of tensions between the two countries, urgency was building among top US officials, including President Nixon, to get the embargo removed sooner. Nixon, beginning to understand the power of the oil weapon, had expressed his fear of an energy crisis in the United States if OAPEC did not lift the embargo, warning the nation in a November 25 address from the Oval Office, "The sudden cutoff of oil from the Middle East had turned the serious energy shortages we expected this winter into a major energy crisis."62 Furthermore, on November 9, the US ambassador to Saudi Arabia, James Akins, had warned that America would face oil shortages in the winter if the embargo was not loosened "in a matter of days."63 While Nixon and Akins were coming to their senses about the Saudi threat, Kissinger continued to believe that the US had the upper hand over the Saudis. It would not be for another month until the Secretary of State recognized the dire situation of the United States, and, in the meantime, Saudi pressures continued to mount.

Despite Yamani's outwardly conciliatory statement, the Middle Eastern kingdom put further pressures on the US the next day to give in to Arab demands. On December 10, OAPEC announced that a previously postponed 5% oil production cutback for January would move forward, amounting to a total of 28.75% in cuts. By reducing production, OAPEC hoped to pressure the United States into bringing Israel to the negotiating table as the cutbacks negatively affected American allies such as Japan, Italy, Belgium, and West Germany.<sup>64</sup>

The next week, on Christmas Day, Sheikh Yamani gifted America and its allies with the unexpected cancellation of the January cutback and replaced it with a production increase of 10% in response to newly stated attitudes from Japan and Belgium that were more favorable towards the Arabs in their conflict with the Israelis.<sup>65</sup> Although OAPEC canceled the cutback, relations between the KSA and United States did not improve, with both sides refusing to compromise. Kissinger continued to delay peace talks, directing his staff on December 28, 1973, "We should hold up the peace talks."66 Furthermore, Yamani vowed to continue the oil embargo on the US until the Arabs got "fruitful results" and now wanted to nationalize all American oil holdings in the

kingdom as well as the rest of the Middle East.67

#### Energy Crisis and Shuttle Diplomacy:

As winter fell upon the United States, Kissinger soon realized that the Saudis were in the dominant negotiating position as the power of the oil weapon became clear. The worries of Nixon and Akins had come true, and an energy crisis now swept across the US due to an oil shortage caused by the embargo, reduced domestic oil production following Nixon's aforementioned price controls, and the higher energy demands of the winter.<sup>68</sup> Oil prices had also quadrupled to \$12 a barrel by January 1974, causing gas prices to rise 466% from \$0.53 per gallon to \$3.00 per gallon.<sup>69</sup> To get this scarce gas for their cars, Americans waited in lines for as long as two hours.<sup>70</sup>

Attempting to combat the energy crisis, the US government, as well as American citizens and businesses, tried to decrease oil consumption. Measures taken to accomplish this goal included gas stations taking appointments for customers, stations only providing gas to regular customers, a 55 mile-per-hour speed limit on highways, imposing limits on the amount of gas customers could buy, walking instead of driving, closing stations on Sundays, carpooling, lowering home temperatures, and rationing electricity.<sup>71</sup>

However, these measures were insufficient, and the United States soon erupted into chaos. With 20% of gas stations out of gas, many Americans grew desperate to get fuel for their cars. In their desperation, Americans rioted at gas stations, shot and stabbed others in gas lines, prostituted themselves, siphoned gas from other cars, installed locks on their tanks to prevent siphoning, camped at stations overnight, hijacked gas trucks, and even bought their own gas stations.<sup>72</sup> On the other hand, in the Middle East, the Gulf Oil Corporation reported \$230 million in profits in the fourth quarter of 1973 due to increased oil prices, a 153% increase from the \$91 million it had made in the same quarter of the previous year, demonstrating that OAPEC could flourish even without American oil purchases.<sup>73</sup>

Furthermore, strikes became increas-

ingly common in the United States, especially among truckers, exacerbating the drop in economic productivity that stemmed from the oil shortage. Independent truckers, who transported 70% of the country's goods, were losing time and money as they now had to stop to refuel on their routes much more frequently due to gallon limits on gas purchases. On December 3, 1973, a trucker named J.W. Edwards ran out of gas on I-80 in Blakeslee, Pennsylvania. Using his radio, Edwards summoned hundreds of other truckers to his location in a strike against problems caused by the fuel shortage and high gas prices, creating a twenty-four-mile-long, 1,000-car jam. Thousands of truckers joined the protest, and it quickly spread to ten states. After three days of unrest, the strike ended peacefully in each state except Ohio, where the National Guard forcefully removed trucks and dispelled strikers with tear gas.<sup>74</sup> However, this strike would not be the last, as shown by another protest just two weeks later and a violent 11-day strike in February 1974 in which two truckers were killed and many others injured.75

Seeing the severity of the domestic troubles that arose from the energy crisis, Secretary of State Henry Kissinger finally began to appreciate the power of the oil weapon and dramatically altered his approach to US policy in the Middle East. Knowing that the removal of the OAPEC embargo depended on successful US mediation between the combatants of the Yom Kippur War, Kissinger commenced his new strategy of "shuttle diplomacy." For the next five months, Kissinger "shuttled" back and forth between Washington D.C. and the Middle East, as he gave into OAPEC and Saudi demands for mediation and attempted to ease tensions between the Arabs and the Israelis, hoping to convince the organization to lift the embargo.<sup>76</sup>

Kissinger's first trip took him to Aswan, Egypt on January 11, 1974, where he met with Egyptian President Anwar Sadat. A week before Kissinger's arrival, the Israelis had approached the Egyptians with a proposal for disengagement, indicating to the Secretary of State that the two sides were now ready to make a deal with each other. With Nixon entangled in the Watergate scandal in Washington D.C., Kissinger led negotiations between Israel and Egypt himself. For the Israelis to sign an agreement, they required the reopening of the Suez Canal, access to the Suez, the Strait of Bab el-Madeb, and the Strait of Tiran, and the building of Egyptian cities near the canal to dissuade Egypt from initiating another conflict in the future. After a week of negotiations, Egypt accepted nearly all the Israeli terms, and the two sides came to an agreement that also created a United Nations buffer zone on the east side of the Suez.<sup>77</sup>

With one agreement now signed, Kissinger turned his focus to negotiating a peace between Syria and Israel. After seeing the Secretary of State's progress with Egypt and Israel, OAPEC lifted the embargo on March 18 but planned to reassess the removal on June 1. Kissinger, knowing that he needed to make a deal between the Israelis and Syrians by that date or risk the reestablishment of the embargo, hurried to prepare the two nations for negotiations. After nearly two months of preparations in Washington D.C. through separate meetings with Syrian and Israeli officials, Kissinger "shuttled" to Jerusalem. One week later, the two sides were on the verge of a settlement but still disagreed on who should possess Quneitra, a town in the Golan Heights which both claimed as their own. Two weeks later, Israel agreed to give the town to Syria, and, after two more weeks of intense negotiations, the two sides finally reached a full agreement on May 31, the day before OAPEC reassessed and then permanently removed the embargo.<sup>78</sup>

#### **Foes Turned Friends:**

In the aftermath of the Arab oil embargo, the relationship between the US and Saudi Arabia took a sharp turn and emerged stronger than ever. The Saudis were producing more oil than they ever had, increasing their production by 123% from 3.80 mbd to 8.48 mbd between 1970 and 1974, and, consequently, the kingdom was now the world leader in oil production.<sup>79</sup> The increased oil production coupled with profits that, at \$10 per barrel, were 900% greater than pre-embargo levels, dramatically raised Saudi revenue.<sup>80</sup> After earning \$7 billion in oil revenue in 1973, the Saudis earned \$25.5 billion in 1974, expanding their government's budget 282% from \$3.4 billion to \$13 billion.<sup>81</sup>

Meanwhile, the United States had plunged into the nation's worst economic recession since the Great Depression due in large part to the embargo. During the two-year recession, US GDP dropped for six straight quarters, from \$1.241 trillion in the fourth quarter of 1973 to \$1.168 trillion in the second quarter of 1975. In the same period, the unemployment rate skyrocketed from 4.9% to 8.7%. Inflation rates soared too, rising from 7.4% in the third quarter of 1973 to 12.2% in the fourth quarter of 1974. To combat the crisis, President Gerald Ford enacted tax cuts and deficit-spending, and, although successful in repairing the economy, the policies increased the national deficit twenty-fold from \$5 billion in the third quarter of 1973 to \$102 billion in the second quarter of 1975.82

In the midst of this recession, the United States turned to an unlikely source for help: Saudi Arabia. Drawn to the KSA's new wealth, the US hoped to strengthen ties with its former foe to boost the American economy and finance the growing deficit through a strategy called "petrodollar recycling," in which the Saudis would pour money from American oil purchases back into the US economy through greater economic cooperation, arms sales, and development deals. Having seen the power of the oil weapon, the United States also hoped that a strong relationship with the KSA would convince it to refrain from future embargoes and ensure uninterrupted access to oil.83 Secretary of the Treasury William Simon expressed this sentiment about a potential relationship with the Saudis, writing, "For the U.S., the primary interest is our continued access to Saudi Arabian oil in adequate quantities."84

The détente between the two countries moved quickly, indicating the mutual gains possible from a partnership. On April 5, 1974, just eighteen days after the removal of the embargo, the United States and Saudi Arabia issued a joint statement that ended the period of tensions between them, even though a peace agreement between Syria and Israel had not yet been made. In the statement, John F. King, a spokesman for the United States State Department, declared that the US hoped "to broaden and deepen the entire range of Saudi-American relations." This goal would be fully realized just two months later.<sup>85</sup>

On June 6, 1974, President Nixon and Secretary of State Kissinger met with Fahd Ibn Abdel Aziz, a Saudi Arabian Prince, and hosted a lunch for him and 73 guests in the Blair House, a tradition normally reserved for government heads. Henry Kissinger stated that the President and Prince discussed providing military and scientific aid to the kingdom. Through this aid, the Americans aimed to combat Soviet and communist influences in the region and protect the nation's oil facilities. Gerald L. Warren, the deputy press secretary for the White House, remarked that the visit set "the stage for a higher level of cooperation" with Saudi Arabia. This "higher level of cooperation" would manifest just three days later in a formal agreement between the countries.<sup>86</sup>

The signing of an extensive economic and military pact on June 9 paved the way for a robust US-Saudi relationship in the years that followed. The pact established the US Joint Commission on Economic Cooperation whose goal, according to Secretary of the Treasury William Simon, was "to develop a link of relationships that will permeate many levels of economic life." In the commission, the Saudis paid the Americans over \$1 billion to advise them on a wide array of bureaucratic issues.<sup>87</sup> In return, the US hoped to recycle the KSA's petrodollar wealth back into the US economy through the awarding of contracts to American companies as well as Saudi investments in American bonds and treasury bills. Henry Kissinger and Prince Fahd Ibn Abdel Aziz both praised the agreement, with the former calling it a "milestone in our relations with Saudi Arabia" and the latter calling it "an excellent opening in a new and glorious chapter in relations between Saudi Arabia and the United States."88 Just five days after the signing of the pact, the two countries would see another milestone in

their relationship.

On June 14, Nixon arrived in Jidda, Saudi Arabia to meet with King Faisal.<sup>89</sup> Although the president's visit did not result in a new agreement, it was a landmark event in relations between the countries, marking the first time a US president visited the kingdom.<sup>90</sup> The meeting further strengthened the growing bond between the two nations, with Faisal referring to his home country as America's "friends in this part of the world."<sup>91</sup> The monarch's reference to the Americans as "friends" contrasted with the aggressive rhetoric between the two nations just months prior when they were on the brink of war, demonstrating the rapid strengthening of their relationship.

Three days after Nixon left Saudi Arabia, the US Treasury began to engage in discussions with the KSA about recycling its petrodollar wealth into the United States economy through the purchase of Treasury securities.<sup>92</sup> A month later, on July 20, 1974, the day that the Saudis announced their massive \$13 billion budget for the 1974-1975 fiscal year, Secretary of the Treasury William Simon met with King Faisal and Minister of Finance Mohammed Abul Khalil in Taif, Saudi Arabia seeking investments in the US.93 That same day, Sheikh Yamani, promised that the kingdom would invest in American Treasury securities, and, on September 6, the Saudis followed through on Yamani's promise with the purchase of US Treasury bonds for an unspecified amount in the billions.<sup>94</sup>

In the aftermath of the pact, American businesses increased their presence in Saudi Arabia through increased exports of goods, such as agricultural products. After exporting \$6.6 million worth of agriculture to the kingdom in May 1974, before the pact, the US sent over \$11 million worth of agricultural goods to its new economic ally in June 1974. John Parker, a member of the United States Department of Agriculture's economic research group, attributed the sharp rise in exports to the kingdom's new petrodollar wealth in a July 8 article in Foreign Agriculture.<sup>95</sup>

Over the next two months, US businesses also expanded their ground-presence in the KSA, recognizing the business opportunities that awaited them in a country now flush with cash. On August 24, 1974, the kingdom awarded an American company, the Daniel International Corporation, a contract to build a hotel in Jeddah.<sup>96</sup> The next month, Detroit-based vehicle manufacturer General Motors, America's largest corporation in terms of revenue in 1974, announced its intentions to expand operations into Saudi Arabia through the construction of a 250,000-square-foot factory near Jeddah in 1976.97 General Motors was to own 60% of the new operation while private Saudi groups were to own the remaining 40%.<sup>98</sup> The expansion of the American private sector into a country that had severed its main economic tie with the US just months prior showed how quickly United States policy towards the Saudis changed as a result of the embargo and the new Saudi petrodollar wealth.

Despite announcing a plan for complete energy independence in November 1973, the United States immediately increased its oil imports from Saudi Arabia following the removal of the embargo. In December 1974, the US imported a then-record 749,000 barrels of crude oil from the kingdom to meet increasing demand and compensate for decreases in domestic production following rapprochement with the Saudis. The next December, imports would cross one million barrels per day for the first time, marking another milestone in the 42-year US-Saudi relationship as the US was quickly re-establishing the KSA as a reliable source of oil.<sup>99</sup>

In addition to economic cooperation, the June agreement also set the stage for increased military cooperation between the countries through the establishment of a joint security commission. According to the pact, the commission's goal was to "[modernize] Saudi Arabia's armed forces in light of the kingdom's defense requirements especially as they relate to training." US officials hoped to use the commission to boost the American economy by selling the Saudis arms and training their military for pay.<sup>100</sup> By strengthening the Saudis, America also hoped to combat the influence of the Soviet Union in the Middle East, preempt incidents like the Yom Kippur War, and protect the region's oil facilities.<sup>101</sup> On September 9, Secretary of the Navy John William Middendorf and Chief of the United States Army Corps of Engineers W.C. Gribble Jr. met with King Faisal and the Saudi Minister of Defense and Aviation, Prince Sultan Ibn Abdel Aziz, to discuss the development of the kingdom's military.<sup>102</sup> The next month the US State Department announced the completion of a survey of Saudi military needs for the next decade, and, on November 23, almost exactly one year after Kissinger had threatened military countermeasures against them, the US provided recommendations to the Saudi government for the modernization of its army.<sup>103</sup>

Following the recommendations, the Saudis and Americans agreed to a series of training deals and arms sales. In one deal, the US signed a \$335-million contract with the KSA to modernize the Arab nation's military. As a part of the contract, the Department of Defense gave a \$77-million subcontract to the Vinnell Corporation to train the Saudi army, marking the first time a private American company was awarded a contract to train a foreign army. Vinnell's contract was specifically for the training of the Saudi Arabian National Guard, which comprised 26,000 men and protected the kingdom's oil fields and facilities – still the main American interest in the region.<sup>104</sup> Other deals included a \$139-million contract awarded to the Bendix Corporation to provide the Saudi military with a logistics system and a \$146-million contract awarded to the Northrop Corporation to train pilots and mechanics for F-5 fighter jets.<sup>105</sup> US policy towards the KSA drastically shifted as a result of the OAPEC oil embargo as demonstrated by the Americans training the Saudis to use military equipment and protect their oil fields a year after planning a potential invasion of those same fields.

The US also agreed to several arms sales with the Saudis. In the fiscal year of 1975, America sold \$2 billion worth of arms to Saudi Arabia, up from just \$15.8 million five years prior and nearly triple the previous year's total of \$700 million.<sup>106</sup> One of these transactions, the sale of sixty F-5 fighter jets, exceeded the previous year's sales alone with a cost of \$750 million. Although the deal included spare parts and training for Saudi pilots, the kingdom paid a highly inflated price for the planes, normally priced at \$2.7 million each or \$162 million for sixty, signifying that the US was taking advantage of its new ally's wealth to boost its own economy.<sup>107</sup> Henry Kissinger displayed his change in attitude towards the kingdom as well as the strength of the two nations' bond, saying, "I do not know of anything that is nonnuclear that we would not give the Saudis."<sup>108</sup> Saudi Arabia was now at the center of US policy in the Middle East, receiving treatment similar to America's longstanding ally, Israel.

The Saudis also recycled petrodollars back into the US economy through development deals. On April 20, 1976, America converted the Mediterranean Division of the U.S. Army Corps of Engineers (USACE) into the Middle East Division. Although technically encompassing the entire Middle Eastern region, this section of the Corps mainly undertook projects in Saudi Arabia, with its headquarters in Riyadh, the Saudi capital city. In addition to Riyadh, there were offices created in Virginia to help design and build new infrastructure in three developmental districts – Al Batin, Jiddah, and Riyadh.<sup>109</sup> The \$14 billion undertaking, which was planned in 1975 and scheduled to be completed in 1982, dwarfed the \$210 million in development the Corps had done in the kingdom in the previous twenty-five years.<sup>110</sup>

The two biggest projects that the Corps undertook were the Saudi Naval Expansion Program (SNEP) and the construction of King Khalid Military City (KKMC). SNEP accounted for \$2.5 billion or close to 18% of the entire program's cost. As a part of SNEP, the USACE constructed two deepwater ports in Jiddah and Jubail and built headquarters for the Saudi navy in Riyadh. At a cost of \$8.5 billion split between thirty separate contracts, the Corps' biggest project was the construction of the KKMC, which accounted for over 60% of the total budget. The King Khalid Military City was so expensive as it was just what its name implies - a city for military use. Shaped like an octagon, the KKMC could hold 70,000 military personnel and included schools, housing, a city center



with retail stores, and training facilities.<sup>111</sup> The two development projects again showed the profound effect that the OAPEC oil embargo had on US-Saudi relations: the US was now investing manpower and time to develop its former foe's infrastructure.

In addition to the two major projects, the Corps also built 2,500 miles of roads, a \$400-million military academy, a center to train engineers, two airports for \$350 million each, a \$50-million college for women, schools, a zoo, mosques, hospitals, and more.<sup>112</sup> Furthermore, the USACE constructed a port at Ras al-Mish'ab to transport materials for the development projects.<sup>113</sup> Private American businesses were also heavily involved in Saudi development, as shown by the previously mentioned Daniel Corporation hotel and General Motors factory.<sup>114</sup> Not only did America help its economy recover from a recession by injecting it with Saudi petrodollar wealth and restoring the oil flow, but the US also ensured that the oil weapon could not be used against it again and set the stage for future cooperation with the KSA.

#### **Conclusion:**

After spending decades building a reliance on foreign oil, a process accelerated by rising energy demands, increasing oil consumption, environmentalism, and the policies of Nixon and his predecessors, the United States was at the mercy of Saudi Arabia during the 1973 OAPEC oil embargo. Initially, as the US still failed to recognize the power of the oil weapon, the embargo severed the growing economic bond between the two nations and brought them dangerously close to war. However, Kissinger's eventual acknowledgment of Saudi oil power after the US plunged into an energy crisis and his ensuing "shuttle diplomacy" brought an end to the embargo, and, in turn, the period of tensions between the US and the KSA. In the aftermath of the embargo, America, now aware of Saudi Arabia's formidable power and its new petrodollar wealth, looked to rapidly mend relations with its former adversary, perhaps fearing another wielding of the oil weapon. In the years that

followed, Saudi Arabia cemented itself as one of the United States' key allies in the Middle East through increased economic cooperation, a series of military deals, and numerous development projects. The economic, political, and military bond that developed between Saudi Arabia and the United States in the 1970s set the stage for their modern partnership.

The strength of this modern partnership and the repercussions of the OAPEC oil embargo on US-Saudi relations were on full display during the Gulf War. From 1980 to 1988, Iraq, led by dictator Saddam Hussein, accumulated \$37 billion of debt as a result of loans taken from Arab creditors during the Iran-Iraq War. Hussein implored the United Arab Emirates and Kuwait to cancel their share of this debt, but they refused to do so.<sup>115</sup> In retaliation, Iraq invaded and annexed Kuwait on August 2, 1990, an aggressive move that threatened Saudi Arabia's national security. Thus, President George H.W. Bush commenced Operation Desert Shield the deployment of 500,000 American troops to the KSA in case the Iraqis attacked. After diplomacy failed to solve the conflict, the US began Operation Desert Storm on January 15, 1991 and attacked Iraq from Saudi Arabia with forty allies. After six weeks of aerial attacks and a four-day ground invasion, the US and its allies defeated Iraq and liberated Kuwait.<sup>116</sup> America owed much of this success to its economic, political, and military bond with Saudi Arabia that stemmed from the OAPEC oil embargo. Not only did the bond allow for the US to deploy half-a-million troops to the Arabian Peninsula in the first place, but American military operations during the war also depended on the same infrastructure that the USACE had built in the immediate aftermath of the embargo.<sup>117</sup> Furthermore, the United States' swift and powerful response to the Saudis being threatened demonstrated the continued strength of their relationship and the importance of Saudi Arabia in American policy in the Middle East.

The US-Saudi bond remains strong to this day, even as anti-KSA sentiment grows in America due to the country's human rights abuses and suspected involvement in the 9/11 attacks.<sup>118</sup> Although the Saudis only



Cartoon on the "Oil Weapon" (1973)

accounted for 6% of US petroleum imports in 2019, compared to 49% for Canada and 7% for Mexico, economic ties between America and Saudi Arabia have strengthened since the 1970s, especially in terms of arms sales.<sup>119</sup> In 2010, the US, under President Barack Obama, sold the kingdom \$60 billion of aircraft in the largest arms sale in American history.<sup>120</sup> More recently, in 2018, President Donald Trump moved forward with the sale of \$110 billion in arms to the nation over the course of ten years despite public backlash stemming from the Saudi assassination of journalist Jamal Khashoggi.<sup>121</sup> President Trump also announced the deployment of 3,000 troops to the nation on October 11, 2019 to protect Saudi oil fields from Iranian bombings.122

Although the relationship between Saudi Arabia and the United States remains strong for now, it may soon be strained once again as opposition grows to US military support for

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the Saudis and as a shift to clean energy threatens to diminish further the oil weapon's once formidable power. However, regardless of the future of the US-Saudi relationship, the OAPEC oil embargo has shaped and defined nearly fifty years of relations between the United States and Saudi Arabia, and its legacy persists through a robust economic, political, and military partnership.



#### Endnotes

- Memorandum, "President Richard Nixon's Dai-1. ly Diary, October 1 - 15," n.d., accessed May 25, 2020, https://www.nixonlibrary.gov/sites/ default/files/virtuallibrary/documents/ PDD/1973/109%20October%201-15%201973.pdf.
- 2. "Transcript of Telephone Conversation Between President Nixon and Secretary of State Kissinger," October 6, 1973, accessed May 25, 2020, https://history.state.gov/historicaldocuments/ frus1969-76v25/d104.
- "The October Arab-Israeli War of 1973: What Hap-3. pened?," Al Jazeera, last modified October 8, 2018, accessed March 5, 2020, https://www.aljazeera. com/indepth/features/2017/10/arab-israeliwar-of-1973-what-happened-171005105247349. html.
- Matthew T. Penney, "Intelligence and the 1973 Ar-4. ab-Israeli War," last modified December 10, 2012, pdf.; "The October," Al Jazeera.
- "The October," Al Jazeera. 5.
- 6. Ibid.
- 7. Ibid; Adam Wambold, "Operation Nickel Grass: Turning Point of the Yom Kippur War," Richard Nixon Foundation, last modified October 8, 2014, accessed July 25, 2020, https://www.nixonfoundation.org/2014/10/operation-nickelgrass-turning-point-yom-kippur-war/.
- 8. "The Yom Kippur War (October 1973)," Israel Ministry of Foreign Affairs, accessed July 18, 2020, https://mfa.gov.il/mfa/aboutisrael/history/pages/the%20yom%20kippur%20war%20-%20october%201973.aspx.; "The October," Al Jazeera.
- 9. "The October," Al Jazeera.
- 10. Nojeim and Kilroy, Days of Decision, 174.
- Jeff Colgan, Petro-aggression: When Oil Causes 11. War (Cambridge: Cambridge University Press, 2013), 234.
- Robert G. Kaiser and David Ottaway, "Oil for Se-12. curity Fueled Close Ties," The Washington Post, last modified February 11, 2002, accessed March 5, 2020, https://www.washingtonpost. com/archive/politics/2002/02/11/oil-for-security-fueled-close-ties/fdf1f123-214f-41b3-a53ca5e687c648e7/.
- 13. "A Guide to the United States' History of Recognition, Diplomatic, and Consular Relations, by Country, since 1776: Saudi Arabia," Office of the Historian, accessed May 25, 2020, https://history. state.gov/countries/saudi-arabia.
- CFR.org Editors, "U.S.-Saudi Arabia Relations," 14. Council on Foreign Relations, last modified December 7, 2018, accessed May 25, 2020, https:// www.cfr.org/backgrounder/us-saudi-arabia-relations.
- 15. Juan de Onis, "Kissinger Fails to Sway Saudis From Oil Embargo," New York Times, last modified November 10, 1973, accessed April 10, 2020, https:// www.nytimes.com/1973/11/10/archives/kissinger-fails-to-sway-saudis-from-oil-embargo.html.
- 16. Leonard Mosley, "Aramco is not so much a compa-

ny as it is a country within a country," New York Times, last modified March 10, 1974, accessed May 25, 2020, https://www.nytimes.com/1974/03/10/ archives/the-richest-oil-companyin-the-worldaramco-is-not-so-much-a-company.html.

Ibid. 17

18.

- "Saudis Want 51% of ARAMCO Now," New York Times, last modified November 20, 1973, accessed May 25, 2020, https://www.nytimes. com/1973/11/20/archives/saudis-want-51-ofaramco-now-sheik-confirms-stand-figures-reported.html.
- 19. "Minutes of Senior Review Group Meeting," Office of the Historian, last modified July 20, 1973, accessed May 25, 2020, https://history.state.gov/ historicaldocuments/frus1969-76v27/d23.
- 20. Mosley, "Aramco is not so much," New York Times.
- 21. "Member Countries," Organization of Petroleum Exporting Countries, accessed May 25, 2020, https://www.opec.org/opec\_web/en/about\_ us/25.htm.
- Samantha Gross, "The 1967 War and the 'oil weap-22. on," Brookings, last modified June 5, 2017, accessed July 18, 2020, https://www.brookings. edu/blog/markaz/2017/06/05/the-1967-warand-the-oil-weapon/
- "1948: A Cause for Unity?," Al Jazeera, last mod-23. ified july 11, 2008, accessed July 25, 2020, https://www.aljazeera.com/focus/arabunity/2008/02/2008525185128450467.html.
- 24. Gross, "The 1967," Brookings.
- 25. Nojeim and Kilroy, Days of Decision, 172.
- 26. Bini, Garavini, and Romero, Oil Shock, 43.
- 27. Said H. Hitti and George T. Abed, The Economy and Finances of Saudi Arabia (n.p.: International Monetary Fund, 1974), 247.
- 28. "The Prize Chapter 28: The Hinge Years - Countries versus Companies," Penn State College of Earth and Mineral Sciences, accessed May 25, 2020, https://www.e-education.psu.edu/egee120/ node/276.
- 29. Bini, Garavini, and Romero, Oil Shock, 43.
- 30. Yanek Mieczkowski, Gerald Ford and the Challenges of the 1970s (Lexington, Ky.: University Press of Kentucky, 2005), 188-189. 31.
  - Ibid., 199, 208.
- 32. "US Imports of Crude Oil," chart, US Energy Information Administration, accessed March 5, 2020, https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrimus1&f=a.
- 33. "U.S. Imports from Saudi Arabia of Crude Oil," chart, U.S. Energy Information Administration, accessed May 25, 2020, https://www.eia.gov/ dnav/pet/hist/LeafHandler.ashx?n=PET&s=M-CRIMUSSA2&f=M.
- 34. "Nixon and the End of the Bretton Woods System, 1971-1973," Office of the Historian, accessed April 10, 2020, https://history.state.gov/milestones/1969-1976/nixon-shock.
- 35. Ibid; "The Bretton Woods Conference, 1944," US Department of State Archive, accessed April 10, 2020, https://2001-2009.state.gov/r/pa/ho/



55.

56.

57.

59.

60.

65.

70.

time/wwii/98681.htm.

- 36. "Nixon and the End of the Bretton," Office of the Historian.
- Michael Corbett, "Oil Shock of 1973-74," Federal Reserve History, accessed May 25, 2020, https:// www.federalreservehistory.org/essays/oil\_ shock\_of\_1973\_74.
- 38. Bini, Garavini, and Romero, Oil Shock, 37.
- 39. "Saudis Cut Oil Output 10% To Put Pressure on U.S.," New York Times, last modified October 19, 1973, accessed May 25, 2020, https://www.nytimes.com/1973/10/19/archives/saudis-cut-oiloutput-10-to-put-pressure-on-us-saudi-arabiacuts.html.
- 40. Nojeim and Kilroy, Days of Decision, 173.
- 41. William D. Smith, "The Arab Oil Weapon Comes Into Play," New York Times, last modified October 1973, accessed March 31, 2020, https://www. nytimes.com/1973/10/21/archives/the-arab-oilweapon-comes-into-play-arab-oil-weapon.html?searchResultPosition=4.
- 42. "The 1973 Arab-Israeli War," Office of the Historian, accessed April 10, 2020, https://history.state.gov/ milestones/1969-1976/arab-israeli-war-1973.
- 43. Onis, "Kissinger Fails," New York Times.
- 44. "237. Editorial Note," Office of the Historian, accessed April 10, 2020, https://history.state.gov/ historicaldocuments/frus1969-76v36/d237.
- 45. Onis, "Kissinger Fails," New York Times.
- 46. "SAUDIS WANT," New York Times.
- Juan de Onis, "Arabs Set New Oil Cutback," New York Times, last modified December 10, 1973, accessed July 25, 2020, https://www.nytimes. com/1973/12/10/archives/arabs-set-new-oilcutback.html?searchResultPosition=1.
- 48. M.A. Adelman, "The First Oil Price Explosion 1971 -1974," last modified May 1990, pdf.
- 49. "SAUDIS WANT," New York Times.
- 50. "Excerpts From the Kissinger News Conference," New York Times, last modified November 22, 1973, accessed March 31, 2020, https://www.nytimes.com/1973/11/22/archives/excerpts-fromthe-kissinger-news-conference-questions-andanswers.html?searchResultPosition=5.
- Glenn Frankel, "U.S. mulled capture of Arab oil fields in '73, memo says," Chicago Tribune, last modified January 1, 2004, accessed March 31, 2020, https://www.chicagotribune.com/news/ ct-xpm-2004-01-01-0401010215-story.html.
- 52. Ahmed Zaki Yamani, "Denmark Interview," AP Archive, accessed March 31, 2020, http://www.aparchive.com/metadata/youtube/e3c5607062c77af0112afc7003f637cd.
- 53. "Memorandum of Conversation," Office of the Historian, last modified November 29, 1973, accessed May 25, 2020, https://history.state.gov/ historicaldocuments/frus1969-76v36/d251.
- 54. "244. Editorial Note," Office of the Historian, accessed May 25, 2020, https://history.state.gov/ historicaldocuments/frus1969-76v36/d244.; Lizette Alvarez, "Britain Says U.S. Planned To Seize Oil In '73 Crisis," New York Times, last modified

January 2, 2004, accessed July 30, 2020, https:// www.nytimes.com/2004/01/02/world/britainsays-us-planned-to-seize-oil-in-73-crisis.html.

- Bini, Garavini, and Romero, Oil Shock, 41.
- "Excerpts From," New York Times.
  - Edward Coltrin Keefer, Energy Crisis, 1969 1974 (Washington: United States Government Printing Office, 2011), 692.
- "Memorandum of Conversation," Office of the Historian.
  - Bini, Garavini, and Romero, Oil Shock, 40 41.
  - David Binder, "Arab Oil Aides Indicate End to Embargo in 1974," New York Times, last modified December 9, 1973, accessed April 10, 2020, https:// www.nytimes.com/1973/12/09/archives/araboil-aides-indicate-end-to-embargo-in-1974-arab-oil-aides.html?searchResultPosition=7.
- 61. "237. Editorial," Office of the Historian.
- 62. Onis, "Kissinger Fails," New York Times
- 63. Onis, "Arabs Set New Oil Cutback," New York Times.
- 64. "MOVE IS SURPRISE," New York Times, last modified December 26, 1973, accessed April 10, 2020, https://www.nytimes.com/1973/12/26/archives/ move-is-surprise-a-5-cut-in-january-canceledflow-to-rise-10-instead.html?searchResultPosition=2.
  - Bini, Garavini, and Romero, Oil Shock, 41
- 66. "MOVE IS SURPRISE," New York Times.
- 67. Bini, Garavini, and Romero, Oil Shock, 118.
- 68. Mieczkowski, Gerald Ford, 203.
- 69. Tom Wicker, "Grim Thoughts From the 'Gas' Line," New York Times, last modified February 19, 1974, accessed April 10, 2020, https://www.nytimes. com/1974/02/19/archives/grim-thoughts-fromthe-gas-line-in-the-nation.html.
  - Kamelia Angelova and Rob Wile, "AMERICA OUT OF GAS: Unreal Images From The 1973 Oil Crisis," Business Insider, last modified October 3, 2013, accessed April 10, 2020, https://www.businessinsider.com/1973-oil-crisis-photos-2013-10.
- 71. Fred Ferretti, "The Way We Were: A Look Back at the Late Great Gas Shortage," New York Times, last modified April 14, 1974, accessed April 10, 2020, https://www.nytimes.com/1974/04/14/ archives/the-way-we-were-a-look-back-at-thelate-great-gas-shortage-the-fuel.html.
- 72. Wicker, "Grim Thoughts," New York Times.
- 73. Joseph A. Williams, "When Truckers Shut Down America to Protest Oil Prices–and Became Folk Heroes," History, last modified January 15, 2019, accessed April 10, 2020, https://www.history. com/news/oil-crisis-1973-truck-strike.
- 74. "MOST TRUCKERS END 11 DAY STRIKE," New York Times, last modified February 12, 1974, accessed July 29, 2020, https://www.nytimes. com/1974/02/12/archives/most-truckers-end-11day-strike-traffic-called-nearly-normal-despite.html.
- 75. "Shuttle Diplomacy and the Arab-Israeli Dispute, 1974–1975," Office of the Historian, accessed April 10, 2020, https://history.state.gov/milestones/1969-1976/shuttle-diplomacy.



91.

- 76. Ibid.
- 77. Ibid.
- "U. S. Falls to No. 2, Behind the Saudis, In Crude Oil Output," New York Times, last modified July 4, 1974, accessed July 30, 2020, https://www.nytimes.com/1974/07/04/archives/u-s-falls-tono-2-behind-the-saudis-in-crudeoil-outputbenchmark.html.
- 79. Paul L. Montgomery, "Faisal, Rich and Powerful, Led Saudis Into 20th Century and to Arab Forefront," New York Times, last modified March 26, 1975, accessed May 25, 2020, https://www. nytimes.com/1975/03/26/archives/faisal-richand-powerful-led-saudis-into-20th-centuryand-to-arab.html?searchResultPosition=20.
- C.L. Sulzberger, "Of Time And a River Of Oil," New York Times, last modified July 28, 1974, accessed May 25, 2020, https://www.nytimes. com/1974/07/28/archives/of-time-and-a-river-of-oil.html.; "Saudis Announce a Record Budget," New York Times, last modified July 21, 1974, accessed May 25, 2020, https://www. nytimes.com/1974/07/21/archives/saudis-announce-a-record-budget.html?searchResultPosition=63.
- 81. Thayer Watkins, "The Recession of 1973-75 in the U.S.," San José State University Department of Economics, accessed May 25, 2020, https://www.sjsu.edu/faculty/watkins/rec1974.htm.
- Ryan McMaken, "Huge Debt Got Us Hooked on Petrodollars and on Saudi Arabia," Mises Institute, last modified January 14, 2020, accessed May 25, 2020, https://mises.org/wire/huge-debt-got-us-hooked-petrodollars-%E2%80%94-and-saudiarabia.
- 83. Kaiser and Ottaway, "Oil for Security," The Washington Post.
- David Binder, "U.S. Will Supply Arms And Factories to Saudis," New York Times, last modified April 6, 1974, accessed May 25, 2020, https://www.nytimes.com/1974/04/06/archives/us-will-supplyarms-and-factories-to-saudis.html?searchResultPosition=60.
- 85.
- 86. "Nixon Welcomes a High Saudi Aide," New York Times, last modified June 7, 1974, accessed May 25, 2020, https://www.nytimes.com/1974/06/07/ archives/nixon-welcomes-a-high-saudi-aidedeputy-premier-also-meets-with.html?searchResultPosition=53.
- 87.
- Kaiser and Ottaway, "Oil for Security," The Washington Post.
- 89. Bernard Gwertzman, "'Milestone' Pact Is Signed By U.S. and Saudi Arabia," New York Times, last modified June 9, 1974, accessed May 25, 2020, https://www.nytimes.com/1974/06/09/ archives/milestone-pact-is-signed-by-us-andsaudi-arabia-acclaimed-by.html.
- 90. "Saudi Arabia Travels of the President," Office of the Historian, accessed May 25, 2020, https://history.state.gov/departmenthistory/travels/pres-

ident/saudi-arabia

"Saudi Arabia," Office of the Historian.

- 92. "Saudi King Assails Critics Of Nixon's Peace Policies," New York Times, last modified June 16, 1974, accessed May 25, 2020, https://www.nytimes.com/1974/06/16/archives/saudi-king-assails-critics-of-nixons-peace-policies.html?searchResultPosition=3.
- 93. Treasury Weighs Saudi Investing," New York Times, last modified June 19, 1974, accessed May 25, 2020, https://www.nytimes.com/1974/06/19/archives/treasury-weighs-saudi-investing-talkswith-nation-cited-on-possible.html?searchResultPosition=51.
- 94. "Saudis Announce," New York Times."; Simon Has Meeting With Saudi King On Investing in U.S.," New York Times, last modified July 21, 1974, accessed May 25, 2020, https://www.nytimes. com/1974/07/21/archives/simon-has-meetingwith-saudi-king-on-investing-in-us-zaki-foresees.html?searchResultPosition=15.
- 95. "Simon Has Meeting," New York Times.; Juan de Onis, "A Multibillion Purchase of Treasury Issue Due," New York Times, last modified September 7, 1974, accessed July 29, 2020, https://www.nytimes.com/1974/09/07/archives/a-multibillionpurchase-of-treasury-issue-due-saudi-arabiaplans-to.html.
- 96. John B. Parker, "U.S. Farm Exports Benefit as Saudi Arabia's Oil Income Soars," Foreign Agriculture: Weekly Magazine of the United States, July 8, 1974, 3.
- 97. "Contract Awards," New York Times, last modified August 24, 1974, accessed May 25, 2020, https:// www.nytimes.com/1974/08/24/archives/contract-awards.html?searchResultPosition=4.
- 98. "Fortune 500 1974 Full List," Fortune 500, accessed May 25, 2020, https://archive.fortune.com/magazines/fortune/fortune500\_archive/full/1974/.; "General Motors Plans Saudi Arabia Venture," New York Times, last modified September 18, 1974, accessed May 25, 2020, https://www.nytimes.com/1974/09/18/archives/general-motors-plans-saudi-arabia-venture.html?-searchResultPosition=38.
- 99. "G.M. Assembly Plant Due for Saudi Arabia," New York Times, last modified April 28, 1975, accessed May 25, 2020, https://www.nytimes. com/1975/04/28/archives/gm-assembly-plantdue-for-saudi-arabia.html.
- 100. "U.S. Imports," chart.
- 101. Gwertzman, "'Milestone' Pact," New York Times.
- 102. The Associated Press, "U.S. Company Will Train Saudi Troops to Guard Oil," New York Times, last modified February 9, 1975, accessed March 31, 2020, https://www.nytimes.com/1975/02/09/archives/us-company-will-train-saudi-troops-toguard-oil-us-company-will.html.
- 103. Juan de Onis, "U.S. Role Grows in Arming Saudis," New York Times, last modified September 11, 1974, accessed May 25, 2020, https://www.nytimes.com/1974/09/11/archives/u-s-role-grows-



in-arming-saudis-it-seeks-to-keep-lucrativeposition.html?searchResultPosition=1.

- 104. "Saudi Arms Needs Surveyed by U.S.," New York Times, last modified October 19, 1974, accessed May 25, 2020, https://www.nytimes. com/1974/10/19/archives/saudi-arms-needssurveyed-by-us.html?searchResultPosition=64.;
  "Details Disclosed Of U.S. Plan to Arm New Saudi Forces," New York Times, last modified November 24, 1974, accessed May 25, 2020, https://www. nytimes.com/1974/11/24/archives/details-disclosed-of-us-plan-to-arm-new-saudi-forces.html?searchResultPosition=7.
- 105. The Associated Press, "U.S. Company," New York Times.
- 106. Michael C. Jensen, "U.S. Arms Exports Boom, Particularly to the Mideast," New York Times, last modified April 14, 1975, accessed July 30, 2020, https://www.nytimes.com/1975/04/14/archives/ us-arms-exports-boom-particularly-to-themideast-orders-at-record.html.
- 107. Elizabeth Allan, "The Yemen Resolution and the Historical U.S.-Saudi Security Relationship," Lawfare, last modified April 25, 2019, accessed March 31, 2020, https://www.lawfareblog.com/ yemen-resolution-and-historical-us-saudi-security-relationship.; Leslie H. Gelb, "U.S. Arms Sales Doubled in '73-'74 Reach \$815-Billion," New York Times, last modified July 10, 1974, accessed May 25, 2020, https://www.nytimes. com/1974/07/10/archives/u-s-arms-sales-doubled-in-7374-reach-85billion-mideasts-share-is. html?searchResultPosition=26.
- 108. John Finney, "U.S. SELLS SAUDIS 60 JET FIGHT-ERS FOR \$750 MILLION," New York Times, last modified January 1975, accessed March 31, 2020, https://www.nytimes.com/1975/01/10/archives/ us-sells-saudis-60-jet-fighters-for-750millioncontract-on-f5s.html.
- 109. Colgan, Petro-aggression: When, 236.
- 110. "Our History," US Army Corps of Engineers, accessed April 2, 2020, https://www.tam.usace.army.mil/About/History/.
- 111. Ibid; Rita Reif, "Saudis Give Americans Key Role in Construction," New York Times, last modified June 22, 1975, accessed May 25, 2020, https:// www.nytimes.com/1975/06/22/archives/saudisgive-americans-key-role-in-construction.html?searchResultPosition=1.
- 112. "Historical Vignette 065 Middle East Division's Extensive Construction Program," US Army Corps of Engineers, accessed April 2, 2020, https:// www.usace.army.mil/About/History/Historical-Vignettes/Military-Construction-Combat/065-Middle-East-Division/.
- 113. Reif, "Saudis Give," New York Times.
- 114. "Historical Vignette," US Army Corps of Engineers.
- 115. "Contract Awards," New York Times; "General Motors," New York Times.
- 116. "The Gulf War, 1991," Office of the Historian, accessed May 26, 2020, https://history.state.gov/milestones/1989-1992/gulf-war.

- 117. Shannon Collins, "Desert Storm: A Look Back," U.S. Department of Defense, last modified January 11, 2019, accessed May 26, 2020, https:// www.defense.gov/Explore/Features/story/Article/1728715/desert-storm-a-look-back/.
- 118. "Historical Vignette," US Army Corps of Engineers.
- 119. Editors, "U.S.-Saudi Arabia," Council on Foreign Relations.
- 120. "Oil and petroleum products explained," chart, U.S. Energy Information Administration, accessed May 26, 2020, https://www.eia.gov/energyexplained/oil-and-petroleum-products/imports-and-exports.php.
- 121. Andrew Quinn, "U.S. announces \$60 billion arms sale for Saudi Arabia," ed. Sandra Maler, Reuters, last modified October 20, 2010, accessed May 26, 2020, https://www.reuters.com/article/us-usasaudi-arms/u-s-announces-60-billion-armssale-for-saudi-arabia-idUSTRE69J4ML20101020.
- 122. Jeremy Diamond and Barbara Starr, "Trump's \$110 billion Saudi arms deal has only earned \$14.5 billion so far," CNN, last modified October 13, 2018, accessed May 26, 2020, https://www.cnn. com/2018/10/12/politics/trump-khashoggi-saudi-arabia-arms-deal-sanctions/index.html.
- 123. Phil Stewart and Idrees Ali, "U.S. says deploying more forces to Saudi Arabia to counter Iran threat," Reuters, last modified October 11, 2019, accessed May 26, 2020, https://www.reuters. com/article/us-saudi-aramco-attacks-exclusive/u-s-says-deploying-more-forces-to-saudi-arabia-to-counter-iran-threat-idUSKBN-1WQ21Z.

### Bibliography

#### **Primary Sources**

- The Associated Press. "U.S. Company Will Train Saudi Troops to Guard Oil." New York Times. Last modified February 9, 1975. Accessed March 31, 2020. https://www.nytimes.com/1975/02/09/ archives/us-company-will-train-saudi-troops-to-guard-oil-us-company-will.html.
- Binder, David. "Arab Oil Aides Indicate End to Embargo in 1974." New York Times. Last modified December 9, 1973. Accessed April 10, 2020. https://www.nytimes.com/1973/12/09/archives/ arab-oil-aides-indicate-end-to-embargo-in-1974-arab-oil-aides.html?searchResultPosition=7.
- ---. "U.S. Will Supply Arms And Factories to Saudis." New York Times. Last modified April 6, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/04/06/archives/us-will-sup-ply-arms-and-factories-to-saudis.html?searchResultPosition=60.
- "Contract Awards." New York Times. Last modified August 24, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/08/24/archives/contract-awards.html?searchResultPosition=4.
- "Details Disclosed Of U.S. Plan to Arm New Saudi Forces." New York Times. Last modified November 24, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/11/24/archives/ details-disclosed-of-us-plan-to-arm-new-saudi-forces.html?searchResultPosition=7.
- "Excerpts From the Kissinger News Conference." New York Times. Last modified November 22, 1973. Accessed March 31, 2020. https://www.nytimes.com/1973/11/22/archives/excerptsfrom-the-kissinger-news-conference-questions-and-answers.html?searchResultPosition=5.
- Ferretti, Fred. "The Way We Were: A Look Back at the Late Great Gas Shortage." New York Times. Last modified April 14, 1974. Accessed April 10, 2020. https://www.nytimes.com/1974/04/14/ archives/the-way-we-were-a-look-back-at-the-late-great-gas-shortage-the-fuel.html.
- Finney, John. "U.S. SELLS SAUDIS 60 JET FIGHTERS FOR \$750-MILLION." New York Times. Last modified January 1975. Accessed March 31, 2020. https://www.nytimes.com/1975/01/10/archives/us-sells-saudis-60-jet-fighters-for-750million-contract-on-f5s.html.
- Gelb, Leslie H. "U.S. Arms Sales Doubled in '73-'74 Reach \$815-Billion." New York Times. Last modified July 10, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/07/10/archives/ u-s-arms-sales-doubled-in-7374-reach-85billion-mideasts-share-is.html?searchResultPosition=26.
- "General Motors Plans Saudi Arabia Venture." New York Times. Last modified September 18, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/09/18/archives/general-motors-plans-saudi-arabia-venture.html?searchResultPosition=38.
- "G.M. Assembly Plant Due for Saudi Arabia." New York Times. Last modified April 28, 1975. Accessed May 25, 2020. https://www.nytimes.com/1975/04/28/archives/gm-assembly-plantdue-for-saudi-arabia.html.
- Gwertzman, Bernard. "'Milestone' Pact Is Signed By U.S. and Saudi Arabia." New York Times. Last modified June 9, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/06/09/archives/milestone-pact-is-signed-by-us-and-saudi-arabia-acclaimed-by.html.
- Memorandum, "President Richard Nixon's Daily Diary, October 1 15," n.d. Accessed May 25, 2020. https://www.nixonlibrary.gov/sites/default/files/virtuallibrary/documents/ PDD/1973/109%20October%201-15%201973.pdf.
- "Memorandum of Conversation." Office of the Historian. Last modified November 29, 1973. Accessed May 25, 2020. https://history.state.gov/historicaldocuments/frus1969-76v36/d251.
- "Minutes of Senior Review Group Meeting." Office of the Historian. Last modified July 20, 1973. Accessed May 25, 2020. https://history.state.gov/historicaldocuments/frus1969-76v27/d23.
- Montgomery, Paul L. "Faisal, Rich and Powerful, Led Saudis Into 20th Century and to Arab Forefront." New York Times. Last modified March 26, 1975. Accessed May 25, 2020. https://www.



nytimes.com/1975/03/26/archives/faisal-rich-and-powerful-led-saudis-into-20th-centu-ry-and-to-arab.html?searchResultPosition=20.

- Mosley, Leonard. "Aramco is not so much a company as it is a country within a country." New York Times. Last modified March 10, 1974. Accessed May 25, 2020. https://www.nytimes. com/1974/03/10/archives/the-richest-oil-companyin-the-world-aramco-is-not-so-mucha-company.html.
- "MOST TRUCKERS END 11-DAY STRIKE." New York Times. Last modified February 12, 1974. Accessed July 29, 2020. https://www.nytimes.com/1974/02/12/archives/most-truckers-end-11day-strike-traffic-called-nearly-normal-despite.html.
- "MOVE IS SURPRISE." New York Times. Last modified December 26, 1973. Accessed April 10, 2020. https://www.nytimes.com/1973/12/26/archives/move-is-surprise-a-5-cut-in-januarycanceledflow-to-rise-10-instead.html?searchResultPosition=2.
- "Nixon Welcomes a High Saudi Aide." New York Times. Last modified June 7, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/06/07/archives/nixon-welcomes-a-high-saudi-aide-deputy-premier-also-meets-with.html?searchResultPosition=53.
- Onis, Juan de. "Arabs Set New Oil Cutback." New York Times. Last modified December 10, 1973. Accessed July 25, 2020. https://www.nytimes.com/1973/12/10/archives/arabs-set-new-oilcutback.html?searchResultPosition=1.
- ---. "Kissinger Fails to Sway Saudis From Oil Embargo." New York Times. Last modified November 10, 1973. Accessed April 10, 2020. https://www.nytimes.com/1973/11/10/archives/ kissinger-fails-to-sway-saudis-from-oil-embargo.html.
- ---. "A Multibillion Purchase of Treasury Issue Due." New York Times. Last modified September 7, 1974. Accessed July 29, 2020. https://www.nytimes.com/1974/09/07/archives/a-multibillion-purchase-of-treasury-issue-due-saudi-arabia-plans-to.html.
- ---. "U.S. Aides in Saudi Arabia Study Sales of New Arms." New York Times. Last modified November 2, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/11/02/archives/usaides-in-saudi-arabia-study-sales-of-new-arms-kuwait-has-similar.html?searchResult-Position=44.
- ---. "U.S. Role Grows in Arming Saudis." New York Times. Last modified September 11, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/09/11/archives/u-s-role-grows-inarming-saudis-it-seeks-to-keep-lucrative-position.html?searchResultPosition=1.
- Parker, John B. "U.S. Farm Exports Benefit as Saudi Arabia's Oil Income Soars." Foreign Agriculture: Weekly Magazine of the United States, July 8, 1974, 2-5.
- Quinn, Andrew. "U.S. announces \$60 billion arms sale for Saudi Arabia." Edited by Sandra Maler. Reuters. Last modified October 20, 2010. Accessed May 26, 2020. https://www.reuters.com/ article/us-usa-saudi-arms/u-s-announces-60-billion-arms-sale-for-saudi-arabia-idUS-TRE69J4ML20101020.
- Reif, Rita. "Saudis Give Americans Key Role in Construction." New York Times. Last modified June 22, 1975. Accessed May 25, 2020. https://www.nytimes.com/1975/06/22/archives/saudis-give-americans-key-role-in-construction.html?searchResultPosition=1.
- "Saudi Arms Needs Surveyed by U.S." New York Times. Last modified October 19, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/10/19/archives/saudi-arms-needs-surveyed-by-us.html?searchResultPosition=64.
- "Saudi King Assails Critics Of Nixon's Peace Policies." New York Times. Last modified June 16, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/06/16/archives/saudi-king-assails-critics-of-nixons-peace-policies.html?searchResultPosition=3.
- "Saudis Announce a Record Budget." New York Times. Last modified July 21, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/07/21/archives/saudis-announce-a-record-bud-get.html?searchResultPosition=63.



- "Saudis Cut Oil Output 10% To Put Pressure on U.S." New York Times. Last modified October 19, 1973. Accessed May 25, 2020. https://www.nytimes.com/1973/10/19/archives/saudis-cut-oil-output-10-to-put-pressure-on-us-saudi-arabia-cuts.html.
- "SAUDIS WANT 51% OF ARAMCO NOW." New York Times. Last modified November 20, 1973. Accessed April 10, 2020. https://www.nytimes.com/1973/11/20/archives/saudis-want-51-ofaramco-now-sheik-confirms-stand-figures-reported.html.
- "Simon Has Meeting With Saudi King On Investing in U.S." New York Times. Last modified July 21, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/07/21/archives/simonhas-meeting-with-saudi-king-on-investing-in-us-zaki-foresees.html?searchResultPosition=15.
- Smith, William D. "The Arab Oil Weapon Comes Into Play." New York Times. Last modified October 1973. Accessed March 31, 2020. https://www.nytimes.com/1973/10/21/archives/the-arab-oil-weapon-comes-into-play-arab-oil-weapon.html?searchResultPosition=4.
- Sulzberger, C.L. "Of Time And a River Of Oil." New York Times. Last modified July 28, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/07/28/archives/of-time-and-a-riverof-oil.html.
- "Transcript of Telephone Conversation Between President Nixon and Secretary of State Kissinger." October 6, 1973. Accessed May 25, 2020. https://history.state.gov/historicaldocuments/ frus1969-76v25/d104.
- "Treasury Weighs Saudi Investing." New York Times. Last modified June 19, 1974. Accessed May 25, 2020. https://www.nytimes.com/1974/06/19/archives/treasury-weighs-saudi-invest-ing-talks-with-nation-cited-on-possible.html?searchResultPosition=51.
- "U. S. Falls to No. 2, Behind the Saudis, In Crude-Oil Output." New York Times. Last modified July 4, 1974. Accessed July 30, 2020. https://www.nytimes.com/1974/07/04/archives/u-s-fallsto-no-2-behind-the-saudis-in-crudeoil-output-benchmark.html.
- Wicker, Tom. "Grim Thoughts From the 'Gas' Line." New York Times. Last modified February 19, 1974. Accessed April 10, 2020. https://www.nytimes.com/1974/02/19/archives/grim-thoughts-from-the-gas-line-in-the-nation.html.
- Yamani, Ahmed Zaki. "Denmark Interview." AP Archive. Accessed March 31, 2020. http://www. aparchive.com/metadata/youtube/e3c5607062c77af0112afc7003f637cd.

#### Secondary Sources

Adelman, M.A. "The First Oil Price Explosion 1971 - 1974." Last modified May 1990. pdf.

- Allan, Elizabeth. "The Yemen Resolution and the Historical U.S.-Saudi Security Relationship." Lawfare. Last modified April 25, 2019. Accessed March 31, 2020. https://www.lawfareblog. com/yemen-resolution-and-historical-us-saudi-security-relationship.
- Alvarez, Lizette. "Britain Says U.S. Planned To Seize Oil In '73 Crisis." New York Times. Last modified January 2, 2004. Accessed July 30, 2020. https://www.nytimes.com/2004/01/02/world/ britain-says-us-planned-to-seize-oil-in-73-crisis.html.
- Angelova, Kamelia, and Rob Wile. "AMERICA OUT OF GAS: Unreal Images From The 1973 Oil Crisis." Business Insider. Last modified October 3, 2013. Accessed April 10, 2020. https://www. businessinsider.com/1973-oil-crisis-photos-2013-10.
- Bini, Elisabetta, Giuliano Garavini, and Federico Romero. Oil Shock: The 1973 Crisis and Its Economic Legacy. London ; New York: I.B. Tauris, 2016.
- "The Bretton Woods Conference, 1944." US Department of State Archive. Accessed April 10, 2020. https://2001-2009.state.gov/r/pa/ho/time/wwii/98681.htm.
- Colgan, Jeff. Petro-aggression: When Oil Causes War. Cambridge: Cambridge University Press, 2013.
- Collins, Shannon. "Desert Storm: A Look Back." U.S. Department of Defense. Last modified January 11, 2019. Accessed May 26, 2020. https://www.defense.gov/Explore/Features/story/Ar-



ticle/1728715/desert-storm-a-look-back/.

- Corbett, Michael. "Oil Shock of 1973-74." Federal Reserve History. Accessed May 25, 2020. https://www.federalreservehistory.org/essays/oil\_shock\_of\_1973\_74.
- Diamond, Jeremy, and Barbara Starr. "Trump's \$110 billion Saudi arms deal has only earned \$14.5 billion so far." CNN. Last modified October 13, 2018. Accessed May 26, 2020. https://www.cnn.com/2018/10/12/politics/trump-khashoggi-saudi-arabia-arms-deal-sanctions/index. html.
- Editors, CFR.org. "U.S.-Saudi Arabia Relations." Council on Foreign Relations. Last modified December 7, 2018. Accessed May 25, 2020. https://www.cfr.org/backgrounder/us-saudi-arabia-relations.
- "Fortune 500 1974 Full List." Fortune 500. Accessed May 25, 2020. https://archive.fortune.com/magazines/fortune/fortune500\_archive/full/1974/.
- Frankel, Glenn. "U.S. mulled capture of Arab oil fields in '73, memo says." Chicago Tribune. Last modified January 1, 2004. Accessed March 31, 2020. https://www.chicagotribune.com/ news/ct-xpm-2004-01-01-0401010215-story.html.
- Gross, Samantha. "The 1967 War and the 'oil weapon." Brookings. Last modified June 5, 2017. Accessed July 18, 2020. https://www.brookings.edu/blog/markaz/2017/06/05/the-1967-war-and-the-oil-weapon/.
- "A Guide to the United States' History of Recognition, Diplomatic, and Consular Relations, by Country, since 1776: Saudi Arabia." Office of the Historian. Accessed May 25, 2020. https:// history.state.gov/countries/saudi-arabia.
- "The Gulf War, 1991." Office of the Historian. Accessed May 26, 2020. https://history.state.gov/milestones/1989-1992/gulf-war.
- "Historical Vignette 065 Middle East Division's Extensive Construction Program." US Army Corps of Engineers. Accessed April 2, 2020. https://www.usace.army.mil/About/History/ Historical-Vignettes/Military-Construction-Combat/065-Middle-East-Division/.
- Hitti, Said H., and George T. Abed. The Economy and Finances of Saudi Arabia. N.p.: International Monetary Fund, 1974.
- Jensen, Michael C. "U.S. Arms Exports Boom, Particularly to the Mideast." New York Times. Last modified April 14, 1975. Accessed July 30, 2020. https://www.nytimes.com/1975/04/14/archives/us-arms-exports-boom-particularly-to-the-mideast-orders-at-record.html.
- Kaiser, Robert G., and David Ottaway. "Oil for Security Fueled Close Ties." The Washington Post. Last modified February 11, 2002. Accessed March 5, 2020. https://www.washingtonpost. com/archive/politics/2002/02/11/oil-for-security-fueled-close-ties/fdf1f123-214f-41b3a53c-a5e687c648e7/.
- Keefer, Edward Coltrin. Energy Crisis, 1969 1974. Washington: United States Government Printing Office, 2011.
- McMaken, Ryan. "Huge Debt Got Us Hooked on Petrodollars and on Saudi Arabia." Mises Institute. Last modified January 14, 2020. Accessed May 25, 2020. https://mises.org/wire/hugedebt-got-us-hooked-petrodollars-%E2%80%94-and-saudi-arabia.
- "Member Countries." Organization of Petroleum Exporting Countries. Accessed May 25, 2020. https://www.opec.org/opec\_web/en/about\_us/25.htm.
- Mieczkowski, Yanek. Gerald Ford and the Challenges of the 1970s. Lexington, Ky.: University Press of Kentucky, 2005.
- "1948: A Cause for Unity?" Al Jazeera. Last modified july 11, 2008. Accessed July 25, 2020. https://www.aljazeera.com/focus/arabunity/2008/02/2008525185128450467.html.
- "The 1973 Arab-Israeli War." Office of the Historian. Accessed April 10, 2020. https://history.state. gov/milestones/1969-1976/arab-israeli-war-1973.
- "Nixon and the End of the Bretton Woods System, 1971–1973." Office of the Historian. Accessed



April 10, 2020. https://history.state.gov/milestones/1969-1976/nixon-shock.

- Nojeim, Michael J., and David P. Kilroy. Days of Decision: Turning Points in U.S. Foreign Policy. Washington, DC: Potomac Books, 2011.
- "The October Arab-Israeli War of 1973: What Happened?" Al Jazeera. Last modified October 8, 2018. Accessed March 5, 2020. https://www.aljazeera.com/indepth/features/2017/10/arab-israeli-war-of-1973-what-happened-171005105247349.html.
- "Oil and petroleum products explained." Chart. U.S. Energy Information Administration. Accessed May 26, 2020. https://www.eia.gov/energyexplained/oil-and-petroleum-products/ imports-and-exports.php.
- "Oil Embargo, 1973 1974." Office of The Historian. Accessed December 19, 2019. https://history. state.gov/milestones/1969-1976/oil-embargo.
- "Our History." US Army Corps of Engineers. Accessed April 2, 2020. https://www.tam.usace.army. mil/About/History/.
- Penney, Matthew T. "Intelligence and the 1973 Arab-Israeli War." Last modified December 10, 2012. pdf.
- "The Prize Chapter 28: The Hinge Years Countries versus Companies." Penn State College of Earth and Mineral Sciences. Accessed May 25, 2020. https://www.e-education.psu.edu/ egee120/node/276.
- "Saudi Arabia Travels of the President." Office of the Historian. Accessed May 25, 2020. https:// history.state.gov/departmenthistory/travels/president/saudi-arabia.
- "Shuttle Diplomacy and the Arab-Israeli Dispute, 1974–1975." Office of the Historian. Accessed April 10, 2020. https://history.state.gov/milestones/1969-1976/shuttle-diplomacy.
- Stewart, Phil, and Idrees Ali. "U.S. says deploying more forces to Saudi Arabia to counter Iran threat." Reuters. Last modified October 11, 2019. Accessed May 26, 2020. https://www.reuters.com/article/us-saudi-aramco-attacks-exclusive/u-s-says-deploying-more-forces-tosaudi-arabia-to-counter-iran-threat-idUSKBN1WQ21Z.
- "244. Editorial Note." Office of the Historian. Accessed May 25, 2020. https://history.state.gov/ historicaldocuments/frus1969-76v36/d244.
- "237. Editorial Note." Office of the Historian. Accessed April 10, 2020. https://history.state.gov/ historicaldocuments/frus1969-76v36/d237.
- "U.S. Imports from Saudi Arabia of Crude Oil." Chart. U.S. Energy Information Administration. Accessed May 25, 2020. https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=M-CRIMUSSA2&f=M.
- "US Imports of Crude Oil." Chart. US Energy Information Administration. Accessed March 5, 2020. https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrimus1&f=a
- Wambold, Adam. "Operation Nickel Grass: Turning Point of the Yom Kippur War." Richard Nixon Foundation. Last modified October 8, 2014. Accessed July 25, 2020. https://www.nixonfoundation.org/2014/10/operation-nickel-grass-turning-point-yom-kippur-war/.
- Watkins, Thayer. "The Recession of 1973-75 in the U.S." San José State University Department of Economics. Accessed May 25, 2020. https://www.sjsu.edu/faculty/watkins/rec1974.htm.
- Williams, Joseph A. "When Truckers Shut Down America to Protest Oil Prices-and Became Folk Heroes." History. Last modified January 15, 2019. Accessed April 10, 2020. https://www.history.com/news/oil-crisis-1973-truck-strike.
- "The Yom Kippur War (October 1973)." Israel Ministry of Foreign Affairs. Accessed July 18, 2020. https://mfa.gov.il/mfa/aboutisrael/history/pages/the%20yom%20kippur%20war%20 -%20october%201973.aspx.



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## The Seeds of the Civil War

#### Author-Aaron Matthews '22 Section-Research Papers

As time progressed in the pre-war United States, a wedge of division buried itself deeper and deeper into the Union. The issue of slavery, its morality, and its legal existence erupted between the North and the South with little middle ground. The economies of the North and South also continued to diverge, as the North concentrated on industry and manufacturing, while the South remained fixated on cotton and agriculture. The North progressed to factories and modernized cities, and the South sustained a substantial dependence upon slavery as an institution to bear the weight of their agricultural economy. No longer contingent upon each other to stimulate economic growth, this growing apart set the stage for complete polarization. With power always up for grabs, control of the federal government was uncertain. The Compromise of 1850 represents the point of no return for America, at which point civil war became unavoidable. Many elements of the relationship (or lack thereof) between the northern and southern regions deteriorated the state of Union to the point where civil war became certain: the purely social divisions between the North and South, legal conflicts such as the Compromise of 1850 and the Fugitive Slave Law, and finally, secession itself.

Broadening the extent of social division in America, the influence of various anti-slavery societies in the North and the controversial Supreme Court Case, Dred Scott v. Sanford of 1857, brought forth the imminence of civil war, or in the very least regional conflict. Anti-slavery societies in the North, such as the American Anti-Slavery Society, exemplified one end of the spectrum on abolition. The abolitionist society, founded by a newspaper publisher by the name of William Lloyd Garrison in 1833, promoted the instantaneous emancipation of slaves throughout the United States. The Society directly contended with other American attitudes of the time, such as William A. Smith, a clergyman and college

president who endorsed the notion of slavery on account of strictly racial reasonings. At the Society's founding meeting in 1833, members professed that all slaves should be granted the identical rights in all walks of life as White men. The abolitionist belief grew popular among the North and illustrated a Southern "enemy," and only five years after the founding of the Society, it had amassed over 250,000 members across 1,350 chapters.

Conversely, the Supreme Court's inflammatory decision in the 1857 case, Dred Scott v. Sanford, embodies an opposing view of the rights and powers of Southern slave owners. The verdict discredited the Missouri Compromise of 1820, federal legislation that had bottled up issues on slavery (and runaway slaves) for over a generation. This progressively reinforced steadfast positions on both sides. The Supreme Court decision, an unanticipated triumph for the South, maintained that because slaves were private property, they could be taken into any territory and lawfully detained there in slavery even in the North. This blow upon Northern sovereignty reasoned that the 5th Amendment prohibited Congress to seize property with the absence of due process of law. The Court even ruled that the Missouri Compromise existed unconstitutionally, and that Congress possessed no power to outlaw slavery from territories. Described as a "lethal wedge between North and South," Dred Scott infringed upon the rights and sovereignty of the North, and implied that free states of the North are not actually free, as slave owners may capture and return slaves back to the South. Social division, ubiquitous in the years leading up to the Civil War, drove a wedge between the already splintered relationship of the Northern and Southern territories, conducting the path towards the looming War.

The Compromise of 1850 and the Fugitive Slave Law symbolized the tipping point in America's struggle over the polarizing issue of slavery. Civil war became inevitable when the most basic interests of the North and South became to undermine the other. The Compro-

mise of 1850, an attempt to resolve the intensifying challenge of slavery, largely failed in its purpose and garnered negligible support in both the North and the South. The Compromise welcomed California as a free state, upsetting the balance in the Senate against the South. Utah and New Mexico became open to slavery under the regulations of popular sovereignty. In arguing against the Compromise of 1850, Senator John C. Calhoun of South Carolina stated that if they could not settle, then the Senate should let the states agree to separate and part in peace. To this, Daniel Webster of Massachusetts responded that "there can be no such thing as peaceable secession." With settling out of the picture, only one option lingered in the air, and Webster made his case abundantly clear. He specified that the secession Calhoun had mentioned would produce "such a war as I will not describe." The Compromise of 1850 marked an unwillingness of the North and South to cooperate, leaving one option to be inevitable: War.

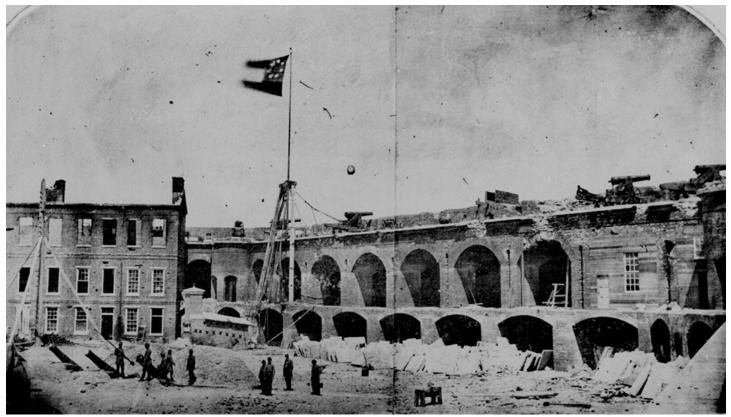
Furthermore, the Fugitive Slave Law, an element of the Compromise, triggered significant hostility and opposition in the North to any form of future compromise. The law established extreme punishment for those who provided assistance to fugitive slaves. It also required all law enforcement officers to engage in capturing fugitive slaves in free states, and once captured, the law denied these slaves not only the right to testify on their own behalf, but also the right to a jury trial. This dramatic act bolstered the antislavery cause in the North, compelling moderates to join the cause as well. Moreover, the act set a dangerous precedent for abolitionist Northerners who aid the escaping of slaves, or who refuse to aid slave-catchers, as they became subject to hefty fines and jail sentences. The Compromise of 1850, merely a metaphorical bandage on the wounds stricken by slavery, did not by any means heal the problem and at best extended the tense peace for a few more years. Stirring up division, the Compromise only delayed the very civil war it had rendered inescapable, as only two options resulted: settling, or war.

After decades of havoc wreaked upon the Union by social and legal divisions, the secession of 11 Confederate states embodied the last nail in the coffin of unity, thereby deeming civil war inevitable. Commencing with the secession of South Carolina on December 20th, 1860, 11 states would also continue ahead with secession in the next six months. In President Lincoln's inaugural address, he vowed that secession remained to be entirely unreasonable, as the country could not physically divide or split. There did not exist any opportunity to turn back once states had seceded, and a "geological truth" stood to cause controversies as well. Though war didn't begin with secession, the issues of debt, federal buildings, and American military on Confederate "territory" made conflict certain. Furthermore, secession also epitomized the idea that state rights reigned supreme within the Union when the truth was a balance of power. Allowing states to secede would have set a dangerous precedent, and drastically weaken the recently-bolstered federal government. The Southern states seceded nonetheless. as the Southern economy couldn't function without slavery. The idea of "King Cotton" in the South represented how cotton and slavery were woven into the Southern economy. As a result, the inevitable began to occur; the federal government's Fort Sumter, in Charleston Harbor, maintained provisions that would last just a few weeks. Lincoln was forced to make a difficult decision to restock the Fort and undeniably face the South Carolinians in an attack against a federal fort. Lincoln sent Union troops to maintain provision in the fort, where Confederate soldiers fired the first shots of America's bloodiest war to date. Following decades of disunity due to social and legal divisions, the secession of 11 Southern states proved to be the finishing blow.

Several influences debilitated the Union to a point where the likelihood of a civil war proved to be undeniable: Social divisions between the North and South, legal divisions including the Compromise of 1850 and the Fugitive Slave Law that was ratified with it, and lastly, the act of secession. While it is ob-



vious that the seeds of conflict and war were sown long before 1861, the question that must be addressed if civil war was ever genuinely inevitable (or when in American history the tides could have turned to peace). In the grand scheme of the relationship between the North, South, and Slavery, war could have very easily been avoided if addressed earlier in history. Slavery remained the foremost catalyst in the schism between North and South. If the South could have weaned off of their reliance on slaves and the idea of "King Cotton" (and perhaps followed the North into an industrial economy), the Civil War may not have occurred. Even something simple such as if the cotton gin was never invented would have forced the economic end of slavery as a profitable institution. Nonetheless, slavery persisted, and with it, unrest in the Union. The seeds of war were planted, and with the Compromise of 1850, they began to poke their stems out from under the soil. With secession and the attack on Union soldiers replenishing Fort Sumter with supplies, the Civil War began.



Fort Sumter in April 1861 flying the Confederate Flag after the attack

National Park Service

# **Destined or Decisive: French Revolution**

### Author-Quinn Healey '23 Section-Research Papers

The French Revolution in 1789 marked a dramatic shift in European history. Since most other nations at the time were ruled by an absolute or constitutional monarchy, the revolution set a new precedent for radical change. Prior to the revolution, France was also ruled by a monarchy. From 1589 to 1610, Henry IV governed the state. Being a politique, Henry followed the will of the people, but lacked complete control over the country due to the devastation from the war of the Three Henrys and other civil conflicts. This limitation of state sovereignty shifted, however, when the minister of Louis XIII, Cardinal Richelieu, took control. Richelieu removed power from the nobles and other groups, centralizing the monarch's power and laying a path for French Absolutism. King Louis XIV later followed this road by augmenting Richelieu's reforms and becoming an absolute monarch. Upon the reign of Louis XV and Louis XVI, however, a lack of substantive reforms and financial decisions led to a loss of monarchical power and ultimately the French Revolution. With the revolution marking a dramatic change in the course of European history, many historians have written contrasting views about the cause of the uprising. In his book War and Peace, Leo Tolstoy argues his belief in determinism, explaining that major events in history, such as the French Revolution, are predestined to occur based on past actions. Conversely, Thomas Carlyle, in his novel On Heroes, Hero-Worship and the Heroic in History, lobbies that the course of history is shaped by decisive rulers and their reforms. While Tolstoy's belief in the inevitability of history aligns with France's destiny for a revolution and rise of a powerful leader in Maximilien Robespierre, Carlyle is also correct in the sense that Robspierre's decisive reforms shaped the immediate course of the Revolution.

Originating with Cardinal Richelieu, France's poor financial decisions led to an un-

avoidable economic crisis. After accumulating much debt from the destructive 30 Years War, Cardinal Richelieu and later Cardinal Mazarin struggled to find ways to raise money. The primary cause of this strife was the archaic privilege that allowed the nobles to avoid taxation. Since tax at the time was collected based on land and income, the accumulated privilege led the government to lack a large portion of revenue that could have been used to further centralize the state. In essence, the privilege of the nobles weakened the state's ability to pay for armies and increase sovereignty. Later in the seventeenth century, King Louis XIV further added to the debt through many unnecessary wars. With the idea of conquering as the highest character of a ruler, Louis continued to fight, though extending the state's borders minimally. In order to control the nobles, Louis XIV forced them to live at Versailles, however the upkeep of this palace also accumulated debt. Under Louis XV, the War of Austrian Succession and 7 Years War brought debt levels to an extreme, servicing the debt to nearly 50% of the state's budget. With another quarter of the state's money going to the military and 6% to Versailles, France was left with only 19% for other matters. The poor, at this time, faced the heaviest burden, as they struggled to sustain themselves because of the significant tax to both the church and the state, roughly cutting their earnings in half. With a firm reliance on agriculture to survive, a tipping point for the peasants was destined to occur. The simmering frustration and desire for change came in 1788, when a famine escalated the prices of bread and increased unemployment. This inevitable occurrence led to a hunger for revolution among the poor.

King Louis XVI's power was also destined to decay because of previous inadequate reforms. Beginning in the seventeenth century, Louis XIV forced the nobles to live at Versailles, and centralized his power without dissent. In the following century, however, the regents of Louis XV released the nobles from Versailles, setting up the French Monarchy for failure. Although Louis XV was able to assert his absolute authority over the courts, his predecessor did not share the same authoritative personality. Louis XVI instead desired popularity and love from the people, thus giving in to the Paris Parliament and losing his control over the nobility. With no say in the courts, Louis XVI resorted to calling an Estates General to address the state's debt problem. The event itself reflected weakness in the king, as the last Estates General was called in 1614 before the absolute monarchy. Moreover, the French estates had dramatically changed since the previous event, as the wealth divisions among classes were no longer accurate. Upon convening in 1788, Louis XVI proposed a tax on all property including the nobles and clergy who were exempt from tax at the time. This plan seemed futile however, because with the new block voting system, Louis XVI needed two estates to vote in his favor. After a deadlock in voting, the merchants of the 3rd estate, or Bourgeoisie, desiring equality before the law, decided to take action and created their own National Assembly. Without the clergy, nobles, or peasants on his side, and a personality based on popularity, the king inevitably succumbed to the assembly.

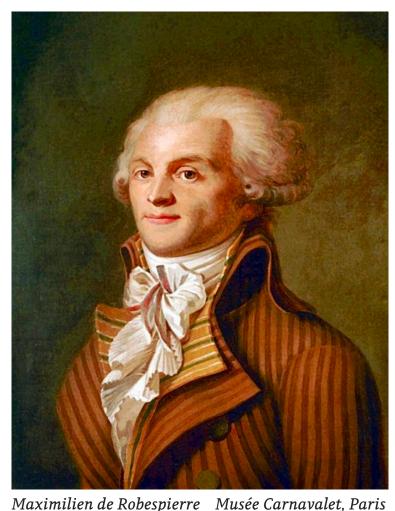
Although the National Assembly instituted many classical liberal ideas and appeared to claim power from the king, the urban poor, or sans-culottes, had the most power and desired radical reform. In the Great Fear of 1789, the sans-culottes burned the houses of many nobles because of their dislike towards feudalism, the price of bread, and gamelaws. This aggressive act demonstrated the urban poor's strength in numbers as they forced the nobles to flee the country and unofficially ended feudalism. A few years later, on August 10 of 1792, the sans-culottes further displayed their capability as they stormed the Tuileries Palace, leading to the suspension of the king. With such power, it was destined that the radical ideas of the sans-culottes would prevail. At the National Convention the more radical Mountain party was able to arrest the Girondists because the Montagnards had the sans-culottes on their side. Now with this new radical party in power, it was

inevitable that a leader of the sans-culottes would emerge to maintain their ideological rule. Since there were many enemies to the radical beliefs of the sans-culottes both within France and among other European countries, the leader would require supreme authority to make quick decisions and overcome the internal and external enemies. In this case, Maximilien Robespierre surfaced as the leader of the Committee of Public Safety, essentially a dictator. Although his rise to power was predestined, Robespierre's reforms were decisive and beyond what was expected.

Maximilien Robespierre shaped the course of the revolution through his many and radical reforms, including his control over the economy. As a great admirer of Rousseau, Robespierre viewed the division of labor as inequality. Thus, the Maximum Prices Edict set maximum bread prices, capped wages, and allowed the government to control who worked where and when. By managing jobs, Robspierre was able to limit the power of the internal enemies, or Royalists. The government also rationed food for the benefit of the sans-culottes, as they had the most power. To emphasize fairness, Robespierre instituted 'the bread of equality', forcing all people to eat the same bread. By nationalizing industries and controlling the economy, Robespierre decisively veered away from the French Revolution idea of classical liberalism and towards a socialist society. New to Europe, this socialist society helped Robespierre maintain his power and continue the revolution.

In 1794, Robespierre boldly created a Republic of Virtue with a new religion and calendar, ultimately leading to his demise. Catholicism was eradicated from France and the Worship of the Supreme Being took its place. This new religion believed in a supreme being that washed up on Earth, similar to Deism. Additionally, the new, more rational calendar was made to correspond with the religion, as it marked a new beginning and did away with the Catholic names of months and holidays. Robespierre saw the new religion and calendar as a supplement to the government's radical change and a way to centralize the beliefs of the people. The Worship of The Supreme Being differed greatly from Catholicism because of its focus on supporting Robespierre over the religion itself. Both the religion and calendar were unpopular with the peasants who preferred the traditional structure of Catholicism, with a rest day on Sunday and many festivals throughout the year. These reforms, although unexpected, were not the most radical of Robespierre's ideas.

While Robespierre's initial role on the Committee of Public Safety was to make quick decisions against foreign powers and royalists, he vehemently dramatized this idea and began to crush his own internal enemies. By instituting the Law of Suspects, Robespierre allowed anyone who was suspected of not supporting the revolution to be arrested. Additionally, the Law of 22 Prairial II permitted group trials because individual trials could not keep up with the demand. To promote more convictions. verbal evidence



verbal evidence Maximilien de Robespierre was accepted in the jury and the sans-culottes often served as the judge. The Guillotine was also invented in this period to allow for quicker executions. Robespierre used this system to eliminate several of his political enemies including Jacques Hebert, a more radical voice of the urban poor, and a conservative, Jacques Danton. At the time, Danton opposed Robespierre's ascension to absolute power and many of his reforms, including the Republic of Virtue. Robespierre thus saw it necessary to eliminate Danton before he gained more

followers. However, both the mass trials and killing of individual enemies, received severe backlash from the public. On July 27th, 1794, while delivering a speech about more power for conviction, Robespierre was shouted down and later arrested and killed. This day, known as the Thermidorian Reaction, thus marked the end of Robespierre's rule over France.

In conclusion, Leo Tolstoy is correct about the inevitability of the French Revo-

lution because the many poor financial decisions and reforms by the monarch set up for a rise of the sans-culottes, change of power, and many radical reforms. Thomas Carlyle, however, instead believing that Robspierre alone shaped history, was also accurate in the sense that Robespierre's control of the economy, Republic of Virtue, and devastation of internal enemies, may not have occurred with a different ruler. In the end, while Carlyle's beliefs may more precisely reflect Robespierre's role in the revolu-

tion, Tolstoy is more accurate about the entire history of France. A revolution swings from left to right like a pendulum, and although Robespierre may have swung the pendulum a little farther to the left, it quickly went back to the right with the conservative Directory soon taking power. While Carlyle would argue that Robespierre's terrorizing legacy lingered among the French people, Tolstoy believed that Robespierre's reign was just another step in the inevitable chain of history.

# **China's Environmental Crisis**

#### Author-Duncan Kilbride '24 Section-Research Papers

China is one of the largest countries in the world. Not just in landmass, but also with the population. The driving issue with a large population is pollution. Pollution is not only harmful to humans, but also the natural world. This includes animals, bodies of water, and even the very air integral to everyone's survival. China has set itself a precedent of destruction and disregard for the human race' and the planet.

China has suffered environmental issues for centuries. Back in the dynastic days, rulers would horde many of China's plentiful natural resources and use them to promote economic growth over ecological preservation.<sup>1</sup> Issues with China's environment only recently became seriously noticed in 1972, at the first United Nations Conference on the Human Environment (also known as the Stockholm Conference).<sup>2</sup> It was a revolutionary meeting because the conference was the first major international environmental gathering and made the environment important to countries around the world. Now with most major powers in the world focusing on the climate, China was pressured to create environmental institutions in an attempt to halt their drastic climate damage. Chinese clear omission of this led many countries to criticize and disapprove of China.<sup>3</sup> Yet despite all of this, China's institutions failed for the most part, and laws were passed encouraging economic development over the environment. The problem worsened Chinese leader of the time, Deng Xiaoping, passed more power to provinces and local governments.<sup>4</sup> These provincial governments were called township and village enterprises (TVEs). TVEs made up a third of China's annual GDP and thus were integral to China's growing economy. The reason for their success was these groups focused deliberately on the economy over the environment, and since the TVEs have little federal overview, they got away with many terrible acts against the environment.⁵

China has undergone a vast amount of environmental degradation in the past thirty years. Issues like desertification (people require a great deal of farmland to be fed, so forest were cut down in bulk), lack of biodiversity (lots of poaching against animals like tigers and shark), and steep population growth (lots of people need lots of resources like cars, energy, food, etc.)<sup>6</sup>. Despite the numerous problems China faces, these are little compared to China's air pollution and water contamination.

Air quality has been a well-known and little addressed environmental issue throughout China's cities. This severely affects the highly populated urban centers of China like Beijing, the nation's capital. The Chinese Communist Party (CCP) has yet to effectively deal with this causing anger among the millions of residents young and old who suffer and some call it "an air pollution catastrophe."<sup>7</sup> The Environmental Protection Agency's air quality scale is a form of rating of air quality using numbers. A score of 300 or more is very dangerous. In Beijing, there was a time where the air was worse than a 300 score.<sup>8</sup> Reports claim 500 is no longer an unusual rating, and the highest reporting has been upwards of 886. China's massive manufacturing industry is partially blamed because of all the factories releasing chemicals into the air near densely populated areas.9 A report from the World Bank estimates that 1% of the 560 million people in China living in cities breathe safe air by EU measurements.<sup>10</sup> Gas-powered cars are also a significant contributor to air quality because so many are in use at a given time. Estimates suggest cars produce about 12% of China's air pollution.<sup>11</sup> The most magnanimous part though is the energy production industry. China burns a lot of coal which is extremely cheap and relatively effective, but horrendous for the environment and the air. China's coal-burning produces 58% or more of its energy. This scale of burning releases incredible amounts of carbon dioxide into the atmosphere.<sup>12</sup>

China's water pollution is just as bad as

its air. Although water pollution is a considerable issue for China, it is not as palpable as air pollution making it more difficult to quantify. But still some studies have shown half of China's surface water is so contaminated that it cannot even be treated to be safely consumable.<sup>13</sup> Another study shows that a quarter is unable to be used for industrial purposes. The underground water supply in China is worse with 90% being somewhat polluted.<sup>14</sup> 50% of China's population cannot find or use clean water and 60% of the rural population consistently rely on dangerously tainted water. Water pollution is widely ignored by the CCP and outside countries because it is not as visible as air pollution. The widespread pollution is from unchecked factories pouring their excess waste into neighboring rivers and lakes and fertilizer used in farms which mix with the underground water.<sup>15</sup> Another startling percentage from China Water risk says, "...while being home to roughly 20% of the world's population, China only has 7 percent of the world's fresh water reserves."<sup>16</sup> Water pollution should be a key issue for the CCP, but not enough is yet known or released to the public to understand it for sure.

The overarching reason for China's rampant pollution is its rapid industrialization. As mentioned earlier, the Chinese government focused primarily on economic growth to keep up with the western powers. This led to a hundred years of revolution in only thirty years time. China's rapid industrialization was not all bad as it pulled 600 million Chinese out of poverty. The GDP also increased by 540% (150 billion dollars (1978) to 8,227 billion dollars (2012)). China demonstrated remarkable economic prowess after years of turmoil (Ten Lost Years).<sup>17</sup> The cause that allowed China to achieve this is its immense population ("...the contribution of labor to GDP growth is decreasing. It contributed 1.4 percentage points of GDP growth in 1979-1989, 0.5 percentage points in 1990-2002, and 0.3 percentage points in 2003-2012.") and an increase in capital accumulation ("Capital accumulation accounted for 6.9 percentage points of the 10.5 percent average annual increase in

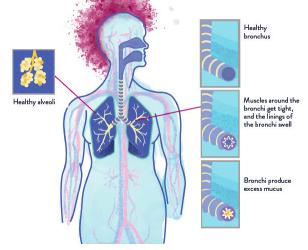
GDP in the last decade, 5.7 percentage points of the 10.1 percent average annual increase in GDP in 1990 to 2002, and 7.2 percentage points of the 9.7 percent average annual increase in GDP in 1979 to 1989.").<sup>18</sup> The one-child policy that was instituted in the later years of China's industrialization critically slowed this advantage because fewer children were being born while the former working-class retired, creating an imbalance. China is also a country in which almost everything is dependent on the CCP. This was evident during the 2008 recession. The government invested four trillion dollars into China's economy to keep it afloat and it worked. But this kind of funding and hand-holding is unsustainable. It requires too much money and companies become reliant on government backing.<sup>19</sup> China's rapid industrialization had many benefits to its population and economy, but was unchecked and moved too fast which provided many cracks like environmental issues and independent economic recovery.

Air pollution is mostly created in China by massive coal burning plants and affects people living near them the most. The pollution is usually formed by a combination of solid particles like soot and gases like carbon dioxide.<sup>20</sup> Both are byproducts of coal factories. A specific kind of air pollution which is prevalent in China is called smog. Smog is a particularly dangerous kind of air pollution and is especially harmful to people with pre-existing repository issues. It is formed by a certain gas (usually in cities) called Ozone. Ozone is made by sunlight reacting with another gas called Nitrogen Oxide. Smog is usually found in big cities and appears as smoke and is very hazy.<sup>21</sup>

Air pollution like smog can cause many health problems to humans in hazardous conditions. Extended time in heavily polluted areas will cause many serious issues all over the body. The most obvious group of organs at risk are the respiratory system.Breathing in polluted air irritates airways from your nose and mouth and this causes muscles constrict around airways. Too much mucus is produced and the airways begin to swell.<sup>22</sup> It can be compared to an asthma attack. Polluted air makes

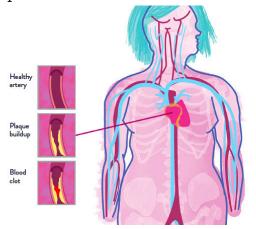


infections worse, lungs weaker, and smaller airways so less air coming into the body, this hampers the lungs ability to filter air, so the effects only worsen over time. Some common diseases and issues located in the respiratory area from air pollution are frequent asthma attacks, more infections in the throat, decreased airflow, excess mucous, and lung cancer.<sup>23</sup>

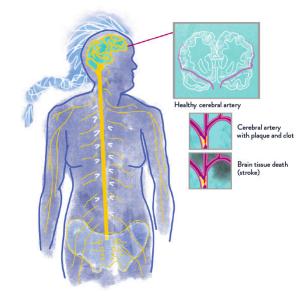


#### Figure 1<sup>24</sup>

While the lungs get most of the attention when pondering air pollution health complications, the heart is at risk as well. It is highly susceptible to damage from pollution because after polluted air is put into blood from lungs, the blood gets pumped into the heart.<sup>25</sup> The contaminated blood can lead to irregular heartbeats which makes plaque fall off the walls of veins and build up blocking proper blood flow. Irregular heartbeat (arrhythmia), heart attacks, systemic inflammation, and blood clots are all typical from exposure to air pollution.<sup>26</sup>



Following the heart, the brain is next to experience the impact of air pollution. The quality of blood flow from unhealthy heart and blood clots damages the brain. Polluted blood gets directly into the brain and can induce mental difficulties like anxiety and headaches.<sup>28</sup> Tiny particles of air pollution that enters the brain through the nose or eyes can be linked to dementia (unsure about direct connection) and damages cognitive functions. Strokes, headaches, anxiety, reduced IQ, and behavioral problems are all brain issues stemming from air pollution.<sup>29</sup>

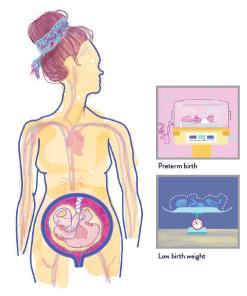


#### Figure 3<sup>30</sup>

While everyone in polluted districts is at risk, pregnant women, children, and the elderly are most likely to develop more demanding symptoms. Polluted blood causes systemic inflammation and may trigger labor or affect baby development. There is another uncertain link to autism theorised to be from systemic inflammation.<sup>31</sup> Babies born could expect a preterm birth, low birth weight, and systemic inflammation themselves. Children have also been at a particularly high risk from air pollution. Some say it is because children are outside more and breathe faster than adults meaning more polluted air enters their system. Children also have developing lungs which makes them more sensitive to pollution than an adult. The elderly are endangered by air pollution because their aging body is unable to fight back the pollutants. This could

#### Figure 2<sup>27</sup>

trigger pre-existing conditions to act up.<sup>32</sup>



#### Figure 4 <sup>33</sup>

Air pollution effects on health have been studied for years. Although we understand how air pollution is made and the way it interacts with the human body and the environment, little has been done to handle it. One specific case study that adeptly conveys China's obstinance from auspicious dealing with pollution are called "cancer towns". There are 459 recorded instances of this spanning from almost every province in China's mainland.<sup>34</sup> Studies say that residents of these towns are more likely to develop diseases like cancer than national and global standards. Most cases are in close proximity to expansive coal burning plants most likely produces alarming rates of air pollution. Cancer rates in China have in general risen by an estimated 80% in the past 30 years not just from these cancer towns, but an overall increase in frequency from pollution. Coincidentally those were the thirty years China began to pollute more than it had ever. Cancer towns however are still not being dealt with and many local officials repeatedly deny their very existence.<sup>35</sup> While the local governments who are causing these catastrophes reject evidence, the federal government is beginning to concede and admit to. In fact, the Ministry of Environmental Protection mentioned cancer villages in its latest fiveyear plan. Many environmental activists say this a considerable step, but the initial problem remains. Cancer towns represent China's recklessness with their environment as it is a cancer hazard to live in a particular residential district.<sup>36</sup>

China has endured other travesties like cancer towns. Experts claim that 1.6 million deaths or 17% of yearly Chinese deaths are caused by pollution of many varieties.<sup>37</sup> Another place where pollution is pervasive is in Northern China. "Researchers with the Energy Policy Institute at the University of Chicago (EPIC) said average lifespans north of the Huai river, where China supplies mostly coal-fired winter heat, were 3.1 years lower than in the south, which is not covered by the state heating policy.<sup>38</sup> EPIC's study cites long-term smog exposure as a primary cause of the difference." The very thing that was intended to benefit the people ended up killing them. Moreover, the same study saw that 10 micrograms per cubic meter of additional long-term exposure to smog reduces life expectancy by 0.6 year and the national average is 35 micrograms. This research was conducted in 154 cities from 2004 to 2012 all over the country, but anomalies were found mostly in the mentioned zones.<sup>39</sup> Concerned citizens have said, "If a decrease in life expectancy is the consequence of rapid superficial industrial growth, then what is the point?"<sup>40</sup> A vast amount of deaths were cardiorespiratory illnesses which come directly from air pollution.

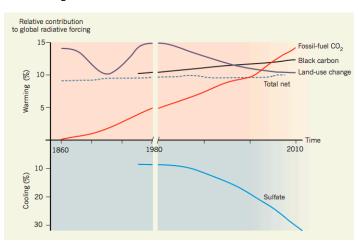
China has earned the title as the most polluted nation in the world. 22 out of the 50 most polluted cities in the world are within China's borders. China also produces the most carbon dioxide out of every single country combined. They surpassed the United States in 2006.<sup>41</sup> The exact measurements in past years have shown this gap. An article from the news website USA Today states that in 2017, the U.S. produced 5,269.5 million metric tons of carbon dioxide while china produced 9.838.8 million metric tons. The difference between the two is almost unquantifiable. But when the data is looked at, American citizens produced 16.2 metric tons per person and Chinese citizens produced half that at (7.1 tons per person). So the numbers offset each other. <sup>42</sup>



#### Figure 5<sup>43</sup>

China's impact on climate change has been revolutionary as well. An organization named Carbon Brief, is dedicated to spreading knowledge and awareness about carbon emission from all countries, suggesting China is responsible for 10% of all climate change. This is astounding becausing China has been involved in releasing emission for a fraction of the time of other western countries. Their contributions have tripled over the past thirty years in which China has been industrializing.44 China was a relatively insignificant emitter until this phase when they entered their industrial era. Even though their additions to global warming are great, they would be noticeably more intense if it were not for their high aerosol count. Many kinds of aerosols absorb sunlight which prevents the heat from even entering the inner atmosphere. China produces a mind boggling amount of these as well, "China is responsible for 28% of the sulphate currently in the atmosphere, 24% of nitrate aerosols and 14% of black carbon." Regrettably for China, though, the aerosols are key factors to air pollution. They are so bad that the U.S. and the E.U. are both trying to limit the number of aerosols China can produce because of their effects on health. But downside to these potential sanctions is global temperature

will rise considerably.<sup>45</sup> Professor Dominick Spracklen, an associate professor of aerosols and climate at the University of Leeds, makes the statement that, "This means that it will be difficult to achieve rapid reductions in nearterm global warming through the control of Chinese air pollutants overall – a focus on greenhouse-gas emissions, in particular, will be required." In conclusion China is in a predicament as the only way to lower their climate change benefaction is to reduce strictly greenhouse gases, before focusing on aerosols and air pollution. <sup>46</sup>



#### Figure 6<sup>47</sup>

The reason China has not already made the speedy switch many other countries are

making now to greener energy sources is of its gargantuan coal industry.. China is by far the largest coal importer and consumer in the world meaning it would be crippling to China's energy grid and the coal world trade if they cut out all coal. There is also a logic to why China commenced and continues to use coal. Coal is cheap and easy to use, so the perfect kick start for their rapid industrialization phase.<sup>48</sup> And China has now built up a dependence on it where hundreds of millions rely on coal burning as a stable energy source. If a switch is to ever come, it will take decades of preparation (building infrastructure) and slow phasing out. It would also take billions or even hundreds of billions of dollars to redirect its population.<sup>49</sup> The coal industry in China will also probably never leave as it is so integral to the functioning of the Republic.

Although the government has been moderately secretive about climate issues they have spent ample sums of money on it. The main incentive for CCP to do this is to keep both their citizens content and in line, but also to please other countries. In 2018 the Chinese government released that it spent an estimated 255.5 billion yuan (37.15 billion U.S. dollars) on it.<sup>50</sup> They also planned to upgrade all of their coal plants to be more to be "ultra-supercritical" plants. This means the factories will be more efficient and emit less.<sup>51</sup> The Center for American Progress says that by 2020, "every coal plant operating in the United States would be illegal to operate in China," because of emissions laws, but this is unlikely as China is the one who usually fails to meet these guidelines.<sup>52</sup> China is also enacting a plan to use natural gas as an energy source. Natural gas emits 60% less carbon dioxide and other greenhouse gases into the atmosphere while being processed. China's dedication is shown by the fact that it is the third biggest consumer of natural gas in the world (America is first). China has invested in liquid natural gas as well and is the second biggest importer for liquid natural gas on the planet.<sup>53</sup> Liquid gas is far better at being condensed so easier transportation and storage than normal natural gas. A substantial way China could

impact its environmental footprint is by converting many houses which actively use coal to consuming natural gas instead. A main way China is getting this is by buying a lot of liquid natural gas from the U.S. Doing this both allows China to have more gas, but also it can balance the trade surplus between the two countries.<sup>54</sup> Very unlike how China normally behaves, tried to spread a little awareness and support for the environment. They have events like "Annual Nationwide Energy-Saving Publicity Week" or "Nationwide Decrease Carbon Day" to accomplish this. As well as spreading knowledge and converting from coal, restrictions on cars with fuel consumption deficiency have been suspended as to reduce car emissions which contribute much to China's pollution.<sup>55</sup> By doing this they also encourage electric cars which also have no emissions. China is the current biggest market for electric vehicles with 2.3 million being used daily.<sup>56</sup> Carbon dioxide is the most blamed and one of the most influential gases to global warming, but many other gases also have similar negative effects. China has put forth plans to deal with other less known gases like methane which, "traps 25x more heat in the atmosphere than carbon dioxide" and nitrous oxide, "one pound of nitrous oxide has 300 times the warming effect of one pound of carbon dioxide." China and the CCP are almost as careless with these gases in the past as with carbon as they contributed 16.2 percent of global methane emissions (1.6 billion tons) and 14.5 percent of nitrous oxide emissions (410 million tons) in 2018.<sup>57</sup> China has entered a few environmental protection agreements like the 2009 Copenhagen Accord and the Paris Climate Agreement. And now since their long-lasting commitment, China says they are in a position of leadership for global environmental protection. President Xi Jinping emphasizes this further by saying China is now ready to be "guiding international cooperation to respond to climate change."58 What China is currently doing to quell their environmental footprint can be concisely summarized in a report by the National Renewable Energy Laboratory. "Widespread use of alternative

fuels and advanced vehicles, including plug-in electric vehicles (PEVs), can reduce our national dependence on petroleum and decrease the emissions that impact our air quality and public health."<sup>59</sup>

China has set forth many ambitious goals over the past few years. Many of them seem outlandish and unreasonable for a country the size of China to complete in such a narrow time period. Perhaps China's most aggressive objective is to reach a net-zero status by 2060. Having net-zero emissions means absorbing more greenhouse gases than are put out. Only two countries have achieved this and they are Bhutan and Suriname. China plans to reach their peak emissions by 2030 and then slowly reduce from there.<sup>60</sup> They have many procedures in place to make sure this happens. One of these is abolishing gas driving cars by 2035.61 Although this is unlikely, electric vehicles have become popular and China is as not impossible as it may seem. They also plan to be net zero for carbon dioxide by 2050. Carbon Dioxide emissions are the main driving force of climate change. One way China plans to accomplish this is switching almost all coal plants into clean energy sources. The numbers say China could make coal contribute only 5% of China's power if they do it correctly. Other ways to reduce carbon while the change is happening is to bury the carbon underground or burn certain plants that make it difficult to locate carbon.<sup>62</sup> After carbon China intends to be net-zero for all other gases like methane by 2060. Reforestation should deal with the remaining gas experts say. Environment and pollution advisers say China should take a less aggressive path until 2030 then cut emissions by 10% every year after that, "the rate of emissions reduction starting to increase after 2030 would actually be in response to China taking more forceful action from 2020 to 2030, but the result of these actions will be clearer after 2030," reports Chen Ji, a principal at the Rocky Mountain Institute in Beijing who studied China's long-term decarbonization.<sup>63</sup> This all will prove very arduous, but beneficial to both the planet and China's citizens.

China is in a dire situation. This issue was primarily caused by China supporting and nurturing its economy over its environment and by extension, pollution levels. But lately China has been acknowledging and taking responsibility for this declining environment and the effects it is having on people living in the country. An environmental lawyer named Wang Canfa puts it well, "it shows that this issue, of environmental pollution leading to health damages, has drawn attention."<sup>64</sup>

A clear example that China has the potential to succeed and save itself is the Covid 19 crisis. Despite all the misery the pandemic has caused, the epidemic proved to be one of the least damaging periods to public health from pollution. Air pollution particles called PM2.5 (tiny particles under 2.5 micrometers) fell by 10.8%. This had an enormous impact on China's air quality.<sup>65</sup> The same study also showed only 33 micrograms of PM2.5 were found per a cubic meter of air compared to usual 35 micrograms. This is an impressive feat, but WHO (World Health Organization) recommends 10 micrograms as a safe amount. Some have theorized China's pollution fell because of forced lockdowns and hampered car and industry activity (coal factories).<sup>66</sup> Shortly after the lockdown China produced above average pollution in order to recover its economy, but during the lockdown there were a recorded 60,000 less pollution related deaths.<sup>67</sup> It all shows that China has the ability to reduce their pollution and keep people healthier.

China has a long journey to make before it can reach many audacious goals. Past statistics have proven China to be a wasteful and exceedingly polluting country with millions having died due to incomprehensible negligence. Health effects are alarming and the environmental stability is unbalanced to say the least. Despite all of these negative comments, China has the resources, money, and manpower to overcome this adversity. They have a responsibility to their 1.3 billion citizens and the 7 billion other inhabitants of Earth to fix this. And if they cannot or will not, the entity of the world will pay the price.

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### **Endnotes**

- 1. Eleanor Albert and Beina Xu, "China's Environmental Crisis," Council on Foreign Relations, January 18, 2016, accessed December 26, 2020, https://www.cfr.org/backgrounder/ chinas-environmental-crisis#:~:text=It%20 wasn%27t%20until%20the,was%20already%20 in%20dire%20straits.
- 2. Sustainable Development, "United Nations Conference on the Human Environment (Stockholm Conference)," Sustainabledevelopment.un.org, accessed December 26, 2020, https://sustainabledevelopment.un.org/milestones/humanenvironment.
- 3. Sustainable Development, "United Nations," Sustainabledevelopment.un.org.
- 4. Ibid.
- 5. Ibid.
- 6. Marc Lallanilla, "China's Top 6 Environmental Concerns," Live Science, March 15, 2013, accessed December 26, 2020, https://www.livescience. com/27862-china-environmental-problems. html.
- 7. Claudio O. Delang, China's Air Pollution Problems (New York, US: Routledge, 2016), accessed January 10, 2021.
- 8. Lallanilla, "China's Top 6 Environmental."
- 9. Ibid.
- 10. Za Zeng and Joshua Eastin, Greening China (n.p.: University of Michigan Press, n.d.).
- 11. Lallanilla, "China's Top 6 Environmental."
- 12. Ibid.
- 13. Ibid.
- 14. Ibid.
- 15. Carolyn Gibson, "WATER POLLUTION IN CHINA IS THE COUNTRY'S WORST ENVI-RONMENTAL ISSUE," Borgen Project (blog), accessed December 27, 2020, https://borgenproject.org/water-pollution-in-china/#:~:text=China%27s%20water%20supply%20has%20 been,of%20China%27s%20cities%20is%20contaminated.
- 16. Claudio O. Delang, China's Water Pollution Problems (New York, US: Routledge, 2016), accessed January 10, 2021.
- Mark Purdy, "China's Economy, in Six Charts," Harvard Business Review, November 29, 2013, [Page #], accessed December 27, 2020, https:// hbr.org/2013/11/chinas-economy-in-six-charts.
  Ibid.
- 10. IDIO 10. Ibio
- 19. Ibid.
- 20. Medline Plus, Air Pollution, January 8, 2021, accessed December 26, 2020, https://medlineplus. gov/airpollution.html#:~:text=Air%20pollution%20is%20a%20mixture,pollution%2C%20 it%27s%20also%20called%20smog.
- 21. National Geographic, "Smog," National Geographic, accessed December 28, 2020, https:// www.nationalgeographic.org/encyclopedia/smog/#:~:text=Photochemical%20 smog%20is%20produced%20when,pow-

er%20plants%2C%20and%20factory%20 emissions.&text=When%20sunlight%20 hits%20these%20chemicals,%2Dlevel%20 ozone%E2%80%94or%20smog.

- Moms Clean Air Force, "How Air Pollution Harms Your Body," Momscleanairforce.org, last modified July 1, 2017, accessed December 28, 2020, https://www.momscleanairforce.org/ how-pollution-harms-body/.
- Ibid.
- Ibid.
- Ibid. Ibid.
- Ibid.
- Ibid.
- Ibid. Ibid.
- Ibid.
- Ibid. Ibid.
- Ibid. Ibid.
- Ibid.
  - Jonathan Kaiman, "Inside China's 'cancer villages," The Guardian (London, England), June 4, 2013, US edition, accessed November 29, 2020, https://www.theguardian.com/world/2013/ jun/04/china-villages-cancer-deaths.
- 35. Ibid.
- Ibid.
   Chin
  - China Mike, "China Facts | Energy, Environment and Pollution in China," China Mike, October 8, 2020, accessed December 29, 2020, https://www. china-mike.com/facts-about-china/facts-pollution-environment-energy/#:~:text=Pollution%20is%20blamed%20for%201.6,pollution%20levels%20in%20the%20country.
  - David Stanway, "Northern China smog cuts life expectancy by 3 years versus south: study," Reuters, September 11, 2017, https://www.reuters. com/article/us-china-pollution-health/northern-china-smog-cuts-life-expectancy-by-3years-versus-south-study-idUSKCN1BM2F1. Ibid.
  - Ma Jun, The Economics of Air Pollution in China: Achieving Better and Cleaner Growth (New York, US: Columbia University Press, 2017), accessed January 10, 2021.
    - China Mike, "China Facts."
- 42. Thomas C. Frohlich and Liz Blossom, "These countries produce the most CO2 emissions," USA Today (Tyonsons, VA), July 14, 2019, accessed December 29, 2020, https://www.usatoday.com/sto-ry/money/2019/07/14/china-us-countries-that-produce-the-most-co-2-emissions/39548763/.
- 43. Forbes, Forbes.com, accessed December 31, 2020, https://www.forbes.com/sites/niallmccarthy/2015/01/23/air-pollution-chinese-and-american-cities-in-comparison-infographic/?sh=445dc80d2362
- 44. Carbon Brief, "REST OF WORLD EMISSIONS 17 March 2016 18:01 China is responsible for 10% of human influence on climate change, study says," Carbonbrief.org, last modified March 17, 2016, accessed December 30, 2020, https://www.



62.

63.

64.

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67.

carbonbrief.org/china-is-responsible-for-10of-human-influence-on-climate-change-studysays

- 45.
- Ibid. 46. Ibid.
- 47. Ibid.
- 48. Melanie Hart, Luke Bassett, and Blaine Johnson, "Everything You Think You Know About Coal in China Is Wrong," Center for American Progress, May 15, 2017, [Page #], accessed December 30, 2020, https://www.americanprogress.org/ issues/green/reports/2017/05/15/432141/everything-think-know-coal-china-wrong/.
- 49.

Ibid.

- 50. Mu Xuequan and Xinhua, "China spends big on pollution control, treatment in 2018," Xinhua Net, June 26, 2019, accessed December 30. 2020, http://www.xinhuanet.com/english/2019-06/26/c\_138176209.htm#:~:text=The%20central%20government%20allocated%20about,said%20Wednesday%20while%20 deliverin
- 51. China Power, "How is China Managing its Greenhouse Gas Emissions?," Chinapower.csis. org, last modified 2021, accessed December 30, 2020, https://chinapower.csis.org/china-greenhouse-gas-emissions/#:~:text=Lessening%20 the%20Emissions%20from%20Fossil,low%20 emission%E2%80%9D%20standards%20by%20 2020.
- 52. Hart, Bassett, and Johnson, "Everything You Think."
- 53. China Power, "How is China," Chinapower.csis. org.
- 54. Ibid.
- 55. Ibid.
- 56. Virta.global, "The global electric vehicle market in 2020: statistics & forecasts," Virta.global, accessed December 30, 2020, https://www.virta. global/global-electric-vehicle-market#:~:text=In%20absolute%20terms%2C%20China%20 remained, and %201.1%20 million %20 EVs %20 respectively.
- 57. China Power, "How is China," Chinapower.csis. org.
- 58. Ibid.
- 59. Thomas C. Frohlich and Liz Blossom, "These countries produce the most CO2 emissions," USA Today (Tyonsons, VA), July 14, 2019, accessed December 29, 2020, https://www.usatoday.com/story/money/2019/07/14/china-us-countries-thatproduce-the-most-co-2-emissions/39548763/.
- 60. Matt McGrath, "Climate change: China aims for 'carbon neutrality by 2060," BBC, September 22, 2020, accessed December 30, 2020, https://www.bbc.com/news/science-environment-54256826#:~:text=China%20will%20 aim%20to%20hit,President%20Xi%20Jinping%20has%20announced.
- Nikkei Asia, "China plans to phase out conven-61. tional gas-burning cars by 2035," Asia.nikkei. com, accessed December 31, 2020, https://asia.

nikkei.com/Business/Automobiles/Chinaplans-to-phase-out-conventional-gas-burning-cars-by-2035#:~:text=In%202019%2C%20 new%2Denergy%20vehicles,new%20car%20 sales%20in%20China.&text=The%20goals%20 are%20to%20raise,and%20selling%20conventional%20gasoline%20vehicles.

- Lili Pike, "How the world's biggest emitter could be carbon neutral by 2050," Vox.com, last modified October 15, 2020, accessed December 31, 2020, https://www.vox.com/2020/10/15/21516537/ climate-change-china-xi-jinping-coal-carbonneutral.
- Ibid.
- Lallanilla, "China's Top 6 Environmental"
- Reuters Staff, "China air pollution falls 10.8% because of coronavirus slowdown," Reuters. com, August 14, 2020, accessed December 31, 2020, https://www.reuters.com/article/us-china-pollution/china-air-pollution-falls-10-8-because-of-coronavirus-slowdown-idUSKCN-25A16Q.
- Ibid.

Simone McCarthy, "Coronavirus: air pollution improved during China's lockdowns - and it may have reduced hospital visits," South China Morning Post (Hong Kong, China), October 9, 2020, accessed December 31, 2020, https://www.scmp. com/news/china/science/article/3104741/covid-19-air-pollution-improved-during-chinas-lockdowns-and-it.



## Bibliography

Albert, Eleanor, and Beina Xu. "China's Environmental Crisis." Council on Foreign Relations, January 18, 2016. Accessed December 26, 2020. https://www.cfr.org/backgrounder/chinas-environmental-crisis#:~:text=It%20wasn%27t%20until%20the,was%20already%20in%20 dire%20straits.

I used this journal resource by The Council of Foreign Relations which was helpful in understanding the history of environmental pollution in China. It was really important to the fundamental understanding and a few specifics about the foundation of China's pollution.

- Blokhin, Andriy. "The 5 Countries That Produce the Most Carbon Dioxide (CO2)." Investopedia. com. Last modified October 27, 2020. Accessed December 27, 2020. https://www.investopedia.com/articles/investing/092915/5-countries-produce-most-carbon-dioxide-co2.asp. Investopedia's site listed all the most emitting countries in the world. From this website a gathered one fact about the percentage of power coal produced for China. This fact was contradicted by other sites though, so exact numbers were hard to find.
- Carbon Brief. "REST OF WORLD EMISSIONS 17 March 2016 18:01 China is responsible for 10% of human influence on climate change, study says." Carbonbrief.org. Last modified March 17, 2016. Accessed December 30, 2020. https://www.carbonbrief.org/china-is-responsible-for-10-of-human-influence-on-climate-change-study-says.
  - Carbon Brief is a website that strives to stop climate change while also spreading awareness about the topic. They gave valuable data on China's individual contributions to climate change. They also informed me about aerosols, which truly makes the situation difficult for China. Carbon Brief is responsible for the graph as well.
- China Mike. "China Facts | Energy, Environment and Pollution in China." China Mike, October 8, 2020. Accessed December 29, 2020. https://www.china-mike.com/facts-about-china/ facts-pollution-environment-energy/#:~:text=Pollution%20is%20blamed%20for%20 1.6,pollution%20levels%20in%20the%20country.

China Mike is some kind of travel guide to China. They gave a few facts about China's carbon emissions and other things.

China Power. "How is China Managing its Greenhouse Gas Emissions?" Chinapower.csis.org. Last modified 2021. Accessed December 30, 2020. https://chinapower.csis.org/china-greenhouse-gas-emissions/#:~:text=Lessening%20the%20Emissions%20from%20Fossil,low%20emission%E2%80%9D%20standards%20by%202020.

China Power strives to understand and explain China and its complexities. They provided information on what the Chinese government is doing to manage pollution and their environmental impact. They also give a quote from Xi Jinping.

Delang, Claudio O. China's Air Pollution Problems. New York, US: Routledge, 2016. Accessed January 10, 2021.

This book goes into depth about China's air pollution problems. It provided a very concise quote about the very issue.

- ---. China's Water Pollution Problems. New York, US: Routledge, 2016. Accessed January 10, 2021. This book was about China's various water issues. I used a quote from this book that gave another good stat about China's water crisis.
- Forbes. Forbes.com. Accessed December 31, 2020. https://www.forbes.com/sites/niallmccarthy/2015/01/23/air-pollution-chinese-and-american-cities-in-comparison-infographic/?sh=445dc80d2362.

This site only provided the graph.

Frohlich, Thomas C., and Liz Blossom. "These countries produce the most CO2 emissions." USA Today (Tyonsons, VA), July 14, 2019. Accessed December 29, 2020. https://www.usatoday. com/story/money/2019/07/14/china-us-countries-that-produce-the-most-co-2-emis-



sions/39548763/.

USA Today is a newspaper that covers topics from pollution to social media. This site helped me finish off a paragraph about China's pollution versus the rest of the world.

Gibson, Carolyn. "WATER POLLUTION IN CHINA IS THE COUNTRY'S WORST ENVIRONMENTAL ISSUE." Borgen Project (blog). Accessed December 27, 2020. https://borgenproject.org/water-pollution-in-china/#:~:text=China%27s%20water%20supply%20has%20been,of%20 China%27s%20cities%20is%20contaminated.

The Borgen Project was a site that explained how water pollution is the worst kind of pollution in China. I personally disagreed based on the research I had done, but certain facts from the site proved useful for talking about water pollution later.

Hart, Melanie, Luke Bassett, and Blaine Johnson. "Everything You Think You Know About Coal in China Is Wrong." Center for American Progress, May 15, 2017. Accessed December 30, 2020. https://www.americanprogress.org/issues/green/reports/2017/05/15/432141/everythingthink-know-coal-china-wrong/.

The Center for American Progress is a newsletter out of Washington, D.C. They went into the part coal plays in China's economy and the difficulty it would cause in phasing it out.

Hineman, Brinley. "Fact check: Electric vehicles emit fewer emissions and are better for the environment." Fact Check. USA Today (Tysons, VA), October 17, 2020. Accessed December 30, 2020. https://www.usatoday.com/story/news/factcheck/2020/10/17/fact-check-electriccars-emit-less-better-environment/3671468001/.

USA Today is a newspaper. They gave specific data on the environmental impact of EVs and a quote.

- Ide, Bill. "Share on Twitter Share via Email Print this page East Asia Pacific China Gets New Weapon in War on Pollution." Voa News, December 28, 2016. Accessed January 10, 2021. https:// www.voanews.com/east-asia-pacific/china-gets-new-weapon-war-pollution. This site gave me the title picture.
- Jun, Ma. The Economics of Air Pollution in China: Achieving Better and Cleaner Growth. New York, US: Columbia University Press, 2017. Accessed January 10, 2021.

This book gave a quote about how the actual Chinese people felt about air pollution.

Kaiman, Jonathan. "Inside China's 'cancer villages." The Guardian (London, England), June 4, 2013, uS edition. Accessed November 29, 2020. https://www.theguardian.com/world/2013/jun/04/china-villages-cancer-deaths.

This website is a British daily newspaper. The article talked in depth about the cancer villages which China has become renowned for. It gives many facts and statistics about this strange byproduct of pollution and was a worthy case study.

Lallanilla, Marc. "China's Top 6 Environmental Concerns." Live Science, March 15, 2013. Accessed December 26, 2020. https://www.livescience.com/27862-china-environmental-problems. html.

This resource by Live Science helped me greatly while researching the specific causes of China's pollution. It helped lay a good foundation for air pollution as well. This site also gave information on a few professional opinions on China's progress and their current situation.

McCarthy, Simone. "Coronavirus: air pollution improved during China's lockdowns – and it may have reduced hospital visits." South China Morning Post (Hong Kong, China), October 9, 2020. Accessed December 31, 2020. https://www.scmp.com/news/china/science/article/3104741/covid-19-air-pollution-improved-during-chinas-lockdowns-and-it.

The South China Morning Post is a newspaper company based in China. It only gave one fact about China's Covid situation.

McGrath, Matt. "Climate change: China aims for 'carbon neutrality by 2060." BBC, September

22, 2020. Accessed December 30, 2020. https://www.bbc.com/news/science-environment-54256826#:~:text=China%20will%20aim%20to%20hit,President%20Xi%20Jinping%20has%20announced.

BBC is an international news outlet. They highlighted the years China wanted to accomplish certain goals.

Medline Plus. Air Pollution. January 8, 2021. Accessed December 26, 2020. https://medlineplus.gov/ airpollution.html#:~:text=Air%20pollution%20is%20a%20mixture,pollution%2C%20 it%27s%20also%20called%20smog.

MedlinePlus is a government website that focuses on medical things. The report I used talked briefly about the basics of air pollution and smog. I used both of these in the paper.

Moms Clean Air Force. "How Air Pollution Harms Your Body." Momscleanairforce.org. Last modified July 1, 2017. Accessed December 28, 2020. https://www.momscleanairforce.org/howpollution-harms-body/.

This site was more than useful when describing and researching the effects of air pollution on health. The website went into great depth on all body parts severely affected by air pollution like the lungs and the heart. The group seems to be some kind of organization that fights against air pollution. It also provided great graphs to show the specifics.

National Center For Biotechnology. Vehicle emission and atmospheric pollution in China: problems, progress, and prospects. By Jin Wang, Qiuxia Wu, Juan Liu, Hong Yang, Meiling Yin, Shili Chen, Peiyu Guo, Jiamen Ren, Xuwen Luo, Wensheng Linghu, and Qiong Huang. Edited by Xinfeng Wang. May 16, 2019. Accessed December 26, 2020. https://doi.org/10.7717/ peerj.6932.

This article by the National Center For Biotechnology provided a singular fact about car emission which bolstered the statement that cars were perilous to the environment.

National Geographic. "Smog." National Geographic. Accessed December 28, 2020. https:// www.nationalgeographic.org/encyclopedia/smog/#:~:text=Photochemical%20 smog%20is%20produced%20when,power%20plants%2C%20and%20factory%20 emissions.&text=When%20sunlight%20hits%20these%20chemicals,%2Dlevel%20 ozone%E2%80%94or%20smog.

National Geographic was very helpful to a small paragraph dedicated to smog. It helped me learn more about the causes like ozone and its deadly affects. National Geographic is a big company which covers all kinds of topics.

- Nikkei Asia. "China plans to phase out conventional gas-burning cars by 2035." Asia.nikkei. com. Accessed December 31, 2020. https://asia.nikkei.com/Business/Automobiles/Chinaplans-to-phase-out-conventional-gas-burning-cars-by-2035#:~:text=In%202019%2C%20 new%2Denergy%20vehicles,new%20car%20sales%20in%20China.&text=The%20 goals%20are%20to%20raise,and%20selling%20conventional%20gasoline%20vehicles. This site is from Nikkei Asia. The material provided an interesting fact.
- Pike, Lili. "How the world's biggest emitter could be carbon neutral by 2050." Vox.com. Last modified October 15, 2020. Accessed December 31, 2020. https://www.vox.com/2020/10/15/21516537/ climate-change-china-xi-jinping-coal-carbon-neutral.

Vox is an American news website. They gave information on how China could potentially become net zero and the things they would have to do.

Purdy, Mark. "China's Economy, in Six Charts." Harvard Business Review, November 29, 2013. Accessed December 27, 2020. https://hbr.org/2013/11/chinas-economy-in-six-charts. Harvard Business review explained China's economy and the rapid industrialization which caused it. The site used six graphs to convey its message. I only utilized the parts in which related to China's growing economy and the reasons for that.



Reuters Staff. "China air pollution falls 10.8% because of coronavirus slowdown." Reuters.com, August 14, 2020. Accessed December 31, 2020. https://www.reuters.com/article/us-china-pollution/china-air-pollution-falls-10-8-because-of-coronavirus-slowdown-idUSKC-N25A16Q.

This website analyzed the effects that Covid had on the environment and the air quality of China.

- Stanway, David. "Northern China smog cuts life expectancy by 3 years versus south: study." Reuters, September 11, 2017. https://www.reuters.com/article/us-china-pollution-health/northern-china-smog-cuts-life-expectancy-by-3-years-versus-south-study-idUSKCN1BM2F1. Reuters is an international news organization that focuses on all kinds of topics. I used it to go into depth about a life discrepancy between the north and south in China. It offered plenty of well-researched opinions and facts, and it helped me build a good case study about it.
- Sustainable Development. "United Nations Conference on the Human Environment (Stockholm Conference)." Sustainabledevelopment.un.org. Accessed December 26, 2020. https://sustainabledevelopment.un.org/milestones/humanenvironment.

This website by Sustainable Development provided many specifics about the Stockholm Conference which was the first major meeting about the environment. It was a minor source and contributed little to the overall paper and was there only for a few facts.

Virta.global. "The global electric vehicle market in 2020: statistics & forecasts." Virta.global. Accessed December 30, 2020. https://www.virta.global/global-electric-vehicle-market#:~:text=In%20absolute%20terms%2C%20China%20remained,and%201.1%20million%20 EVs%20respectively.

This website belongs to a company that is involved in the electric vehicle charging industry. They gave a few facts about EVs and their presence in China.

Xuequan, Mu, and Xinhua. "China spends big on pollution control, treatment in 2018." Xinhua Net, June 26, 2019. Accessed December 30, 2020. http://www.xinhuanet.com/english/2019-06/26/c\_138176209.htm#:~:text=The%20central%20government%20allocated%20about,said%20Wednesday%20while%20delivering%20the.

Xinhua Net is the biggest media organization in China and is state-run meaning potential bias could be located in articles found within the site. This site references the exact amount of money the government spent on pollution control.

Zeng, Za, and Joshua Eastin. Greening China. N.p.: University of Michigan Press, n.d. This book summarizes many aspects of China. I used a fact about air pollution.



# **QR Code Bibliography**



The above QR code, scannable by phone camera or any other device, will direct you to an online version of the essay and a link-accessible bibliography on <u>the-podium.org</u>

# Student Art



# Kumiko Lamp

Artist-Will Marra '23 Section-Student Art



Each piece of wood was hand-cut and assembled into four patterned panels on each side. The legs were sanded and finished with oil. Kumiko art has existed in Japan since 600-700 AD, as a functional yet extremely delicate form of hand-crafted design. Elaborate light fixtures were an important symbol of status and wealth.

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# Spider Clock

Artist-Nate Voss '24 Section-Student Art



The spider body was carefully sculpted in clay and the wire-covered legs were added after the glaze firing. The first recorded ceramic clocks began as a decorative tradition in wealthy German households in the 1850s. Since then, they've become an impressive art form around the world and continue at Belmont Hill, fully-functional and on display in the Robsham.

# **Floating Boxes**

#### Artist-Ceiba Wild '24 Section-Student Art

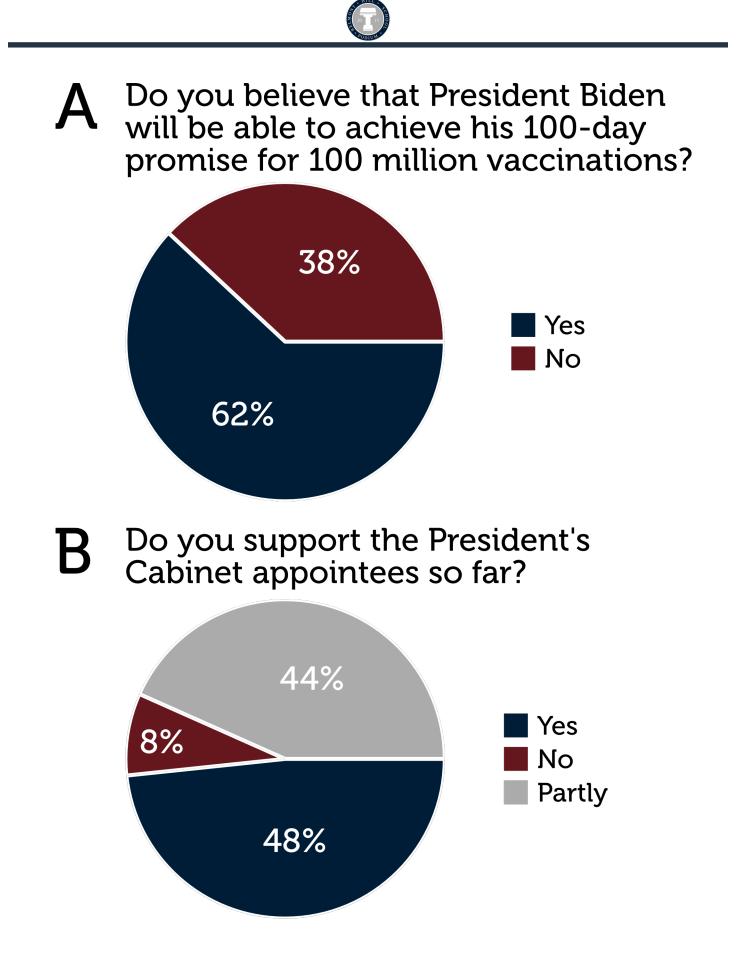


Attached two boxes to the main support to create a floating effect. The glaze, tick marks, and colored lids were all hand-painted. Ceramic pieces as an art form have existed in almost every culture and every continent dating back thousands of years, first (likely) discovered in modern-day Czechoslovakia. The above glazing and painting technique was common on Chinese porcelain and so-called "fina china," first developed in England.

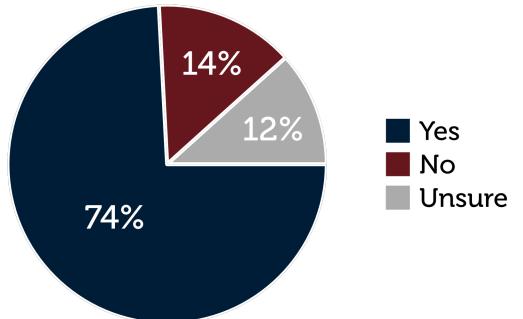
# Data Analysis



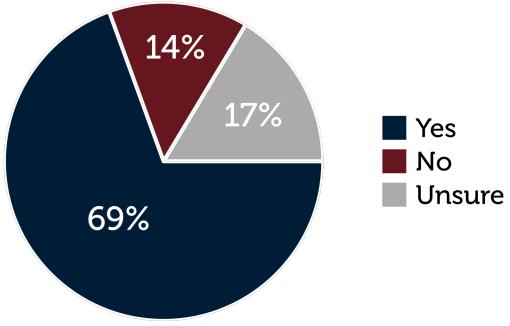
Making serious progress with COVID Most Diverse Cabinet ever Biden is amazing Just great A step in the right direction They're all very qualified Appointees aren't qualified Not a tough enough leader Isn't as bipartisan as he said Strongly disagree with a few choices Failed on minimum wage Trying to appeal to the public



C Do you approve of President Biden's decision to rejoin the Paris Climate Agreement?



D Overall, do you approve of President Biden's job performance in his first thirty days?



# Featured Person

# Senator Joe Manchin (D-WV)



Author-Abe Tolkoff '21 Section-Featured Person

is not a relatively well-known figure in national politics. Unlike many of his Dem-Association. ocratic colleagues in the Senate, he did not seek the presidency in the 2020 election, nor did he campaign frequently for President Biden, or make the short list for cal savvy and views that cross party lines. a coveted Cabinet position. That said, the reason he remains a key figure in American politics, and will for the next two years can be found in the first sentence written above. He is the Democratic Sena- positions across all issues. Most notably, tor from West Virginia. In the state where he was endorsed by the National Rifle former President Trump won the 2020 election by a margin of 38.9 percentage points, the Republican incumbent Senator shooting, he co-sponsored a bipartisan beat her Democratic challenger by more than 43 points, and all three of the state's seats in the House of Representatives are held by Republicans, Senator Manchin has ination of the filibuster which would won, and continues to do so. However, he is not what many would describe as a "typical" Democrat. He is firmly pro-life, a nificantly ease the passage of bills given stance different from the vast majority of Democrats' tight majority. Manchin has his party, and he is consistently in favor of fossil fuel sourced energy.

Born on August 24th, 1947 in Farmington, WV, he began his career as a businessman before turning to politics. Both his father and grandfather served as the mayor of Farmington and owned small businesses in the town. After graduating high school, he earned a degree in business administration from West Virginia University in 1970. After spending a decade working for his family's business, he ran for a seat in the West Virginia House of Delegates in 1982. After serving for four years, he won a seat in the West Virginia Senate. In 2001 he was elected Secretary of State of West Virginia, and after a four year term, won the race to be the 34th governor of the state. As Governor, he was an active member of the Nation-

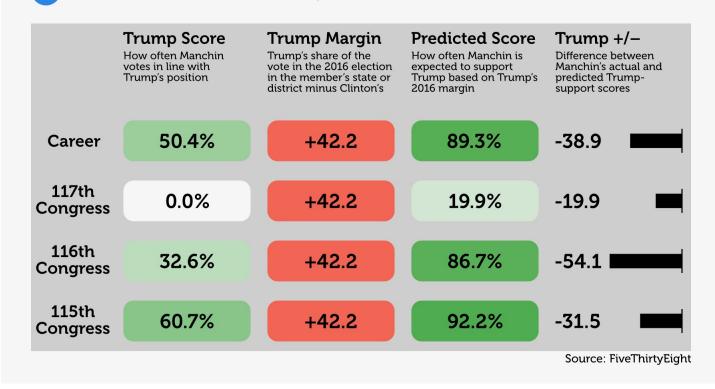
al Governors Association, the Southern Governors Association, and the Dmocratic Governors Association. He served as the Chair of the National Governors Senator Joseph Manchin III (D-WV) Association for a few months, as well as the chair of the Democratic Governors

Needless to say, as the only statewide elected Democrat in West Virginia, his electoral success is owed to his politi-While his personal focus has been on energy policy–Manchin currently serves as the Chair of the Senate Energy Committee-his office requires him to take Association (NRA) during his 2012 Senate campaign and following the Sandy Hook comprehensive background check bill which eventually failed. Many progressive Democrats have called for the elimremove the sixty vote requirement for legislation to pass in the Senate and sigvocally opposed this effort, in addition to other "progressive" plans like increasing the number of justices on the Supreme Court, and raising the federal minimum wage to fifteen dollars per hour. His opposition, paired with the concurrence of fellow Democrat Kyrsten Sinema, all but ensures that none of these proposals will pass the current Congress, placing Manchin in the key position of a moderator of the Democratic agenda.

According to FiveThirtyEight's "Trump Score," a tool which documents the frequency that members of Congress voted with the former president, Manchin has a career record of 50.4%. Compared to his Senate Democrat colleagues, he ranks the highest among them, tied only with Senator Kyrsten Sinema (D-AZ). His ranking is, however, roughly

# Joe Manchin III

D Democratic senator for West Virginia



fifteen percentage points lower than the most liberal Republican, Susan Collins (R-ME) who Manchin endorsed over her Democratic rival Sara Gideon in 2020. However. Senator Manchin's political relevance is rooted in the fact that the Senate is currently split 50-50 with Vice President Harris serving as the tie-breaking vote. In this way, Manchin has the ability to seriously help or hinder Democrats' agenda in the coming two years, assuming the power balance remains the same. For example, Senate Republicans have expressed opposition to President Biden's proposed COVID relief package to which Democrats have responded by moving to pass the bill through budget reconciliation, a process that only requires a simple majority as opposed to the typical sixty vote minimum. Manchin has expressed his displeasure with voting for such a measure, meaning that he personally controls the fate of this bill. As President Biden moves down his legislative agenda list, Manchin will likely be the first person he calls to ensure the Senator will vote for the bill.

As Senator Manchin's name becomes increasingly present in political conversations, the question must be raised of the fate of such politicians in Washington. The 2016, 2018, and 2020 elections saw the solidification of party unity within states, and we today have the fewest number of split Senate delegations since the ratification of the 17th Amendment in 1914 (which made Senators directly elected state-wide). A move towards hyper-partisanship in the political landscape makes those willing to work across the aisle or vote with the other party's president increasingly vulnerable to primary challenges and inter-party ire. Manchin faces a difficult battle, but remains one of the most powerful men in Washington-so long as he holds his seat.

Courtesy: manchin.senate.gov

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# Miscellaneous



**Returning to a Past Schedule** 

Author-Jason Wong '24 Lawrence Tang '22 Section-Miscellaneous

Due to the pandemic, the class schedule at Belmont Hill has changed from the normal three days of 40 minute blocks and two days of long blocks to the new four days of long blocks and one day of 40 minute blocks. As we progress through the year, the question of whether or not we should continue with this new schedule or revert back to our old schedule, or even a compromise between the two come fall. With the new schedule comes some pros and cons.

In this newly formalized schedule, there has been a considerable reduction of class meetings per week, even though the in-class time levels out with last year. With this alteration, students only have to prepare for the full five classes once per week (before Wednesdays), meaning homework tends to be more spread out between the week. Furthermore, with the newly-lengthened advisory time, more DEI work has been included along with a plethora of other events. This advisory block has overall been a helpful change in our schedule, and should be taken into consideration when deciding what the schedule should be like next year.

Also with the new schedule, Wednesdays have become (regrettably) remote, starting at 8:30 AM, similar to the out. While COVID prevention is a source "normal" late start. With this remote day, teachers have sometimes made classes optional or asynchronous, allowing students to have even more of a relaxing and months. calming day instead of attending Zoom meetings for the full duration of all class periods. Students have benefitted from this asynchronous day, with the ability to sleep in and to have less actual synchronous class time. This idea of asynchronous exists. Many students have complained classes should be taken into consideration about the excessive integration of Zoom as well in developing the new schedule, even when considering our in-person

future ahead.

Lastly, the new schedule has allowed for students either to opt out of sports or to attend drama and theater -- flexibility that didn't exist in the past. Once classes end at 1:30 PM, some students choose to stay at school to attend sports, just as with previous years, but also have the ability to go home and rest or to engage in the drama program. In previous years, the schedule did not place as much emphasis on the theater program, but this new schedule does.

Despite its many benefits, the current operating schedule for the school is an enormous disruption to the usual business at Belmont Hill. Although athletics and sports practices are still offered as optional choices to students, they only run for two days per week and have much less choice as well as games. This is often seen as a disadvantage of the present schedule due to the lack of sports engagements.

The pandemic schedule is also characterized by its serious inflexibility and little free time. Students have far less time to meet their teachers for extra help. They also lost most of their social time outside of classes as the school expects students to leave campus as soon as classes end. This greatly reduced the time students spend with their peers chatting, eating lunch together, or just hanging of the limits on social activity, even reasonable and safe social time has been cut to its minimum these past twelve

While all the classes have at least one day via Zoom and the majority of extra help are done through Zoom as well, clubs are usually forced to have Zoom meetings when no in-person option into their daily life -- Zoom fatigue has invaded our school like many others.

With the new schedule, not only Zoom is often used for classes, club activities are looking into a screen as well.

While the pandemic schedule has its advantages and disadvantages, it is designed to be a balance between the danger of COVID infection and having a class experience as similar to previous years as possible (and, simply, as productive). Returning to the old schedule will certainly bring students and faculties a sense of normalcy in this turbulent time because they are familiar with it, so we look forward to the return of the old schedule. Nevertheless, the pandemic is in some ways a valuable opportunity for the school to change its operation before settling back in to another rigid schedule.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:30-9:45 <sub>АМ</sub> А BLOCK I M&C	8:30-9:45ам D BLOCK I M&C	8:30-9:10ам А BLOCK	8:30-9:45 <sub>АМ</sub> А BLOCK I M&C	8:30-9:45 <sub>AM</sub> D BLOCK I M&C
10:00-11:15ам В BLOCK	10:00-11:15ам Е BLOCK	9:20-10:00ам В BLOCK 10:10-10:50ам С BLOCK	10:00-11:15ам В BLOCK	10:00-11:15ам Е BLOCK
11:20-12:10 <sub>РМ</sub> Community Time/ Lunch w/Advisory	11:20-12:10 <sub>Рм</sub> Homeroom/Lunch	11:00-11:40ам D BLOCK 11:40-12:40 LUNCH BREAK	11:20-12:10рм DEI/Lunch with Advisory	11:20-12:10рм Virtual Chapel/ Lunch w/ Advisory
12:15-1:30рм С BLOCK	12:15-1:30рм F BLOCK	12:40-1:20 E BLOCK	12:15-1:30рм С BLOCK	12:15-1:30рм F BLOCK
1:45рм Buses	1:45рм Early Buses	1:30-2:10рм	1:45 <sub>РМ</sub> Buses	1:45 <sub>РМ</sub> Early Buses
2:00-3:30 <sub>РМ</sub> US Athletics/Drama	2:00-3:30 <sub>РМ</sub> MS Athletics/Drama	F BLOCK	2:00-3:30рм US Athletics/Drama	2:00-3:30 <sub>PM</sub> MS Athletics/Drama
3:30-4:15 <sub>РМ</sub> MS X Block (virtual)	3:30-4:15 <sub>РМ</sub> US X Block (virtual)	FACULTY TIME	3:30-4:15 <sub>РМ</sub> MS X Block (virtual)	
3:45 <sub>РМ</sub> Late Buses	3:45 <sub>РМ</sub> Buses	4:00-4:45 X BLOCK (VIRTUAL)	3:45 <sub>РМ</sub> Late Buses	3:45 <sub>РМ</sub> Buses

Belmont Hill's Current Hybrid Class Schedule on Virtual Wednesdays

BH Communications

# **Back to School Full Time**

#### Author-Will Seward '22 Section-Miscellaneous

Last week, Belmont Hill announced its plan to return to in-person learning five days a week immediately following Spring Break in March. This change will keep the current long block schedule on Monday, Tuesday, Thursday, and Friday; the only difference is that virtual Wednesdays will now also be in-person, again keeping the same Wednesday class block schedule. Although this learning adjustment will contribute to a sense of normalcy returning to school, many students appreciate the value of virtual Wednesdays in breaking up the otherwise tedious school week.

There is no question that one of the most resounding differences between regular years at Belmont Hill and these unprecedented times is taking classes at school five days a week. Although Zoom offers a sufficient substitute for in-person instruction (or, in the very least, for the flow of information if not social life), nothing beats direct contact between students and faculty. Teaching, learning, and fostering relationships come much more naturally, and being in-person is much more beneficial than staring at someone through a computer screen.

With the return to a five-day in-person schedule, both students and faculty alike may expect an increased sense of normalcy on campus. Without Zoom Wednesdays to break up the week, more meaningful interactions can take place between students and faculty, as meeting three times a week in-person presents many more opportunities to check in about academics or have conversations outside of the classroom. In addition, having class in-person for the extra day will increase academic engagement. Learning in the classroom is much more natural to participate in than staring at someone through a computer screen, and learning at home may present more distractions and opportunities to zone out. Finally, having every class meet on campus in a single day will heighten the sense of normalcy, as 40 minute periods will occur

in-person for the first time since March of last year.

Although the schedule adjustment to accommodate having school on campus during Wednesday classes will be advantageous in numerous ways, many students look forward to online days to break up the otherwise physically and mentally exhausting school week. Having one day at home offers students a chance to recharge after a draining two days in school, affording time to sleep in and get more work done than usual school days. Moreover, not all teachers decide to synchronize their classes, instead electing to assign asynchronous work for students to complete individually. This may mean students have as little as two or three classes during online Wednesdays, allotting more time for students to pursue hobbies or other interests outside of the classroom; this is hugely beneficial for mental health, especially in these times where social interaction can be difficult.

In conclusion, returning on campus in place of virtual Wednesday classes has many benefits and drawbacks too. Although the new schedule offers a better learning environment and affords more time for student-faculty interaction outside of the classroom, many students look forward to a day at home to break up the long school week, using the time to recharge and get ahead on work. However, even with the disadvantages of returning to school full-time, it would encourage everyone that the COVID pandemic is in decline, and that there is a light at the end of this virus-infected tunnel.

# **Senator Warren's Corruption Crusade**

### Author-Luke Carroll '22 Section-Miscellaneous

To date, Massachusetts' junior senator, Elizabeth Warren, has served only one full term in the U.S. Senate. Yet she has attracted extraordinary national attention and recognition, particularly concerning her highest legislative priorities. Senator Warren's Plan to End Washington Corruption covers nearly every aspect of lobbying and seeks generally to curb the excessive influence of money in politics -- an influence that has grown seemingly exponentially over the past few decades. In her proposal (and other forms of legislation), Senator Warren documents the history of vastly increased political action committee (PAC) spending since the 1970s, as well as the rise of so-called "dark money" 501(c)(4) organizations in federal politics. Her proposed plan includes the imposition of taxes on lobbying efforts over \$500,000; revised and improved ethical professional conduct standards for the federal judiciary; a ban on stock trading by federal elected officials; an end to lucrative "golden parachute" severance packages for corporate executives who move into appointed positions in the federal government; and various additional measures specifically intended to reduce and blunt the corrosive influence of money in politics.

Senator Warren's policy crusade, however, has been years in the making. In 2018, Senator Warren introduced the 289-page Anti-Corruption and Public Integrity Act (S. 3357). Although the bill was initially denied consideration in the Senate, Senator Warren pursued further action in the Democratically-controlled House, where Representative Jayapal (WA-7) agreed to introduce the bill. While House members amended aspects of the proposed legislation -- ultimately converting it into a broader anti-corruption bill -- the final draft legislation contained most of Senator Warren's key provisions. Although the amended bill was again not considered on the Senate floor, Senator Warren's leading efforts on this front reflect a renewed hunger among

elected officials for anti-corruption legislation -- a hunger which is very much alive and well in the broader electorate.

Senator Warren's advocacy concerning anti-corruption measures began well before her political career. Having previously published thirty-one books and considerable research on the topics of financial stability, consumer debt, and the American banking system (among other topics), Senator Warren was perfectly poised to take on issues surrounding the influence of money in politics. Under one of her now-familiar catch-phrases, "big, structural change," Senator Warren released Ending Washington Corruption during her 2020 campaign for the Democratic presidential nomination, as the first of many proposed "plans" on the campaign trail. Although her campaign lasted only fourteen months, Senator Warren achieved the third-highest delegate count and was credited with drawing then-nominee Joe Biden's priorities more in line with her own -- starting with the Washington Corruption plan. From pushing for a specific, economic-focused team on Biden's Unity Task Force (following his ultimate nomination) to withholding her endorsement until several policy goals had been agreed to, Senator Warren never relented on the issue that launched her campaign months earlier. And those ideas, that "pretty much nobody wanted to hear" from a professor ten years ago (Senator Warren; March 5, 2020), will soon sit on the President's desk.



