

101

This 101 is an adaptation of  
the first season of the podcast  
**DRILLED**

**DRILLED**



A million thank you's to  
@amywetervelt for creating this  
podcast and giving me permission to  
summarize it in this format.

There is so much more in her podcast.

**Give it a listen and share  
with your friends!**

# Climate Denial

# 101

*Written & Designed By:*

*@spencer.r.scott*



This is a story about how we've all been lied to. This is a story of corruption, greed, and deceit with the highest possible stakes.

It is a story we should all know well.

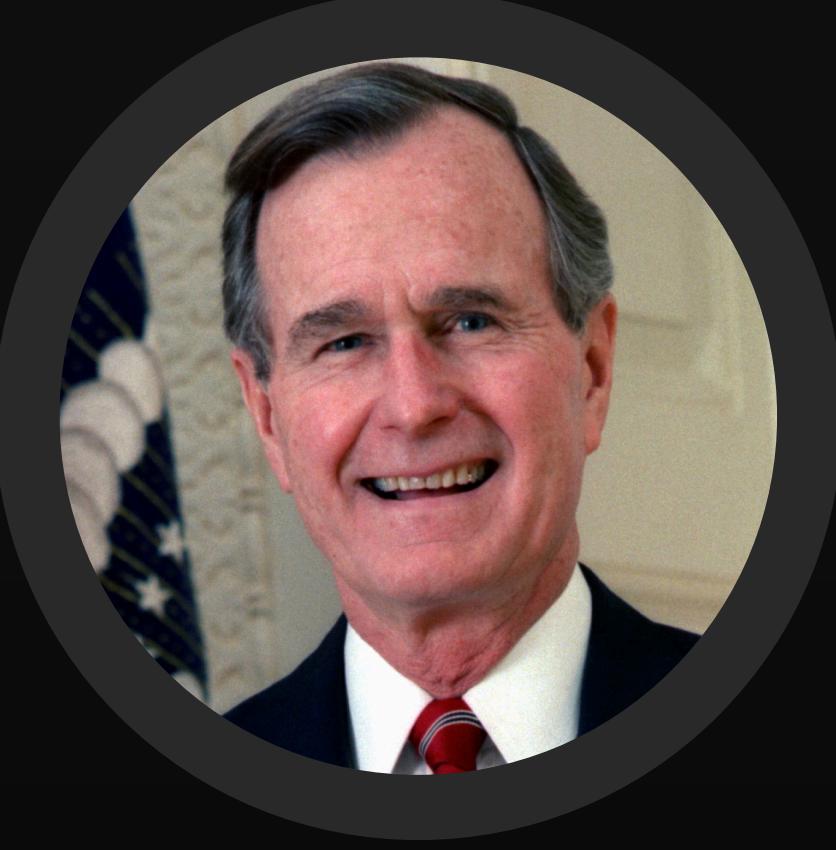
#Exxonknew is a scandal for the history books.

This is the true story of how Exxon Mobil and a host of other interest groups intentionally mislead the public in order to delay action on climate change.

This is a story of 30 years of lost time.

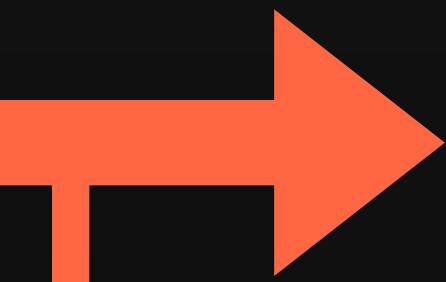
Proof lies even in the most unfavorable of places: A tale of two Republican Presidents.

# 1988 -



"Some say these problems are too big that it's impossible for an individual, or even a nation as great as ours, to solve the problem of global warming... My response is simple. It can be done. And we must do it. Let's not forget all that we've accomplished...since America first concentrated its attention on preserving the environment, under a Republican administration back in 1970."

**-G.W.H. BUSH**



# 2018



“So Obama is talking about all of this with the global warming and that is a lot of it's a hoax it's a hoax. I mean it's a money making industry. OK. It's a hoax.”

**-DONALD TRUMP**

This is a story of how we arrived, well... here.

**Part I:**

**1970s**

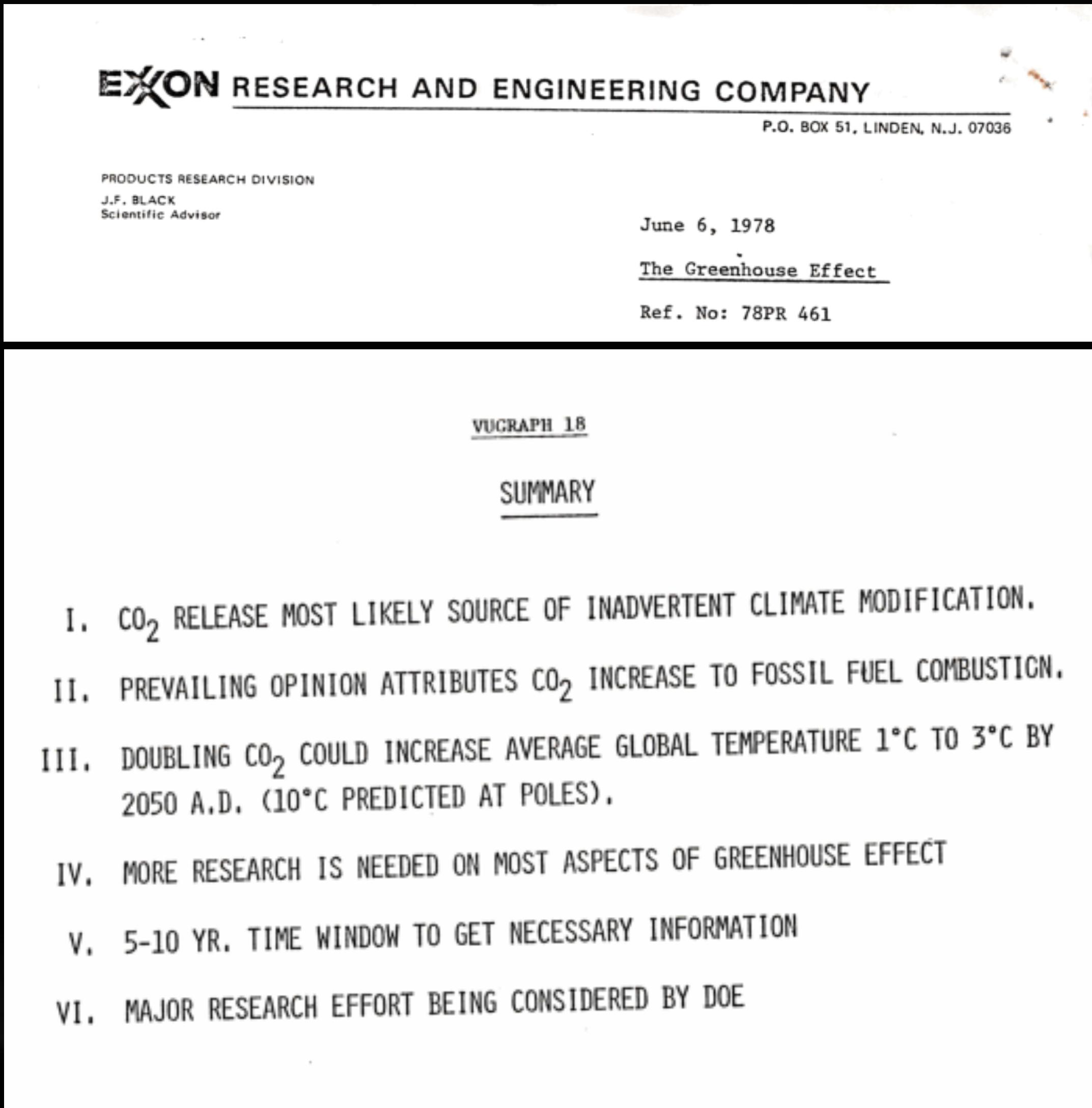
**EXXON FUNDS  
CLIMATE RESEARCH**



# THAT 70s MEMO

1978

Internal Exxon memo by scientist  
James Black warns Exxon that  
continued burning of fossil fuels  
may cause global temperature  
increase of 3°C by 2050.<sup>1</sup>



# EXXON FUNDS CLIMATE SCIENCE

## Late 1970s

Believe it or not, at the time, Exxon was a powerhouse of climate research. They wanted to be the “Bell Labs of Energy” not just an oil company.

They hired the brightest scientists, funded projects in solar, nuclear, and batteries. And footed the bill on “the tanker project” to monitor CO<sub>2</sub> levels in the Atlantic ocean.<sup>1</sup>

“ The issue was not were we going to have a problem [with global warming]. The issue was simply how soon and how fast and how bad was it going to be. Not if. Nobody at Exxon when I was there [in the late 70s] was discussing that. It was just OK, how fast is it going to come? Can we do something about it? But not if.”

-Former Exxon Scientist  
Ed Garvey

# 1970s

Exxon was working not only to understand climate change but to help transition to a new energy future in which it wanted to ensure it had a key role.

What happened next, however, changed the course of human history.

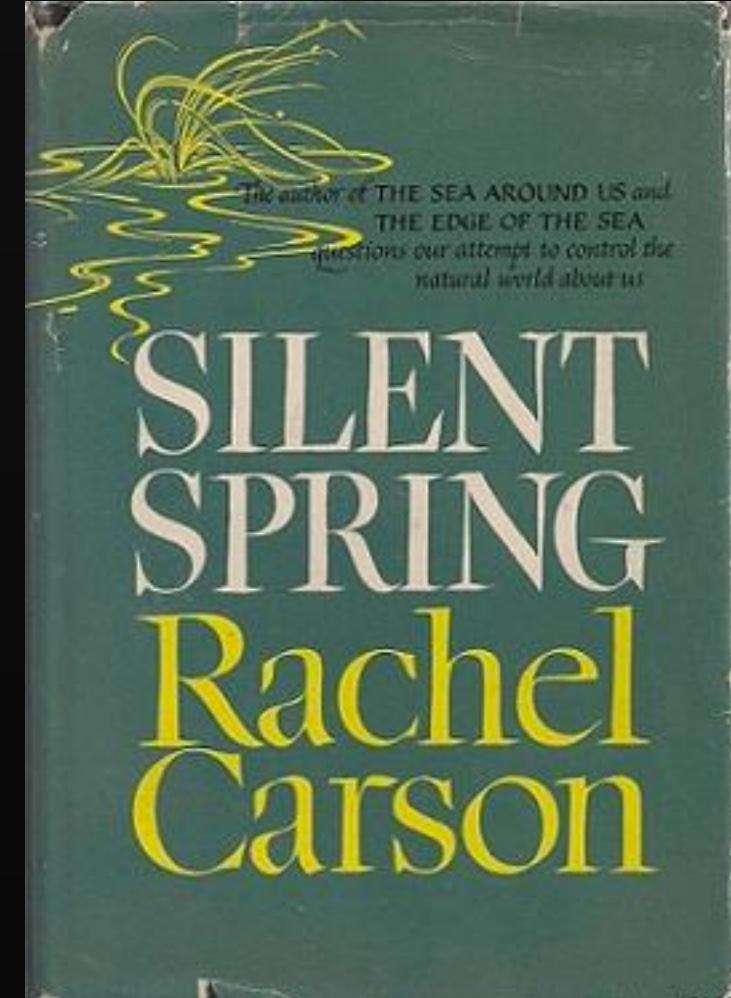
**Part II:**

**1980s**  
**-1990s**  
**EXXON LAUNCHES**  
**DISINFORMATION**  
**CAMPAIGN**

# First, Some History

— **1962**

Rachel Carson publishes *Silent Spring* drawing massive public attention to corporate pollution.



— Subsequent social upheaval in the 60s and 70s becomes the country's first real challenge to the Manifest Destiny, colonizer mindset.

— **1970s-1980s**

A schism within corporations forms: those dedicated to the public interest, and those dedicated to the All-American bottom line.

# THE BOTTOM-LINE WINS

1982

Oil prices were dropping and Exxon's management deprioritized research in alternative energy.

They laid off all the scientific talent they had been stockpiling, cancelled plans to build a research center in New Jersey, and shut down the tanker project.

They missed a golden chance to lead a new energy paradigm.

If only they had stopped there.

# GLOBAL WARMING GOES PUBLIC

1988

This year brings record heat-waves and devastating fires in Yellowstone. NASA's James Hansen has a message for Congress:



“ The greenhouse effect has been detected and it is changing our climate. Now.”

# 1988

**At this point Republicans and  
Democrats both thought  
something needed to be done;  
remember this is when George  
Sr. made his impassioned  
speech about solving global  
warming.**

**What happened to  
our resolve?**

Exxon is, what Amy Westervelt calls, the patient zero in the US propaganda war. Long before Russian bot armies and social media's fake news, Exxon perfected the public influence campaign with their calculated creation of climate denial in the 1980s and 1990s. All to avoid regulation amidst increasing environmental concern and climate science connecting fossil fuels to global warming.<sup>1</sup>

# HOW DID THEY DO IT?

Funding Contrarians  
Infiltrating Research Institutions  
Invoking Religion



False Equivalency

The Op-Ad or Advertorial

Blaming the Individual

Gaslighting

# CLIMATE DENIAL TOOLKIT

Funding  
Contrarians

False  
Equivalency

The Op-Ad or  
Advertisorial

Infiltrating  
Research  
Institutions

Blaming the  
Individual

Invoking  
Religion

Gaslighting

## FALSE EQUIVALENCY

Since as early as 2011, there has been a **99% scientific consensus** that humans are causing global warming.<sup>2, 3</sup>

Nevertheless, fossil fuel interest groups weaponized journalists' sensitivity to being accused of bias, pressuring them to give equal time to "both sides."

In reality, 'both sides' would be a climate scientist **with conservative projections and one who is an alarmist**, not one who still claims that climate change isn't exacerbated by humans.

“ If the Yankees beat the Red Sox last night 6 to 1 journalists would report that. They would not feel compelled to find someone to claim that the score was actually 6-4 or that in fact the Red Sox had won 6 to 1.”

-Harvard Professor, Naomi Oreskes on climate reporting

And yet this type of false equivalency continues to happen in climate science reporting.

**WASHINGTON** gets harder not to foreboding about many warnings — Presidents Gorbatov and themselves — Mr. Yeltsin — have issued since 1993 about trends toward breakdown, fragmentation, anarchy and civil war sound steadily more real. True, the recent congress of the Russian Parliament just avoided becoming the brawl that threatened to turn into at one point. But was postponing painful decisions, deepening the gridlock of government and weaker Mr. Yeltsin to the point where Mr. Gorbachev's charge that he is "losing his grip" rang true.

It is still possible in theory to sketch a more hopeful scenario, based on the legendary stoicism of Russians in the face of chaos and deprivation. We may also hope that, before too long, Russia will emerge from its agonies and set itself on the road to a better future. And we can be certain that far from all the heroic efforts made by Russians in recent years to develop business and build democratic institutions, strengthen

But in the short run, the public is overwhelmingly against the success of most of these efforts. First, Russia's rebirth as an independent state has been so sudden. The 14 other countries that joined the formation of the Commonwealth are stable and, in most cases, Russian resentment and fear of the Russian expatriates — about 25 million in all.

Second, in October 1991, Mr. Yeltsin committed the fatal mistake of a referendum. To the overwhelming majority of voters, and to the economy, it was a vote of confidence in the

Peter Reddaway is professor of political science and international affairs at George Washington University.

years. He did this even though most of the political and cultural prerequisites for success — especially a national consensus, such as the Poles had in 1990 — were absent.

In launching the three revolutions, Mr. Yeltsin's Government was good at destroying old institutions and symbols. Because a national consensus about the future was lacking, however, it failed to create viable alternatives. This bred growing popular feelings of insecurity, fear and despair.

In the economy, for example, the system of running everything from the center was largely destroyed, but too few elements of a genuine market economy had taken its place. Instead, the economy was controlled by a small number of oligarchs who had seized power and wealth from the state. What, then, does it mean for Russia's future? In a situation reminiscent of 1917, where political divisions are profound, centrifugal tendencies strong and economic conditions critical, the overriding need is for a strong, legitimate leader, a viable plan for reversing the negative trends and an ability

Russia's long-delayed post-Communist Constitution. If he and the Parliament cannot produce a compromise by then, they will ask the people to choose between two alternative texts. This exercise may well end up resolving nothing.

The Parliament is rivaled in unpopularity by Mr. Yeltsin's Government. As crime soars, Russia's top legal officer laments that the system of crime prevention "has collapsed." In October the Ministers of Police and State Security reportedly told Mr. Yeltsin that they could not agree to his declaring a state of emergency, because

What, then, does it mean for Russia's future? In a situation reminiscent of 1917, where political divisions are profound, centrifugal tendencies strong and economic conditions critical, the overriding need is for a strong, legitimate leader, a viable plan for reversing the negative trends and an ability

Vance  
And  
Powell

Two men whose views must be respected stand in the way of lessening the bloodshed in Bosnia: Mr. Vance, the heroic U.N. diplomat, negotiates tirelessly for a peace settlement; and Gen. Colin Powell, brilliant warrior, who argues relentlessly against U.S. and allied military intervention.

Peace among Serbs, Croats and Muslims will almost certainly be possible for generations, perhaps longer. The hatreds surpass all reason.

What is possible is to establish a balance of power, and perhaps a cease-fire, to contain the war's worst horrors. Even that will be unattainable unless outside forces and aid are brought in to redress Serbian dominance.

What is wrong about the peace? Mr. Vance is right, and he is on the scene. Peace pleads and Olympian caution block needed action.

leader. Mr. Yeltsin has lost the trust of the people, and no one else has gained it. Through assault and battery the Parliament has obtained inordinate power, paralyzing government and deepening the conviction of the provinces that they must seek their salvation elsewhere.

Yeltsin nor the Congress appears to relish the risk of facing a hostile and apathetic electorate. The outcome of the referendum

Time is not on the Vance side. Winter's coffin is already encased in ex-Yugoslavia. Tens of thousands more will soon die or join more than a million of their countrymen and women as refugees. The peace process cannot just drift on, becoming an excuse for not taking decisive military action.

Nor is history on the Vance side. The peoples of this tragic land have not been arguing for centuries simply among them should the Serbs who among them should be allowed to bury this

for a time at least, impose authoritarian rule through a state of emergency. At the essential moments of the Government, even Mr. Yeltsin's much less drastic plan of insisting on the quick referendum "could only lead to general chaos and the disintegration of Russia."

Members of the current Government span much of the political spectrum, with their center of gravity at present in the middle, but likely to move — with the probable ouster of Foreign Minister Andrei Kozyrev, possibly others — toward the center-right. Prime

But no political settlement, ceasefire or mere slowing of the slaughter is feasible until outside powers bring the Serbs in check. And there is a chance of that until the kinds of agreements raised by General Powell are convincingly met.

General Powell, like many of his counterparts in Europe, argues for nothing. Either use whatever force is necessary to bring the adversary to his knees or stay out militarily.

What does it mean to do nothing in this case? It means standing by while millions are displaced and tens of thousands freeze and are shot — abandoning civilized norms and respect.

It means faking serious efforts to help the Muslims, thus fueling cynicism and undermining faith in democratic leadership. It means emboldening the Serbs to attack other neighbors in Kosovo, with greater risks and more refugees.

Plainly, doing virtually nothing, continuing the present policy of simulating feeding victims while they die makes no sense. But if doing "all" would mean an open-ended, Vietnam-like quagmire, that makes no sense either.

For months now, it has been clear that the issue boils down to this: Will the West intervene militarily in what will not lead to endless and inconclusive war? I believe the answer is here's how:

Western leaders must speak with their people about stakes and the risks of inaction, clear about their limited goals and strictly limited means.

Western or certainly American involvement should be by air power. Either the Serbs accept a full cease-fire or NATO

craft attack Serbian military targets in Bosnia and Serbia.

Third, and this is critical, the Muslims themselves must accept the necessary ground troops to arm them appropriately.

Fourth, these troops should concentrate on protecting safe havens.

NATO should provide food and shelter for the havens immediately.

This plan for getting in does not create a way out. It does offer a way to reduce the slaughter and the West's military role.

Bosnians cannot wait for Vance's illusory peace. Nor can the West suffer General Powell's Olympian caution. Every action carries risk. Inaction is the most risky — and

# THE OP-AD

From 1977 to the 2000s Exxon spent ~\$15 million placing “advertisements” every Thursday in the New York Times.<sup>4</sup>

Their goal was two-sided: change public perception and change the way the NYT itself covers related issues.

## They Succeeded.

but neither can anyone else.

In an 80s internal memo<sup>1</sup>, they congratulate themselves for shifting “the views of the majority of the American people” and significantly “softening the Times viewpoints on conservation, monopoly, natural gas, coal, offshore drilling, and ethanol.”

# GASLIGHTING

— **Gaslighting (verb): manipulating someone by psychological means into questioning their own sanity**

— Making people feel crazy for believing in climate change was a deliberate tactic of Exxon and the API.

— In an internal memo<sup>1</sup> from the 90s, they said **victory will be achieved when we get uncertainty in people's mouths, when we've painted those concerned as liberals and hippies, and when those promoting climate regulation "appear to be out of touch with reality."**

# INVOKING RELGION

“ You're doing God's work every time you turn your car on and you burn fossil fuels and you put CO<sub>2</sub> in the air. You're doing the work of the Lord. Absolutely. That's the system, that's the ecological system we live in.”

-Fred Palmer, Peabody Coal

This attitude didn't come from nowhere. Fossil fuel companies intentionally targeted "older less educated males who are not typically active information seekers" (Their words)!

Conservative environmentalists in the past invoked religion to be stewards of the planet but in the 80s and 90s that sentiment warped to this.

## TALLYING THE DAMAGE

Throughout the 80s and 90s oil companies and their ilk teamed up to fund, conceive, and execute comprehensive social influence campaigns; setting us back on climate action by 30 years<sup>1</sup>.

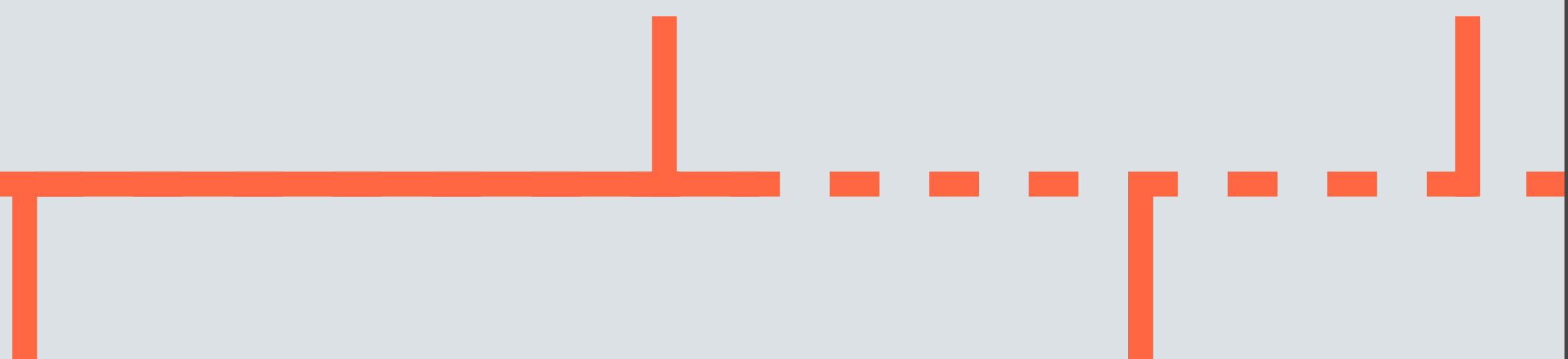
This delay will cost hundreds of thousands of lives. Per year.<sup>5</sup>

Their success however, has not gone unnoticed. Cities, counties, states and various groups of people are suing Exxon, Shell, Chevron, BP and more for damages.

**Part III:**

**2000s**

**THE PEOPLE  
DEMAND JUSTICE**



## SEEKING JUSTICE

Climate refugees from Kivalina Alaska are suing for rising seas.

Colorado and California are suing for increasingly intense wildfires.

San Francisco is suing, Oakland is suing, Massachusetts and New York are suing.

Commercial crab fisherman are suing because warming oceans have caused a buildup of a neurotoxin in crabs that makes them unsellable.

The children of Oregon are suing for the endangerment of their future.

## PAYBACK TIME

Oil companies are being sued because there is substantial proof they knew the harm “business as usual” would cause and yet...

These companies spent millions of dollars to manufacture doubt about climate change when they knew the science was sound. They knew it was sound because they funded a lot of it.

They used the science to guide business decisions for themselves while paying PR agencies, front groups, and scientists for hire to tell everyone else it was bunk.<sup>1</sup>

This is the defining story  
of our generation.

**This is the story of why  
tomorrow, we strike.**

And even if you eat meat, never  
recycle, and drive a pickup truck.  
Don't miss out on the strike  
because you feel guilty or out of  
place - show up to the strike  
because you, like everyone else,  
has been wronged.

**And the time to demand  
justice is Now.**

# RESOURCES

1

**DRILLED****DRILLED Podcast  
Season 1****Amy Westervelt**

2

'No doubt left' about scientific consensus on global warming, say experts

**The Guardian // Jonathan Watts**

3

Consensus on consensus: a synthesis of consensus estimates on human-caused global warming

**IOP Science // John Cook et al**

4

**Exxon spent millions misleading the public on climate change, study shows****Vice // Sarah Sax**

5

SPECIAL REPORT

**Global Warming of 1.5 °C****IPCC // 2018 Report**