

Fair Observer Monthly



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ABOUT FAIR OBSERVER

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No – Not just Russian Imperialism Has Triggered War in Ukraine

Peter Isackson July 03, 2022

We sometimes forget that "casus belli" in Latin is both a singular and a plural noun, and it should always be treated as such. A close look at history reveals that there are no simple causes for the Russia-Ukraine war and pinning blame on the villain-like figure of Vladimir Putin or historic Russian imperialism is intellectually sloppy and politically propagandist.

he problem with any war is that both sides always believe they are right. In this age of electronic communication and sophisticated tools designed to distort reality, both sides also heavily invest in propaganda. Those who attempt to introduce nuance while a conflict is raging are typically bullied by one of the sides to fall into line, as we pointed out in our analysis of an astonishing interview by a Western journalist of India's Minister of External Affairs, Dr. S Jaishankar. In times of war, perspective itself becomes the enemy.

Decades after the final victory or peace treaties, historians may calmly assess the events that led up to a war, tease out the play of rivalries that triggered it, elucidate the economic and cultural factors that defined its emotional character and assess the impact of the the personalities involved in launching and prosecuting the war. Such analyses, when conducted by objective historians, reveal complex networks of meaning and multiple factors hidden from public view at the time of the war. The "truth" concerning the causes of any war can never be fully described. More

significantly, for a true historian, it can never be reduced to a simple attribution of blame.

The title of a well-argued article by Bhaskar Majumdar that appeared on Fair Observer a week ago illustrates a risk that has become all too common in today's journalism. It is the temptation to reduce the analysis of every conflict to a simple blame game. Its ultimate aim is to identify a single individual who will bear the brunt of the blame. Who can forget the evil Saddam Hussein, purveyor of weapons of mass destruction so deviously hidden no one could ever find them? Our politicians and media explained how he had to be eliminated to usher in a glorious period of peace and prosperity that would inevitably follow. Or Muammar al-Qaddafi? Or Bashar al-Assad? To say nothing of Ho Chi Minh, Salvador Allende or Hugo Chavez, who were never elevated to absolutely Satanic status but still became the focus of a noble combat to replace pure evil with unadulterated good.

None of the cases cited above ended well. So why do our politicians and media persist in the same vein even today? Is it just a lazy habit or is there a novel strategy this time around? Psychologists understand that attributing blame to one group of people for some social, political or economic ill is easy to do. One day it's Mexicans and another, Asians, Arabs, Russians, Jews or simply immigrants in general. Animosity towards such groups obviously becomes exaggerated in times of war. But we should also be aware that, even in times of peace, this tendency persists. It is at the core of every form of racism.

To successfully stir the emotion of the population of any nation committed to war, propagandists cannot rely only on suspicion or hatred of the group alone. An effective war mentality requires two other essential factors that will become the foundation of every effective effort of propaganda. The first is an ideological gap, a factor of cultural

differentiation that claims to describe what another group of people believes in or is committed to. The second has become even more important in this age of media celebrities. It is the focus on a single personality to bear the blame. Eliminating that agent of evil will restore purity to the world.

Ideology can be many things. It can even be assembled from diverse components. These include religion, language, economic theory (capitalism vs. communism), implicit explicit moral codes, and style of government (e.g. democracy vs. autocracy). The ideology need not be real in the sense that it is consciously embraced by all or even a majority. It can simply be a convenient label based on officially inculcated aspirations. In today's Western anti-Russian propaganda, the preferred choice for labelling the ideology combines one notion. "autocracy," abstract and one supposedly concrete reality, "Russian imperialism." Both notions appear rather nebulous, a simplistic formulation of a far more complex reality. The key to believing that they amount to an ideology is the identification of a unique and consummate evil-doer, whose mind is focused on that credo. The arch-villain who embodies the ideology we are authorized to hate today is of course Vladimir Putin.

How nuance can be overtaken by simplification

In his article, Majumdar makes a number of pertinent points about the Russian context that help clarify some key aspects of the conflict. He evokes the background to the conflict and acknowledges its complexity. He also reminds readers of the tendency, in times of propaganda, to revert "subconsciously, if not consciously" to the reflex developed during the Cold War. He describes it as putting "things in easy perspectives: a binary black and white, the US against Russia, us versus them."

After this promising start, the mood changes. In the course of the article Majumdar

even appears to contradict himself. He slowly builds up to a position that denies the very nuance and perspective he promoted in the opening paragraphs. Towards the end of the article, he simplifies history to the very pattern of black vs. white that he earlier warned against. How else may we interpret this pair of assertions? "US President Joe Biden may have been at fault in Afghanistan but he is not at fault for Ukraine. Putin is the man responsible for this conflict." Back to the Manichean blame game.

How did the author slide into the kind of reasoning he derided? He commits three common errors of pseudo-historical reasoning that deserve our attention. They can be seen as illustrative of the process by which, in times of armed conflict, propaganda falls, "subconsciously, if not consciously" into place. The first is logical, the next, linguistic. The third is what literary critics call the "intentional fallacy."

In the very first sentence Majumdar aptly calls into question "the popular narrative of the Cold War." He identifies it with George W. Bush's famous assertion: "If you are not with us, you are against us." In other words, it reduces a problem to two competing and mutually exclusive narratives, one of which will be considered right or good, and the other wrong or evil. At this point, we would expect the article to highlight the importance of nuance and complexity in its analysis of the conflict in Ukraine. Nuance means that attribution of an absolute moral quality to any position is likely to be inaccurate. Complexity means two things. The first is that there will likely be other factors that will inevitably lead to formulating more than two competing and mutually exclusive explanations. But, whatever the number of causes identified, even when they contradictory, they may prove be to complementary. example, For Russia's motivation may be simultaneously imperialistic

(expansive) and anti-imperialistic (countering NATO's expansion). Selecting one and ignoring or suppressing the other is what propaganda typically does.

Majumdar appears to veer towards propaganda when, after evoking the fact that the US might be justifiably blamed for "neo imperialism and more," he tries to answer the question that appears after the subheading: "US Provocation or Russian Imperialism?" His argument begins with a curiously hesitant assertion about blame for the war. "Some of the popular narrative in many countries is that the US is responsible for Putin's invasion of Ukraine, at least in part."

Why "some" of the narrative? And why "popular narrative?" What does this convey? It is clearly dismissive of the idea he hasn't even begun to explain. It is the first step in the logical error of reducing the complex to a simple opposition and discarding one of the terms of the binary pair by branding it illegitimate. Instead of exploring the relative merit of two views of the conflict, this paragraph presents them as mutually exclusive hypotheses, one of which must be eliminated from consideration. There is a simple choice to be made: Russia is to blame or the US is to blame (though possibly only "partly"). In other words, the reader is confronted with a formulation identical to the Cold War logic that the author critiqued as simplistic in his first paragraph.

To make his case for placing the blame on one side only, the author astonishingly writes: "John Mearsheimer, professor at the University of Chicago, has popularized this line of thought." This is a curious and rather disingenuous linguistic trick. Those who are familiar with Mearsheimer know that he is a very serious academic who, despite the interest of doing so, is never invited by the popular media to clarify public issues. In other words, contrary to Majumdar's assertion, he has never "popularized" anything.

With a verbal sleight of hand the author puts the political scientist's well-researched analysis into the category of "popular narrative." This is both an unjustified factual distortion and, in terms of logic, a category error. Its effect is to dismiss Mearsheimer's very serious contribution to an issue of monumental importance for all of humanity by invoking a misattributed adjective: "popular." Mearsheimer as a writer of pulp fiction?

Majumdar is by no means a propagandist, but this kind of confusion of terms and categories is precisely what propaganda encourages. To be fair, the author's assimilation of the ambient propaganda is most likely subconscious, if not unconscious in Freudian sense. But that is how propaganda works, as Freud's nephew, Edward Bernays, explained in his own book, Propaganda. The word propaganda in Latin means "things that are spread or propagated" through the cultural atmosphere. That means we are all designated receivers. That should remind us why in times of propaganda, when the Cold War mentalities Majumdar describes developing, it is important to apply logical and linguistic rigor to everything one receives. Even that won't make us immune.

What Mearsheimer says

Majumdar takes Mearsheimer to task for daring to suggest that NATO's eastward expansion might have provoked the Ukraine war. He implies that the distinguished University of Chicago professor has mistakenly (if not treasonously) chosen the other camp in the binary choice concerning the attribution of blame. But Mearsheimer never hesitates to qualify Russia's invasion as illegal and an unambiguous act of aggression. What he refuses to accept, because history makes the case clear, is the literally unprovoked idea that Putin's aggression was unprovoked. Western propaganda, echoing the White House and State Department, has created a Pavlovian

association between Russia's invasion and the adjective, "unprovoked." In so doing, it dismisses with a swipe of the hand decades of historical evidence easily available to anyone even mildly curious about events in the region, especially over the past eight years.

The point Mearsheimer has been making for many years is simply that this conflict was predictable. Because meteorologists study the temperature conditions of pressure, humidity, they can reasonably accurately predict the dynamics that will define the forecast for days or even weeks to come. One of the main factors Mearsheimer focused on was the evolving attitude and actions of the West, and more particularly the United States as the reigning hegemon. Telling that story in no way resembles "a popular narrative." Instead, it's a complex bundle of facts contained within a systemic chain of events. And the US has consistently played a major role at every phase.

In a second and perhaps even more astonishing category error, Majumdar dismisses Mearsheimer's analysis as "curiously imperial." Perhaps he believes that Mearsheimer is a "useful idiot" or a Kremlin stooge. Is he suggesting that Mearsheimer seeks to justify a Russian plan of imperial conquest for which there is no evidence other than the invasion of Ukraine itself, which can be more easily and neatly explained as the reaction to a very real campaign to expand NATO right up to Russia's border?

To buttress his case, Majumdar cites the concerns of the Baltic nations based on the history of their relations with tsarist Russia and the Soviet Union. In so doing, he appears to suggest that there is some kind of essential character trait in Russian civilization that requires it to act as an imperial power and to repeat identical or at least similar actions that took place in entirely different historical conditions. There may be some truth to this when studying the long duration, but basing the hypothesis on the feelings of the neighbors

rather than the words and actions of the agent cannot be considered evidence. After all, Russia never reacted "imperially" to the Baltic states' integration to NATO, despite seeing it as a broken promise by the United States.

Though cultural continuity will always be a factor that plays out over the long term, making such suppositions about Russian imperialism fails to acknowledge that the modern Russian state is fundamentally different from both tsarist Russia and the USSR, just as the modern French republic and Britain's parliamentary democracy no longer function as absolute monarchies, while nevertheless retaining vestiges numerous of the tradition aristocratic privilege and colonial reach.

As the leader of the school of realism in geopolitical analysis, Mearsheimer focuses not on vague fears and historical memories, but on how power is structured, the tools it possesses and how it uses them. He seeks to detect patterns and laws that tell us how the power game will play out, given what we know about the playing field and the assets of the teams. Just as empirical science constructs hypotheses, predicts effects and draws conclusions on the basis of the success or failure of the empirical facts, prediction plays a fundamental role in political science.

Accurate prediction, when it is taken seriously, can render a vital pragmatic service. It can facilitate prevention. Forewarned is forearmed, says the proverb. In contrast, as Hamlet noted, "taking arms against a (predicted) sea of troubles" ultimately leads to being drowned in the tsunami. Mearsheimer claims his predictions could have spared us the drowning Ukraine is now undergoing. Anyone enterprising enough to consult his predictions from as long as seven years ago would notice how accurate they have been. We witnessing a conflict that, in multiple ways, is threatening world. Western now the propagandists seem more tempted by the hypothesis Hamlet wisely rejected: in this case,

the West's decision to massively provide "arms against a sea of troubles." Mearsheimer is neither a politician nor a propagandist. He has no dog in the fight, no stake in the game. None, that is, other than his quest for scientific clarity. In the past, he has generally sinned on the side of promoting American hegemony. But that is precisely why he, as an American patriot, has consistently mobilized his capacity scientific observation not with a view to condemning or excusing other empires, but in the interest of improving the chances of preserving US hegemony, which he admits has provided him with a way of life he has stated on many occasions that he appreciates.

Is there a distinction between hegemony and empire?

The same cannot always be said of Mearsheimer's critics. This is especially of those who possess - or rather seem possessed by - an imperial rather than a merely hegemonic mindset. Because whether or not Russia, with its already large landmass and unimpressive economy, has imperial ambitions, it is clear that the US has consistently had such ambitions, and never more so than in the past 75 years, a period in which it consciously took over Britain's role of dominant Western empire.

Hegemony, Mearsheimer's focus, or empire? What is the difference between these two similar notions? Hegemony is about relative geopolitical influence, the famous "balance of power" that regulates matters in any global or extensive system of relationships that admits of a "rule of law" or, at the very least, a "law of rules." The idea of hegemony relies on and implies a respect for authority. Empire, in contrast, is about exercising control and exploiting resources. Respect of any authority other than its own, if it exists, is secondary. Empire is driven by its capacity to extract wealth from other parts of the world and enforce the obedience of other peoples.

Hegemony is abstract; empire is concrete. Thus there can be a science of hegemony but only a history of empire. The first is a game, the second, a racket.

Mearsheimer justly claims to be a political scientist. He analyzes behavior, but as a respected intellectual - in contrast with opportunistic think tank academics and consultants - he typically does not seek to directly influence or alter other people's or his own government's behavior. He nevertheless hopes his work will have an impact on political decision-making, but makes no special effort to frame policies and even less to enforce them. The most valuable outcome of a true political scientist's work is prediction, just as the most valuable outcome of a natural scientist's work is the confirmation of laws of nature.

That is why Majumdar's claim that Mearsheimer has a "curiously imperial" mindset makes little sense. Predicting a behavior based on one's understanding of physical or psychological laws combined with familiarity with context simply should never be interpreted as in any way excusing the behavior thus described or serving the interests of the party it describes. But that is what authorities in the West have been doing systematically with anyone who suggests an alternative to their version of propaganda.

An accurate prediction of an unwanted event should thus never be confused with consent. But that is what Majumdar appears to be suggesting. Mearsheimer has been studying the situation in Ukraine and speaking about it publicly for the past decade. Some are now hailing him as a modern Nostradmus for predicting in eerily accurate terms the current war back in 2016. Is that what Majumdar means by a "curiously imperial" argument? One might say the same thing of the soothsayer who told Julius Caesar: "Beware the Ides of March." That marked the historical moment the Roman republic disappeared, to be replaced after years of civil war by the empire.

Majumdar persuasively begins his article like a political scientist but somewhere along the line drifts into a discourse that resembles propaganda. Statements such as "US President Joe Biden may have been at fault in Afghanistan but he is not at fault for Ukraine" are doubly doubtful. First, with regard to Ukraine, it is far too early to accurately allocate fault in such a long, complex story. As for Afghanistan, and whatever fault one can attribute to Biden, that is even more complex.

Biden's relationship with events in Ukraine is in itself a complex story. Anyone even vaguely aware of the events leading up to and including the Maidan uprising in 2014 or who has heard the voice of US State Department's Victoria Nuland in her hacked phone call with Ambassador Geoffrey Pyatt, will be aware of Biden's active role in Ukraine. At the time Barack Obama had made Biden his point man in Ukraine.

Is it really stretching things to suspect that Biden, even before becoming president, had already been implicated in the events that led to the invasion? Did what happen in the Obama years have nothing to do with the events that accelerated as soon as Biden was took over as president in January, 2021. Nitpickers may go mention and another insignificant player known to have played a peripheral role in the drama: Hunter Biden. How peripheral was it? In short, it's far too early to let Biden off the hook for his potential personal fault in Ukraine. Just as many accused George W Bush of wanting to finish his father's unfinished business in Iraq, family relations may have something to do – however marginal with the events that have unfolded in Ukraine over the past eight years.

The ambiguity of words chosen to describe historical relationships

After categorically exculpating Biden, Majumdar focuses on what he represents as the unique fault of the Russians and Putin in particular. White House and State Department propagandists can only applaud. Propaganda always uses the shifting and imperfectly perceived meaning of words to create beliefs meant to distort reality in ways that are slight enough that the public is unlikely to notice. Majumdar provides an interesting example when he casually calls NATO's attitude with regard to Ukraine as "welcoming." Let's call this a generous interpretation of a somewhat less palatable reality. This verbal ploy elides the subtle distinction between a pair of related actions: welcoming and inviting.

If Ukraine had simply asked to join NATO, it would be fair to describe NATO's position as "welcoming." It is even true that at the very beginning, back in 2005, Viktor Yushchenko, Ukraine's president at the time, actually did formulate a request to join both NATO and the European Union. That set off a period of debate, both internal and involving Russia, about the long-term implications of Ukraine joining NATO.

That debate was never resolved. But there was a critical moment in 2008 when US President George W Bush insisted not on "welcoming" Ukraine but on actively inviting it to apply for NATO membership. In reality, Yushchenko's earlier request itself had already been the result, not of the spontaneous desire of Ukrainians, but of pressure from the US that had already been expanding NATO. The initiative by the US with regard to Ukraine, unlike the Baltic states, was consistently resisted by France and Germany, two major members of NATO.

Things took a different turn when the pro-Russian Viktor Yanukovych was elected president in 2010. The Ukrainian parliament voted specifically to exclude the goal of integration into not just NATO but to becoming a member of any military bloc. It's a status called neutrality. The law nevertheless permitted and even encouraged cooperation with alliances such as NATO while promoting the idea of joining the European Union.

The annoying complexity of history

In other words, at the end of 2013, the status of Ukraine was that of a nation that in 2008 had been invited to join NATO by the US, though – and this is significant – not by Europe. But because Ukraine itself had declined the invitation, the question of being welcomed became moot.

At the end of 2013 – as is now well documented - the CIA stepped in (not for the first time) to help foment the protests that had peacefully were but increasingly violent, This was the direct effect of the American initiative of "welcoming" the participation of Ukraine's ultra-nationalist groups, known for their extremist neo-Nazi culture and their taste for brutality. The strategy worked. This became clear when the elected president Yanukovych fled the country, leaving it in the capable hands of a band of political actors vetted and briefed by the US State Department.

The rest of the story is well known to anyone who even vaguely followed events in Ukraine. A corrupt billionaire fully aware of the agenda was elected president. Petro Poroshenko served out his five-year term presiding over a deeply kleptocratic state. With a civil war raging in the east and corruption installed as a way of life, he nevertheless managed to become unpopular enough to be voted out of office in 2019 in favor of a comic actor who convinced 73% of Ukrainian voters that he would be more competent than the incumbent. Or at least that he would be less corrupt, like the president he played on television. Moreover, Volodymyr Zelenskyy promised to be the outsider capable of doing what Poroshenko had been unwilling to do: collaborate with Russia, Germany and France on applying the Minsk accords that granted

autonomy within the Ukrainian state to the disputed Russian-speaking areas of the east.

Majumdar simplifies things in the extreme when he describes Putin's ambitions in these terms: "Running a kleptocratic regime, this authoritarian leader needs to squash democratic Ukraine." This is half correct. Russia is indeed kleptocratic and authoritarian, but no more than – and some might claim even less than – any of the regimes that have been installed in Kyiv since 1991. Ukraine is no more a democracy than Russia itself and has never found a way of recovering durable political or economic stability since the collapse of the Soviet Union. It might be more realistic to rewrite Majumdar's assertion with this formulation: "Running a kleptocratic regime, this authoritarian leader [Putin] needs to squash another kleptocratic, authoritarian regime: Ukraine." In their majority, the Ukrainians definitely want to be independent of Russia, but they have never shown any aptitude for democracy.

The promoters of the war in the West never ask themselves why the US is so heavily engaged in Ukraine? Are they so averse to killing or the ways of war? If so, shouldn't they have stepped in on Yemen's side in the Saudi war on the Yemen republic?

When interrogated about the problem of organized crime in the US, many Americans will shrug their shoulders and say, "Well, at least the Mafia essentially kills its own and leaves the rest of us alone." One might expect them to conclude that when two authoritarian neighbors in Eastern Europe begin slaughtering each other on their own disputed territory, why should we feel concerned to the point of funding their entire military?

That actually was President Barack Obama's policy. He famously told The Atlantic's Jeffrey Goldberg: "The fact is that Ukraine, which is a non-NATO country, is going to be vulnerable to military domination by Russia no matter what we do." As with

everything concerning nations that have acquired the habit of meddling in the affairs of others, this has to be taken with a grain of salt. Obama said it at the very moment when his State Department was intrusively working in the wings to favor one of the two authoritarian rivals (Ukraine) over the other (Russia). To some extent washing his hands of this troubled zone, Obama delegated to his Vice President Joe Biden the task of managing what were essentially covert operations of deep military engagement in the name of NATO.

Majumdar's informative article highlights some important aspects of Russia's and Putin's authoritarian ways as well as his often illegal and destructive actions. But when analyzing the causes of a complex drama that has now become dangerous for all of humanity, it is always helpful to refrain from simplistic explanations that rely on identifying blameworthy individual. We always want to understand the psychology of leaders guilty of aggression, but speculating about their "real" motives and asserting that they explain everything is precisely what propaganda does as a routine. This is especially true when teasing out the causes of something that has become clearly much more than just "a major geopolitical crisis."

As the days go by, the war in Ukraine increasingly resembles the initial rumblings of World War III. At the NATO summit in the final days of June US President Biden responded to a question about how long Americans would have to support the high price of gas with these words: "As long as it takes, so Russia cannot, in fact, defeat Ukraine and move beyond Ukraine."

Apart from the message to Americans that their comfort and well-being is less important than the government's commitment to a foreign war, this can be interpreted in several ways. One possibility is that this reveals what has been a pattern for decades: the inclination of every US government to commit, though in a

slightly modified role, to yet another forever war. It is the duty of an empire to maintain a permanent military presence at all strategic points around the globe. Time in such endeavors is never an issue, especially when, with no troops on the ground, no Americans are coming back home in body bags.

Another rather more surprising possibility, is that this may indicate a serious change of strategy. The conditions Biden evokes could presage the terms of a negotiated settlement. If the end of hostilities could be presented officially not as a victory of Russia over Ukraine but as Ukraine's heroic achievement of a newly defined independence from Russia accompanied by the assurance that Russia would make no other territorial claims and accept NATO on its borders everywhere except Ukraine, everyone might save face. That rosy scenario seems unlikely, given another remark Biden made in the same interview: "What happens if the strongest power, NATO, the organizational structure we put together, walk[s] away from Russian aggression?"

A third is that the US will continue until it has put a dagger in the heart of Russia, or at least of Vladimir Putin. That may explain why the chit-chat in the West has increasingly turned to considerations of Putin's bare chest. That lighthearted banter assumes that at no point would Russia, or the US itself, be tempted nuclear weapons capable to use compromising the survival of humanity itself. Or that, profiting from the confusion, Israel might take the initiative to nuke Iran or North Korea to nuke its own chosen targets, just for the sport of it.

When the future of the human race and the planet itself is at stake, offering simplistic takes on who is at fault tends to be destructive rather than constructive. Taking time to tease out all the details — something John Mearsheimer and a few others have been doing over the years – is probably worth the effort. We owe them our respect.

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This is Biden's Inflation Plan?

Christopher Roper Schell July 07, 2022

US President Joe Biden has a grand plan to fight inflation. The trouble is that Biden's plan is not much of a plan and it will certainly not curb price rises not experienced for decades. In fact, the president's policies have proven to be inflationary and the public has lost confidence in his ability to manage the economy.

"Milton Friedman isn't running the show anymore."

Joe Biden – April 2020

Glibly thus did then-presidential candidate Joe Biden describe his economic vision for America on the campaign trail in April 2020. Had he not so clearly delineated his economic approach against that of the Nobel Prizewinning economist of the Chicago School, comparisons between Republican policies and Democratic policies might be murkier. The results of Biden's 2021 stimulus package are now in. As senior economists at the US Treasury warned him, this package was bound to be inflationary and has proven to be so. Good old Milton Friedman would have told him the same. It is clear now as to who is running the economic show.

When Biden spoke those words, I was reminded, as I am more so now, of the t-shirts that were in vogue in my youth that read:

"God is dead."

-Nietzsche

"Nietzsche is dead."

-God

President Pangloss might think the economy is going great guns. He might even think that Afghanistan was a success. Maybe the fanboys actually believe we have the "fastest-growing economy in the world" (not true) or that core inflation is down (wrong again), but most Americans are not quite as convinced. They're worried about inflation and consumer sentiment plunged to an all time low. The Business Roundtable CEO Economic Outlook Index has declined dramatically in six months. After 18 months of Biden's presidency, and amidst the Committee's anti-Trump January 6 extravaganza, people prefer Trump to Biden in a head-to-head contest.

Given the dire state of affairs, this would be the time for the president to get serious, demonstrate clear thinking and come up with new ideas. Instead, Biden has published a rather curious op-ed detailing his plan to tackle inflation in The Wall Street Journal. Sadly, this plan amounts to very little. Biden grandly promises three things:

- To leave the Federal Reserve alone,
- To push green energy, and
- To reduce the deficit.
- To use this Irish Catholic president's own words, this plan is malarkey.

"Don't use three words when one will do, don't shift your eyes, look always at your mark but don't stare, be specific but not memorable, funny but don't make him laugh, he's gotta like you then forget you the moment you've left his sight..."

Biden's op-ed is rather prolix. He uses a lot of words but says little and is utterly forgettable. There is another point to remember. The law prohibits Uncle Joe from playing footsie or getting handsy with the Federal Reserve. So, the president is promising not to do what the law tells him not to do. No shit, Sherlock!

In recent months, the Federal Reserve has not exactly covered itself with glory. The cover story of the April 23rd-29th edition of The Economist was "The Fed That Failed." I agree. I'm not sure I have faith in the very people who ignored inflation as a "transitory" phenomenon. Yet I would prefer they deal with inflation instead of Uncle Joe.

Ah, dream too bright to last!

Ah, starry hope! that didst arise

But to be overcast!

Biden's second promise kicks the fever dream of ideologues on the left. They believe that a Green New Deal would build infrastructure, create jobs, and bring down inflation at the same time. It would be a magic bullet or, even better, a bullet train to the Promised Land.

This green romance does not seem to survive first contact with reality though. Nickel prices may not be at the highs they soared to in March but they are still bloody high, and you can't go green without Class 1 nickel. Even if we did have reasonable nickel prices, the US has a single nickel mine, the Eagle Mine in Michigan. There is simply not enough nickel to go green.

Furthermore, as we learned from the energy crisis of the 1970s, it's not great to put all your eggs in a foreign-sourced basket. This is what the Biden administration has ended up doing by canceling the mining leases of the Twin Metals mining project that was the other nickel mine in the US.

Twin Metals claims it has 99% of US nickel reserves, yet Biden's Interior secretary said she "can't answer" if it will ever be allowed. We import a lot of nickel. In fact, Russia is one of the main suppliers of nickel to the US. So, nickel mines in the US make eminent sense. Instead, the administration seems to be hell bent on killing nickel babies in their cradles and putting clean energy security at the mercy of the likes of Russia.

It is not just nickel that is scarce. We have a single US mine for rare earths. China produces four times what we do and makes up 60% of the rare earths global market. There's no way we can be a green energy powerhouse when China has six state-owned mining companies while the US has only one, single mine: Mountain Pass. We very much have a simple problem; the US lacks the raw materials to go green.

It is not just raw materials that are the problem. When it comes to solar power, 90% of all panels installed in the US come from China and Southeast Asia. Note that panels from the latter part of the world are manufactured by Chinese companies. These companies have been accused of dumping solar panels into the US market, undercutting American companies in the process. These companies petitioned the US Commerce Department, which launched an investigation into the matter.

Under the Biden administration, that investigation has been practically buried. So, China will continue to corner the market in solar and we will offshore our green energy to the Middle Kingdom. Under President Pangloss, we will build the entire US green economy around the kindness of strangers from sea to shining sea.

I would think that the key lever to control inflation would be to curb energy prices. Since February 24 when Russia invaded Ukraine, there has been a supply shock when it comes to oil and natural gas. For years, the Democrats have been squeezing domestic energy

production and distribution in an idealistic and ideological pursuit of making the US cleaner and greener. They have killed offshore drilling, fracking, shale gas, the Keystone XL pipeline and the like.

Today, the US needs more domestic production and distribution if it is to control inflation and achieve energy security. Yet the Biden administration seems to be unable to dismount from its ideological high horse. The president is busily sending oil execs nasty letters, canceling oil and gas lease auctions, and doing his best to make sure the US doesn't have any lease sales while he's in office.

Biden has anointed Amanda Lefton to draw up the US offshore energy policy. She has drafted a five-year leasing plan that was released on July 1, in a pre-July 4 holiday Friday afternoon news dump. This makes drilling all but impossible in the waters off the Atlantic and Pacific coasts. If this does not tighten energy supply, I don't know what else will.

Instead of producing more oil and natural gas, the US seems to be looking to import them from abroad, including Iran and Venezuela. Surely, it is unlikely that their production methods are cleaner than US ones. Also, why should US taxpayer money go to foreign ones, especially those with a history of hostility to Uncle Sam.

It is not only production but also refining capacity that needs to go up in the US. That would lower oil prices at the pump and bring down inflation. Yet Chevron's CEO, Mike Wirth, recently said he didn't envision a new US refinery ever. What is going on?

Refineries are capital intensive. As Wirth said, "You're looking at committing capital 10 years out, that will need decades to offer a return for shareholders, in a policy environment where governments around the world are saying we don't want these products." Given the likes of Lefton in charge, it makes little sense for

Wirth or any oil and gas executive to make capital investments in the US.

In the country of the motor car, Biden has promised to eliminate fossil fuels. He has turned up the rhetoric against oil companies. Recently, the president said, "Exxon made more money than God last year" before angrily telling the company "Start investing. Start paying your taxes." For all its faults, it is highly unlikely that Exxon stopped doing either.

Few know that oil companies have to pay royalties when they drill on federal lands. These have remained flat for more than a century, but recently the Biden administration hiked up royalties by a whopping 50%. Given surging inflation, this is not exactly the best time to hike up royalties. Biden claims oil companies aren't investing and are gouging consumers. It seems that the Biden administration is doing the gouging instead. Note that gasoline prices went up by over 40% during the first year of the Biden presidency. Blaming the "Putin price hike" for all the US energy troubles is a bit too clever by half.

Lately, I feel the haters eatin' away at my confidence

They scream out my failures and whisper my accomplishment

Biden's third promise is to reduce the deficit. In his op-ed, Biden's claims that he has already done so. Yet the president feels that people do not give him credit for his many accomplishments. Is this true?

Let us just examine one of the accomplishments for which Biden pats himself on his back. The president claims that he has reduced the deficit this year. Given that he passed the \$1.9 trillion COVID stimulus last year, a reduction in the deficit this year was not such a big deal. As pointed out earlier, economists in the US Treasury had told senior officials in the Biden

administration that the stimulus would be inflationary as it has clearly proved to be.

Biden has also signed into law further spending of \$1.1 trillion on "infrastructure," which takes his total expenditure to \$3 trillion already. Ironically, little of the money earmarked for infrastructure will actually be spent on infrastructure. Yet Biden has the cajones to tout his credentials as a deficit reducer.

In reality there are three reasons why he isn't increasing the deficit in a wild blowout. First, the US Congress has put the kibosh on Build Back Better, which originally planned to spend approximately \$4.5 trillion over 10 years. Second, the COVID panic is finally over in the US. Third, tax receipts are way up because job numbers are up with COVID under control and inflation-triggered wage increases have put people in higher tax brackets.

At a time when the stock markets have crashed and people are feeling poorer, Biden makes another curious argument in his op-ed. He will dramatically increase the budget for the Internal Revenue Service (IRS) to collect "taxes Americans already owe." As many others have done before him, the president is promising to reduce the infamous "tax gap," the \$600 billion that the IRS loses out on because of unreported payments (often in cash) and the sheer complexity of the US tax code. While I support collecting taxes that are owed, significantly increasing the size of a tarnished, partisan IRS at a time of economic and political uncertainty does not make sense.

While concluding this op-ed, Biden does what any good politician does in a campaign. He paints his Republican rivals as barbarians at the gate who would sack the US economy. Most Americans now no longer buy Biden's shtick. They have lost confidence in his competence to run the economy and the midterms are likely to reflect that fact.

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"The Lady Vanishes" But She Must Not

Ranjani Iyer Mohanty July 10, 2022

Women have to deal with sexism throughout their lives. As they get old, they have to deal with ageism as well. This must end because they deserve better and also because they offer society many unseen benefits of great value.

y mother, aged 81, had a couple of errands and so I was driving her around Calgary. First, we went to her bank so she could deposit a check. Wanting to ensure she didn't slip on the well-polished floor, I held her arm gently as she walked up to the teller. She greeted the teller good morning and said she had a check to deposit. The teller looked right over my mom's head and asked me, "Which account does she want to put it into?" I was a bit shocked and confused. So I blurted out, "It's her check and her accounts. Ask her."

Next, I took my mom for her annual appointment with a cardiologist. After having examined her, he asked me how her current medications had been working for her. I said, "I don't know. Let's ask her." After all, my mother was sitting right there.

Women are unfairly treated by society and in many industries. Sexism is a well-documented phenomenon. However, as they age, they also encounter ageism—they become invisible.

Scene 1: Gender Bias

We've known for some time about gender bias in many areas of society, including healthcare, finance and media.

Women's health issues are often underestimated by medical professionals. Heart disease, autoimmune disease, and severe period pain are routinely dismissed as anxiety, depression, or just plain normal, causing women to suffer in silence. A study of nearly 30 million people found that women were "less likely to receive the medication treatment and monitoring recommended by clinical guidelines".

In general, women avail of fewer financial services. They have fewer bank accounts, make fewer deposits, and have less life insurance. Loan officers tend to be biased against women applicants, resulting in women less likely to get a loan, and when they do get a loan, receive smaller amounts; interestingly, the women are less likely to default on their loans.

Examples of sexism abound not only in real-life, but in reel life. In the top grossing movies of 2018, only 35% of speaking characters were female.

Scene 2: Gender Bias + Age Bias

Now, on top of a gender bias, add an age bias. A global study across 18 countries and multiple dimensions found that, while aging is no picnic for either sex, elderly women are singularly disadvantaged.

Since women live longer than men, they have more interactions with the healthcare system. Unfortunately, the interactions are not all they should be. Ageism combined with sexism hampers diagnosis and treatment for elderly women. Another study's title itself says it all: "Seen but not Heard: Elderly Women's Experiences in the Hospital". It found hospital care for elderly women sadly lacking,

especially in the areas of bathing, mobility, nutrition, and not surprisingly, communication.

In financial services, elderly women face both gender bias and general financial ageism. They experience discrimination and exclusion because there are fewer physical bank branches and more online banking. They also have fewer and more expensive insurance options.

For women in cinema and the news, even 35 is considered old. A study of the top grossing movies from the 1940s through the 1980s found elderly women not only to be underrepresented (only 19% of characters over the age of 35 were women) but more negatively (unattractive, unfriendly, portrayed unintelligent). Another study analyzed the top grossing movies of 2019 in France, Germany, the UK, and the US to find that of the characters that were 50+ years old, only some 25% were female and that there were no female leads in a single movie. The 2015 Global Media Monitoring Project studied the news arena to find "an inverse relationship between sex, age and visibility so that as a woman's age increases, her visibility in the news decreases: a mere 20 per cent of all sources/subjects who were perceived as being over the age of 50 years were women."

They are even ignored by the academic and research community. We don't collect enough data on elderly women, or even women over 50. And in an age of data-driven policy making, that means they miss out on services. We don't conduct sufficient clinical trials on elderly women. And that means the appropriate dosages for them or the possible side-effects on them are not known. We don't have an accurate understanding of how common diseases affect women or how best to treat them. As an article in The Lancet article states:, "Most adults older than 85 years are women with unique health and social needs, but they comprise an invisible majority". We know that women live longer than men, but, as one global meta-analysis reveals, they "live more years of their lives with

functional limitations", and they "score significantly lower on most indicators of subjective well-being and mental health".

Scene 3: Fade to Gray

In essence, elderly women are invisible. They are not presented, acknowledged, studied, or listened to. And therefore, they suffer service inequities – be that in the area of healthcare, finance, or other industries. Among the elderly, women suffer greater exclusion from material resources and civic participation.

It's not just the average elderly woman who discrimination. High-profile women face discriminationas well. Mary Ann Sieghart's must-read book The Authority Gap overflows with examples of high-ranking female leaders being repeatedly underestimated. In one, she tells of how the then Pope reached past Mary McAleese, the President of the Republic of Ireland, to first shake the hand of her husband (p.2). In another, she tells of how, at a White House reception, US President George Bush told Joseph Mulcahy that he was doing a great job at Xerox while it was actually his wife Anne Mulcahy who was CEO of Xerox and standing right beside him (p.69). The book mentions the then chair of the International Monetary Fund Christine Lagarde explaining how, when women board members begin to talk, people stop paying attention (p.66). Dame Mary Beard, professor of Classics at Cambridge University and well-known TV historian, has to gently chide people to let her have a chance to speak (p.65). Madeleine Albright, the former US Secretary of State, encouraged women to interrupt more in order to have their say (p.64).

Because of the tech revolution and then working from home during COVID, we've learned not to judge people by their clothes. The young guy or gal in the t-shirt, jeans, and hoodie may well be the entrepreneur of a startup worth millions — so you better acknowledge them, respect them, and give them

good service. And yet, we continue to judge people by their gender and by their age. If you're a woman and you're elderly, you're doubly discriminated against, underestimated and unseen.

By being ignored, elderly women lose out on what is rightfully theirs: to be seen and acknowledged and respected, to be heard, to be taken into consideration, and to avail fully of the resources and services due to them. We need to listen to them out of compassion, out of concern for their physical and social well-being, and out of a sense of what is their right.

By ignoring elderly women, we lose out on what they have to offer: their extensive experience, deep knowledge, non-judgemental perspective, unconditional empathy, and insightful wisdom. We need to listen to them selfishly for our own growth and well-being.

In Alfred Hitchcock's 1938 film, The Lady Vanishes, the 'lady' who disappears is Miss Froy, an elderly woman who is overtly a governess and music teacher. But she is more than that; she is also a spy for the British Foreign Office. Thankfully, at the end of the movie, she reappears. A happy precedent.

The eldest of five children, my mom lost her father at an early age. She married, immigrated far from her native land to Canada, raised two children, worked a full-time job where she was admired for her intellect and ethics, managed an immaculate and friends-filled home, sang classical music on stage, contributed to a community where she was known for her open heart, and, for the last seven years, nursed her husband through cancer. Every elderly woman has her own story, her own trials, her own accomplishments. After all, they have lived a life.

Back home, my mom makes dinner, eats, washes the dishes, and takes her medications. Then, she sits down to relax and do some sudoku. She finishes one in 3 minutes – and I finish the same one in 5 minutes. "Don't

worry," she says smiling gently. "You'll get better with time."

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US Supreme Court Decisions Highlight Ethical Concerns

Larry Beck July 11, 2022

Since the US Supreme Court still has no code of ethics, it would seem that the justices are confident enough in each other that no one will tell or supremely confident that no one is watching.

or those of you longing for the simpler life of the 18th century, the chief justice and five associate justices of the US Supreme Court stand at the ready to help you find your way. Spread before them as their sacred guide is the US Constitution, crafted in the late 1780s and ratified in 1788, with the Bill of Rights tacked on in 1791. Just in the last few weeks, those six justices who seem so perplexed and challenged by the realities of the 21st century took refuge in the original and dated text of their sacred guide to women of previously-granted reproductive rights, to undermine federal regulatory authority to confront climate change, and to ensure that concealed firearms would present an even graver danger tomorrow than they do today.

Not even the slow and tortured historical path to an inclusive reading of the 14th Amendment to the Constitution could sway these "originalists" from their intrepid march backward. To this troglodyte six-member

Supreme Court majority, a march through Times Square with a concealed firearm gets the constitutional nod over women struggling to ensure good outcomes from available options for protecting their reproductive health and their lives.

This, of course, is hardly the first time that the words of the original US Constitution and the Bill of Rights or the absence of words in those documents has gotten in the way of crafting the legal foundation required to meet the challenges of an evolving nation. For example, the US Supreme Court paved the way for corporate money to further overwhelm the nation's political integrity by finding corporate persona that had a guaranteed right to free speech. Yet, the word "corporation," like the word "abortion" appears nowhere in the Constitution or the Bill of Rights. So, if we just work with the original text, neither women nor corporations would enjoy the perceived Yet, today, women don't and rights. corporations do.

And this doesn't even touch the original text granting each Black man 3/5ths of the constitutional recognition granted to White men. Somehow, and thankfully, in the 19th and 20th centuries and after a Civil War, a "living" document slowly evolved through amendment and court decisions to recognize that the original words of the Constitution on the topic of counting slaves could not meet the fundamental societal challenges of the day. And further, that those words could no longer be given continued legal vitality.

Corruption Taints Institutions

As with most public endeavors, good legal outcomes require a confluence of professional judgment and ethics. Nowhere is this more certain than the exercise of power in the hands of judges. Corruption that undermines confidence in judicial rulings has a negative institutional impact that can touch each of us. The US Supreme Court is no exception.

The annual salary of each of the associate justices of the US Supreme Court is \$274,200, with the chief justice earning \$286,700 (January 2022, National Taxpayers Union Foundation). Now you would think that an annual salary in that range for a lifetime job with very generous benefits and retirement options would be enough to satisfy Supreme Court justices, if for no other reason than to free them from the real temptation of ethical lapses and the appearance of corrupt influence on the performance of their duties. But you would be wrong.

Seemingly, the grifter mentality polluted so much of the Trump administration has yielded a palpable sense that way too many public officials are plotting their profitable exits, padding their investment portfolios, drafting their "profound" memoirs while supposedly serving the nation. Now, and not for the first time, even justices of the Supreme Court seem unable to avoid the temptation of cashing in. Nor it seems can those charged with making definitive and final iudicial determinations in America for others police themselves in order to avoid an ethical stench that is today undermining public acceptance of their judicial decisions and the critical role that acceptance of those decisions plays in the rule of law.

Some of the Supreme Court's ethical shortcomings are finally being vetted in full Justice Clarence Thomas is so public view. blind to ethical norms that he plunges forward infuse his mindlessly wife's hyperconservative advocacy into his judicial decision making. Her denials of spousal influence peddling should ring hollow since her continued passion to overturn the results of the last presidential election belies the reality that integrity would require. Meanwhile, husband increasingly hunkers down to rebuild an 18th century America suited for steamrolling the 21st century.

Among the many ethical concepts that some of us believe to have escaped Justice Thomas is the pretty obvious notion of recusal from all cases where his spousal connection might appear to taint his judicial neutrality. Now it appears that Justice Thomas's ethical lapses are nothing new, since there are many cases to which Justice Thomas has lent his support that his unhinged wife might have influenced. Yet it took her participation in a coup attempt to raise the ethical questions that should have been raised ages ago.

No Code of Ethics for the US Supreme Court

Why might that be? Maybe it is because Justice Thomas is not alone. His egregious and continuing ethical lapses stand out at the moment, but surely someone among the other justices with whom he has served since 1991 would have known about the spousal ethical problems and could have internally flagged them for review. But perhaps a book deal was in the works for one or more of the justices that might get ethically squelched if even internal ethical concerns were to be raised by some justices about other justices.

Remember the salaries and benefits of Supreme Court justices noted above? Well, they appear to have fallen short in ensuring a comfortable life for those toiling so hard on our behalf. It appears that these supreme legal minds have the extrajudicial energy to spew written wisdom for profit at an eye-popping level. Then, just to prove the incredible vitality of those judicial minds, teaching at universities and highlighting national and international conferences in garden spots around the world provide further opportunity to mine the gold of high public office.

Unfortunately, the ethical challenges infect both sides of any perceived political divide in the Supreme Court. This should not be surprising since the US Supreme Court has no code of ethics, unlike the rest of the federal judiciary. It would seem that they are confident enough in each other that no one will tell or supremely confident that no one is watching. It again makes you think of Donald Trump and his band of grifters, a comparison that should embarrass even those otherwise challenged justices who Trump appointed.

Within the limited cohort of informed Americans, some people seem to be catching on, maybe even enough to wake up the chief justice long enough to take notice. In a political environment in which all government institutions have questionable records of accomplishment that are under public scrutiny, the US Supreme Court's institutional collapse is perhaps most troubling of all.

It should be clear by now that there is eroding public confidence in the US Supreme Court and that a Supreme Court with compromised integrity cannot fulfill its crucial constitutional role.

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The Russia-Ukraine War Proves That We Must Define National Security Differently

Mark Cummings July 14, 2022

To confront the four horsemen of the apocalypse of the 21st century — global warming, nuclear war, food insecurity and pandemics — we need coopetition, not competition.

t is dangerous to deal with the 21st century using 19th century definitions. The Russia-Ukraine war is founded on a 19th century Clausewitzian definition of national security. In contrast, the operative 21st century national security considerations are based on economics, technology and trade.

There is also another important overlooked fact about wars of the 19th century. They amplify the four horsemen of the apocalypse of the 21st century: global warming, nuclear war, food insecurity and pandemics.

It is clear that we need a new definition of national security. This new definition needs to focus on what actually makes individuals more secure in their daily lives. Competition between nations will continue in the realm of technologies, economics and trade but we need international cooperation to confront the four horsemen — this new phenomenon could be termed coopetition. In a way, we have stumbled into this transition already with such organizations as the World Trade Organization, the World Health Organization, the United Nations, etc.

However, we still think about national security in a 19th century way. By changing our definition, we can hasten the transition to better policies both nationally and globally. The need for such a change is highlighted by the Russia-From a 19th century point of Ukraine war. view, Russian leaders feel they need a buffer zone to protect Russia. In turn, the North Atlantic Treaty Organization (NATO) feels compelled to avoid appeasement of an aggressive dictator that in their view led to World War II. From a 21st century national security point of view, the Russia-Ukraine war is making each of the horsemen more dangerous.

Global Warming

Greenhouse gases are released every time a gun is fired, a bomb goes off, a building catches fire, an armored vehicle burns and so on and so forth.

The transportation systems that bring all the military personnel and equipment to the battlefield release more greenhouse gases. The manufacture of weapons releases greenhouse gases as well. Finally, when the war is over and reconstruction starts, there will be an increase in greenhouse gases because of reconstruction.

Now, it can be argued that the Russia-Ukraine war may hasten Europe's move away from fossil fuels and lead to reliance on sustainable forms of energy. It can also be argued that the rise in fossil fuel costs around the world will lead to a reduction in consumption. But, so far, we are not seeing that transpire. Instead, the fossil fuel industry is adapting to the new situation.

Nuclear War

We have two nuclear-armed groups separated by several hundred miles talking of tactical nuclear weapons. We have soldiers firing at nuclear power plants. Emotions are running high. Egos are involved. Casualty rates appear to be quite high. It appears that soldiers are taking drastic actions, either out of frustration or under direct orders or a mix of the two. There are reports on Russian-controlled media for national mobilization. Individual Russian civilians have called for the use of nuclear weapons. It doesn't take much to imagine something going wrong: a nuclear accident, a rogue officer ordering a launch or even the top leadership ordering a tactical low-grade nuclear strike.

Since the end of World War II, nuclear weapons have not been used. Even the use of tactical nuclear weapons has been unthinkable. That is, unthinkable till now. Political leaders are talking about being prepared for such an eventuality. If tactical nuclear weapons become thinkable, what happens to strategic nuclear weapons? If tactical nuclear weapons are used a few miles on the other side of your border, what are the radiation effects on you? Does all this make the people in your nation more secure?

Food Insecurity

The United Nations Secretary-General Antonio Guterres, has said, "We all see the tragedy unfolding in Ukraine. But beyond its borders, the war has launched a silent assault on the developing world. The crisis could plunge up to 1.7 billion people, more than a fifth of humanity, into poverty and hunger on a scale not seen in decades."

If you are a well-off individual in a country where food prices go up, but there is plenty of supply. Would you care if 20% of humanity falls into poverty, hunger and despair? Even in a Hobbesian worldview, the answer has to be yes. Despair among 20% of the global population is bound to breed trouble for all. Desperate people do desperate things: crime, corruption, terrorism and illegal immigration are just the tip of the iceberg.

In short, if my neighbor's house catches fire, my house is at risk as well. If I want to ensure my security, I need to make sure my neighbor's house doesn't catch fire. And right now 20% of humanity is soon going to have their house on fire. This isn't good for my security or anybody's security.

Pandemics

We are still recovering from the COVID-19 pandemic. In fact, we might be entering a new era of pandemics. Some authors have been arguing that "environmental devastation threatens to unleash new zoonotic diseases as well as long-dormant bacteria and viruses to deadly effect."

The Russia-Ukraine war is adding to the risk of pandemics. Refugees are now living in close proximity even as wartime conditions undermine their immune systems. We could do well to remember that the end of World War I led to an influenza pandemic. It killed more people than the war itself. That could happen again.

The Right Tools for the Right Problems

A screwdriver and a hammer are both good tools, but using a screwdriver to hammer in a nail is suboptimal, if not stupid. In the US, both the Central Intelligence Agency and the Pentagon have been examining the four horsemen's risks to national security. Intelligence and defense Institutions in other countries have been doing the same.

Yet there is an argument to be made that the DNA of these institutions equips them for 19th century challenges. They are unable to really think through the risks of global warming, nuclear war, food insecurity and pandemics. They do not know how to manage the 21st century horsemen of the apocalypse. These institutions were designed for conflict, not cooperation or coopetition. Yet they command top of mindshare and the lion's share of funding.

The time has come to define national security differently. We must examine what enhances the security of an individual and work towards achieving it. This will require people, processes, organizations and technologies focused on cooperation rather than conflict. We will have to build upon previous attempts at cooperation and collaboration as well as engage in new thinking, new development and new research to tackle the four horsemen of the apocalypse.

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How Britain Has Seen Its Place in the World from 1815 to 1955

John Bruton July 17, 2022 For more than two centuries, the UK has had two schools of thought in its foreign policy establishment. One believes in engagement while the other in isolationism. Post-Brexit, the latter seem to be in the ascendant.

have just greatly enjoyed reading Douglas Hurd's book, Choose Your Weapons: The British Foreign Secretary – 200 years of Argument, Success and Failures.

Hurd has had a distinguished career, which included not only holding the office of the foreign secretary but also of the secretary of state for Northern Ireland. He is an excellent writer who combines historical analysis with vivid sketches of political personalities.

Published in 2009, this book shows how the life experiences and assumptions of successive foreign secretaries influence the content and outcome of diplomatic policies. There is a tension, throughout this long period, between two views of how Britain should conduct itself in its relations with its European neighbors.

The Two Views of Europe

One view was that the UK should seek to create. and participate in a structure of consultation which would help preserve peace in Europe. The best exponent of this approach was an Irishman, originally a member of parliament in the Irish parliament. In 1800, the Acts of Union united the Kingdom of Great Britain and the Kingdom of Ireland (previously in personal union) to create the United Kingdom of Great Britain and Ireland. Lord Castlereagh who had begun his political career in Ireland now moved to London, rose to be foreign secretary and helped to ensure that a defeated France was not humiliated in 1815. Arguably his work in the Congress of Vienna and afterwards helped preserve relative peace in Europe until 1914.

While Castlereagh believed in engagement, Lord Palmerston took the view that the UK should be somewhat more isolationist, intervening only to promote liberal causes while avoiding entanglements in Europe. Castlereagh had his supporters and so did Palmerston and, between the two of them, they set the two poles of British foreign policy when it came to Europe.

Forgotten Figures

Hurd shines the light on some figures that are forgotten today or do not get their deserved attention. He highlights the role of Ernest Bevin in helping found NATO, and thereby committing the US to the defense of Europe. Bevin's efforts are very relevant to events today, and to maintaining the peace in Europe for the last 70 years.

Another who figure gets deserved recognition Hurd's book in is Austen Chamberlain, the author of the Locarno Pact which reintegrated Germany into Europe and established good relations with its neighbors. This could have kept peace in Europe but for the economic crash and the rise of Adolf Hitler in the 1930s. Unlike his half brother, Neville, Austen warned of the danger of Hitler before any other British leader, including Winston Churchill.

Decline of Empire and Changing Role of Foreign Secretary

The relative economic power of Britain peaked around 1870 after which it began to decline slowly. But the fact that so many parts of the world were still colored pink on the map as part of the British Empire led some statesmen to overestimate British power and the power of the foreign secretary.

In the earlier periods, the foreign secretary was in-charge of foreign policy. The prime minister supervised the foreign secretary mildly. Today, the prime minister plays a much more central role in foreign policy. Still, personalities

matter and the best example of this phenomenon is Anthony Eden. Under Churchill, Eden was a good and methodical foreign secretary. He turned out to be a bad prime minister because he had no strong foreign secretary to restrain him over Suez in 1956.

If the UK overreached in 1956, it is in danger of withdrawing into its shell in 2021. The country is isolating itself in a dangerous way. The UK is conversing with itself, rather than conversing with its neighbors. None of the statesmen chronicled in Hurd's book would have let that happen.

*John Bruton is a former Irish prime minister and an international business leader.

Sultan Recep Tayyip Erdoğan's Erdonomics is Driving Turkey to Disaster

Atul Singh July 21, 2022

The Turkish president is insisting on cutting interest rates when inflation is rising, causing the currency to crash and the economy to collapse. If Erdoğan does not change course, the opposition might triumph in the 2023 elections, ending 20 years of the strongman's rule.

ot a very long time ago, there was a plucky young Turk who was an outsider in politics. He entered public life and became mayor of the capital of his nation. Against the odds, he even went on to become prime minister. No, this is not the tale of Boris Johnson (who has Turkish ancestors). This is the story of Recep Tayyip Erdoğan.

As a rising Islamist politician, the football-playing Erdoğan took on corrupt Scotch-drinking elites and a power-drunk military. He was even banned from politics for a while. Yet Erdoğan came roaring back and, unlike the recently dethroned Johnson, has emerged as the strongman of his nation.

A Truly Historic Leader

Even his critics would concede that Erdoğan has etched his name in Turkey's history. He is the most significant leader of the country since Mustafa Kemal Atatürk, the general who created the modern Turkish state on the dying embers of the Ottoman Empire. Atatürk dragged the country screaming and kicking into secularism and towards Europe. In a land were the sultan was seen as the caliph by the Muslim world, Atatürk abolished the caliphate.

For all of Atatürk's herculean efforts, much of Turkey was far too religious to turn secular like Europe. The elites of Istanbul inhaled the liberating air of Europe but, over time, lost touch with their people. The secular military managed to keep "Muslim parties in check and rebellious Kurds under control" through military coups. In 1997, the military forced an Islamist prime minister to resign. Then, Erdoğan was a young mayor of Istanbul.

To cut a long story short, the Islamist tide could not be held back by the military dam. Eventually, Erdoğan led them to power. He cut the wings of the military, initiated a rapprochement with the recalcitrant Kurds and made Islamism the new guiding principle of the country, both at home and abroad. Out went Kemalism, in came Erdoğanism. In the early days, this meant moving closer to Europe to avoid yet another military coup and fairly sound management of the economy.

As war rages between Russia and Ukraine, the early era of Erdoğan seems a lifetime away. In June, some researchers estimated inflation in Turkey to be 160%, more than twice the official estimate of 79%. The country is also facing a

currency crisis. In 2021, the Turkish lira fell by 44% against the dollar. In 2022, the lira is in freefall, the current account deficit (imports minus exports) is rising and the budget deficit (expenditures minus revenues) has reached a record high. Millions of workers, young people and pensioners have fallen below the poverty line, which is set at \$1,200 a month for a family of four. While much of the economic pain was inevitable given the global economic downturn, some of it is self-inflicted. By stubbornly insisting on cutting interest rates at a time of soaring inflation, Erdoğan has scored a spectacular own goal.

Elections and Revolutions Depend on the Price of Bread

The Turkish economy has struggled with its economy long before Erdoğan. With an oversized military, Turkey spent too much on defense. The country has long relied on dollar-denominated debt, which leaves it very exposed to external shocks. As a NATO member and a frontline state against the erstwhile Soviet Union, Turkey was regularly bailed out by the US and institutions like the International Monetary Fund (IMF). Like Pakistan, Turkey extracted geopolitical rent from the West and bailouts have been par for the course. Only last year, the IMF doled out \$6.3 billion to Turkey.

Erdoğan has been putting a gun to the head of European leaders to wring some cash out of them. In 2016, the European Commission coughed up over \$6.6 billion (€6 billion) for Turkey to host refugees and not disgorge them into the EU member states. Like a good bazaar merchant, Erdoğan has somehow kept the Turkish economy from falling into collapse because the US, the EU, the IMF and NATO all need Turkey for one reason or another. It is too important to fail.

Even geopolitical rent and political blackmail have limits. They do not yield infinite amounts of cash or gold. When inflation rises, central banks raise interest rates so that

people keep their money in the bank instead of spending them on goods and services or assets. Inflation is a regular feature of the Turkish economy. In the 1980s and 1990s prices soared. Then, the central bank raised interest rates and brought it under control.

Erdoğan wants his central bank to keep interest rates low. Some of his key supporters have long been small businessmen who resent high interest rates. Turkish economists privately tell this author that Erdoğan thinks raising interest rates would put a spoke in the wheels of the economy. Like many politicians who want economic growth, Erdoğan wants to print money to achieve it. After all, he is doing what the Federal Reserve and the European Central Bank did when they printed money through their policy of quantitative easing.

The US and European central banks have since reversed course in the face of rising inflation. Erdoğan has held the fort and pressured his central bank to cut rates instead. This means there is more money sloshing around in the Turkish economy than necessary. With oil, food and commodity prices high thanks to the Russia-Ukraine War, Erdonomics has sent prices soaring even further.

Turks are scrambling to get rid of liras as fast as they can. They are buying dollars, properties (prices are up by 182% over the past year), cars, electronics and other consumer goods, and even high-risk volatile assets such as overpriced stocks and cryptocurrencies. Turkey might not be Sri Lanka yet but Erdonomics is causing its economy to collapse.

Over the last few years, he has become a de facto sultan. He has built Ak Saray, a pure white palace of 1,000 rooms on 50 acres of Atatürk Forest Farm, after razing Atatürk's country lodge to the ground. Hagia Sophia is no longer a museum but a mosque. Secular Kemalist Turkey is dead. Istanbul's elites have been defenestrated. Critics have been castrated. Furthermore Erdoğan has been able to project himself as a key leader of the Muslim world

and won much popularity in places like Palestine and Pakistan. Recently, he even changed Turkey's name to Türkiye.

In his 19 years in office, Erdoğan has accomplished a lot. He has changed the nature of the state and the arc of Turkey's destiny. Yet he is increasingly vulnerable. Turkey may not be Sri Lanka yet but it is in turmoil. Elections and revolutions depend on the price of bread. Erdonomics has set that on fire. At some point, the mob might turn on the sultan.

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Italy, Europe, and the World Needed Super Mario to Stay On

Federica Fazio July 22, 2022

This is a critical year for European stability and security. With the ongoing energy crisis, surging COVID-19 cases and Russia's intenisfying hostilities in Ukraine, Italy has just lost one of its most competent and respected prime ministers at the worst possible time.

Since he walked into *Palazzo Chigi* in February 2021, Italians, Europeans, international partners and financial markets had one certainty: Mario Draghi would do "whatever it takes" to get his country back on track. The ex-European Central Bank (ECB) point man has risen to the challenge. He has brought that very same pragmatic approach to the fight against COVID-19, the consequent economic downturn, and the enemies of the multilateral order, strengthening Italy's role in the EU and multilateral fora in the process.

The Italian prime minister leaves Italy in a much better shape than he found it. It is only thanks to Mr. Draghi that The Economist crowned Italy the country of the year for 2021. Indeed, as the British newspaper wrote last December, "it is hard to deny that the Italy of today is a better place than it was in December 2020".

Response to COVID-19

Italy's COVID-19 vaccination rate is among the highest in Europe. Besides, il Bel Paese is set to receive nearly \$192 billion (€191.5 billion) from the European Commission's Next Generation EU, a €750 billion recovery fund designed to boost the bloc's economic growth hampered by the pandemic. Italy is getting more funds than any other EU country.

The Italian prime minister planned to make efficient use of the EU money. In fact, his reform-rich Recovery and Resilience Plan (NRRP) had persuaded European Commission President Ursula von der Leyen to disburse more than \$25 billion (€24.9 billion) in prefinancing and the first tranche of over \$21 billion (€21 billion) of the total sum. Italy also requested the second tranche, of over \$21 billion (€21 billion) too, at the end of last These allocations, though, conditional on Italy meeting the objectives set in the NRRP. So far, the Italian government has reached all 45 milestones and targets. With Super Mario gone, however, it is extremely unlikely that Italy will continue to do so.

According to Istat, the Italian GDP grew by 6.6% during Draghi's first year in office, the highest rate since 1976. Bear in mind that the eurozone's third largest economy was the first European country to be hit by the pandemic. However, the Russian invasion of Ukraine has sent energy, food and commodity prices soaring. And as a consequence, the Italian GDP contracted by 0.2% in the January-March quarter of 2022.

The Draghi administration instituted

damage control measures to reduce the impact of the war on the economy early on. It is for this reason that Minister of the Economy and Finance Daniele Franco estimated "robust growth" for the GDP in the second quarter in a speech at the Italian Banking Association (ABI). Neither did Franco know nor could he possibly predict that Giuseppe Conte's party would unleash hell in Palazzo Madama. Conte was Draghi's predecessor and has been the president of the populist Five Star Movement since August 2021.

To understand why Draghi came under pressure, we need some country-specific context. A gifted economist, Draghi took charge of a coalition government to nurse the Italian economy back to life. At the time, Italy was on the brink of collapse due to COVID-19. After Russia invaded Ukraine, economic recovery slowed down and Draghi's coalition partners saw this as a good time to sabotage him. The center-right Forza Italia of former premier Silvio Berlusconi, the right-wing League of Matteo Salvini and the Five Star Movement led by Conte decided it was time to pull the rug under Draghi.

As support collapsed, Draghi resigned. Italian President Sergio Mattarella promptly rejected Draghi's resignation. This did little to stop markets from panicking. At a time when eurozone inflation is reaching a record 8.5%, the spreads between Italian 10-year government bonds (BTPs) and German Bunds have risen to new highs. On July 20, Draghi addressed the Italian Senate and declared that he was willing to stay on as prime minister if the coalition backed parties his reform Unfortunately, the above-mentioned parties did not even have the decency to show up in parliament for the vote of confidence. This forced Draghi to resign despite winning the confidence vote.

Draghi's final resignation prompted markets to react even worse than before. The Italy-Germany bond spreads shot up to 243 points.

They only started to go down again when the ECB announced it would raise interest rates and launched the Transmission Protection Instrument (TPI), a new tool to tackle financial fragmentation in the euro area.

Renewed Credibility and Influence Abroad

With his considerable experience, statesmanlike stature and personal connections, Draghi has restored Italy's credibility on the European and international stage in his short tenure as prime minister. Thanks to him, Italy successfully led the G20 and COP26 throughout 2021. Italy also (pro)actively participated in G7, NATO, and EU Summits, as well as other high-profile events such as the International Conference on Libya and the Summit for Democracy. Draghi's deft diplomacy demonstrates how committed he strengthening multilateralism democratic values. As a result, Italy has gained in strength, influence and credibility abroad under his sapient premiership.

As the political crisis unfolded, Super Mario was still hard at work. On July 19, he spoke with Ukraine President Volodymyr Zelenskyy who thanked Draghi for his "significant personal contribution to granting Ukraine the status of a candidate country for EU membership". The day before, Draghi was in Algeria where he signed several agreements, including an energy deal enabling Italy to reduce gas imports from Russia. The Italian government has signed similar deals with Angola, the Republic of Congo, Mozambique, Egypt, Bahrain, Qatar, Turkey and Azerbaijan.

In fact, in May the Trans Adriatic Pipeline (TAP) brought 10 billions cubic meters of gas from Baku, Azerbaijan all the way to Melendugno, Southern Italy in the span of a weekend. Similar negotiations with Israel and Libya are ongoing. By seeking to diversify gas supplies and investing in renewable energy projects, Draghi has been trying to reverse decades of dependence on Russian energy. Following Draghi's resignation, however,

Russia has increased its gas supplies to Italy by 71,4% in just one day.

As The Financial Times recently pointed out, Draghi "is (or at least was) shifting the power dynamics within the EU". Proximity to the Mediterranean Sea and the Middle East and North Africa (MENA) region is no longer perceived as a liability. The risk of increased migration is now trumped by the opportunity of importing non-Russian gas and oil into Europe.

Even as Draghi nudged the EU in a new direction, he deepened ties with France, the outgoing president of the Council of the EU. On November 26, 2021, the two EU founding members signed the Quirinale Treaty, a historic deal to strengthen cooperation between Italy and France.

The agreement is very similar to the Élysée Treaty between France and Germany which celebrates its 60th anniversary next year. The EU's biggest economy assumed the presidency of the G7 in January. Yet the post-Angela Merkel traffic-light coalition has struggled to speak with one voice and retain its leadership role in Europe. For all its promises to increase defense spending and deliver lethal weapons to Ukraine, Germany is still very reliant on Russian energy. Hence, it has proved reluctant to suspend the Nord Stream 2 Pipeline and support a full embargo on Russian oil and gas.

Until a few weeks ago, Italy was the second largest importer of Russian gas, next only to Germany. Yet the Draghi administration has been bold enough to back all sanctions on Russia proposed by the EU and its North American allies.

Stronger Transatlantic Ties

On the other side of the Atlantic, US President Joe Biden and his administration have been looking at Draghi's Italy with renewed interest and respect. The recipient of The Atlantic Council's 2022 Distinguished Leadership Award has proved to be a strong leader and a committed transatlantic partner.

Draghi has been pushing for the development of a strong European defense to complement NATO and took a tougher stance vis-à-vis both Russia and China than his predecessors long before Russia's aggression against Ukraine began. In his May address to the European Parliament, the Italian prime minister urged greater European coordination on defense. The economist also made the case for more efficient defense spending among EU member states, something that would greatly benefit NATO as well since 21 (soon 23) EU countries are also NATO allies.

Unfortunately, Draghi did not have it all his own way though. Despite his calls to increase Italy's defense budget, the Boot will not hit NATO 2% GDP defense spending target until 2028. Nevertheless, in the eyes of US Defense Secretary Lyloyd Austin, Italy remains "one of Europe's most reliable security providers".

Last year, Italy celebrated 160 years of diplomatic ties with Washington and also marked 70 years of NATO's presence on its soil. The country is currently leading the NATO mission in Iraq and is supposed to take the lead of the mission in Kosovo in the fall. Italy's Eurofighter jets have been stationed in Romania since November 2021 and the country has been supporting NATO all the way from the Baltic to the Mediterranean. In addition, since Russia's invasion began, Draghi has been striving to provide heavy weapons to Ukraine despite the strong opposition from within his coalition. He even looked to strengthen cooperation with Japan amid concerns that China might be preparing to attack Taiwan.

Thanks to this renewed international credibility, Italy has reclaimed its rightful place within the Quint, an informal framework used by the United States, France, Germany, the UK and now Italy again to discuss and coordinate their foreign policy on matters of common interest.

Political Mayhem Returns

Draghi's premiership has undoubtedly transformed Italy into a power player in Europe and positioned it to be a stronger and more credible ally for NATO and the US. However, as basketball legend Kobe Bryant once said "Job is not finished". Draghi needed more time in office to undertake all the reforms envisaged in the NRRP to modernize Italy. Instead, Italy's best player was fouled by his own teammates and sent to the locker room in the middle of the game. His season is over.

Despite not being an elected official, Draghi enjoyed the support of both politicians and ordinary citizens. Since he first tendered his resignation, there have been protests in Italy's main cities and petitions signed by nearly 2,000 mayors and governors and 100,000 Italians demanding that Draghi stay on in the nation's top job until the next elections, originally scheduled for March 2023. Now that Draghi has resigned, Italy will go to the polls in September.

Sadly, Draghi's ambitions for Italy clashed with the country's grim political reality. The notoriously Russian-friendly Five Movement, League and Forza Italia are jeopardizing Draghi's hard-fought legacy of credibility for the country. By behaving so irresponsibly, they are throwing Italy into political and economic instability once again. If Super Mario could not change Italy, then no one else can. The premature ending of Draghi's government is bad news not only for hardworking Italians, but also for the EU, NATO and Ukraine, who might soon lose a key partner in its fight for freedom. In the Kremlin, on the other hand, this is a cause for celebration because whoever is elected this fall will never be as pro-Europe and pro-US as Mario Draghi.

Mr. Prime Minister, you will be missed!

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Brains Explained: Vibration all the Way Down

William Softky July 28, 2022

Some scientific explanations are so simple and universal they seem to defy logic. For example, vibrations explain almost everything about brains and bodies, in particular how "good pain" works. This article previews a talk for the Festival of Consciousness in Barcelona.

here is a story with the infamous ending "Turtles all the way down," which means two opposite things. Once you understand the deeper meaning, you'll understand your most important biorhythms, and how to tune them up.

Mostly the story mocks simple-minded people. A thousand years ago an unnamed guru said the world is supported on a turtle, but couldn't say what the turtle rested on. A hundred years ago a little old lady, believing the Earth to be flat, made the same claim to scientist William James:

"If your theory is correct, madam," he asked, "what does this turtle stand on?"

"You're a very clever man, Mr. James, and that's a very good question," replied the little old lady, "but I have an answer to it. And it's this: The first turtle stands on the back of a second, far larger, turtle, who stands directly under him."

"But what does this second turtle stand on?" persisted James patiently.

To this, the little old lady crowed triumphantly,

"It's no use, Mr. James—it's turtles all the way down"

Fair enough. Infinite stacks of turtles, or infinite stacks of any real objects don't fit well in finite space. So the lady's version of what holds up Earth lacks support, and thus falls flat.

But other infinite stacks work fine. In computer science, for example, the concept of infinite regress shows up in approximations, or when a program invokes itself (recursion). In geometry, some patterns contain smaller copies of themselves, patterns inside patterns (fractals). In those cases, the phrase "all the way down" represents nested multiscale interactions, among the most elegant structures possible. That's the kind of simplicity scientists love, because it lets one theory cover everything. Let's call it a multiscale theory. So simple it defies logic.

For example, music is built of multi-scale vibrations. Beats, quarter-beats, sixteenth beats, fundamental notes and overtone harmonics, consonant chords of notes, predictable progressions of chords, repetitive sonata form. I propose here that human bodies ring with similar multiscale vibrations, whose ultra-faint, ultra-high frequencies convey sensation and implement motor control.

Coherent vibrations explain bodies so well you don't need anything else. Human bodies absolutely rattle with vibrations, from circadian rhythms down to myofascial ultrasound. Vibration all the way down.

The Vibrational Bandwidth Stack

Take this very moment, as you read this sentence. While the paper (or screen) is fixed in space, your eye must move in order to see its subtle shapes of bright and dark. Muscles swing and vibrate the eye to release showers of fresh data, using all kinds of movements, ultrafast atop slow. A few big lurches per second (called saccades) re-aim your eyeball toward

interesting spots, like corners or edges, spots which promise refinement of your brain's blurry hunches by zooming in.

Moving your eyes semi-intentionally is the normal process of looking. But being made of jelly, the eyeball also wiggles after each yank, adding subtle quick back-and-forth motions (micro-saccades) dancing around the region of interest. Within the micro-saccades are even tinier and faster wiggles that only the eyeball itself can sense.

Same for hearing. The brain sends boosting signals to the ear, using its predictions to anticipate arriving sound. Especially to locate a sudden scary sound like a twig-snap, a task honed by millionths of a second. doesn't just predict sound into the ears, but into sensitive skin all over the body. When sound impacts you, the waves go everywhere. Ideally you hear sound not just with your ears but with your face, your neck, your chest, your gut and Ideally, your physical experience is back. unified enough that "sound" and "feeling" merge, no telling the senses apart. Hearing and mechanical sense shouldn't be separate, in fact their nerve inputs overlap enormously.

Hearing and seeing are external senses, not as important as awareness of one's own internal configuration. Every animal must feel its body to live. The internal sense (interoception) is built from mechanical vibrations in bones and muscles, vibrations which constitute the information field of the body.

What do those vibrations look like? We can build our way down from the big slow obvious ones, into the realms of invisible and inaudible. Any muscular motion is fair game, even if it doesn't repeat. Here goes:

Breathing takes a few seconds per breath. Waving at a friend takes a second or two per wave. Heartbeats and walking clock in at one to a few (beats/strides) per second, as does shaking someone's hand. Those muscle motions happen faster than the "biorhythms" medicine usually talks about (like circadian

rhythms and menstrual rhythms), but are slow by data-flow standards. Most motions slow enough to see use big external muscles like the bulging "heads" of biceps or quadriceps.

Smaller, faster motions deep inside you are easier to miss. They originate from muscles close to the spine like the multifidus and psoas. But they carry much more information. Aiming a laser pointer at a wall reveals body tremor wiggling ten or twenty times per second (Hz). A basso profundo might sing a low note severalfold higher, say 50 Hz, and a soprano a high note ringing fifty times faster at 1000 Hz, with harmonics even higher adding to vocal texture (children can squeak even higher than that). Singing proves humans can vibrate at least that fast.

The threshold of consciousness

But this is where consciousness fails. Frequencies higher than 10-20,000 Hz are beyond human hearing (technically ultrasound), so it's easy to think our bodies can't make or use such information. But as engineers know, higher frequencies carry more information, ad infinitum. In fact inside human bodies, ultrasound carries so much information, merely keeping track of it would tie our brains in knots. Ultrasound is unconscious on purpose, for maximum throughput and bandwidth.

In fact, it's a law of Nature (pointed out by physics Nobelist Richard Feynman in 1959) that the tiniest things store the densest information. Claude Shannon showed that fast-changing things carry the most bandwidth. In other words, the tighter the resolution in space and time of any signal, the more data it can carry. So vibrations in a body aren't created equal, not at all. Information is mostly carried by the smallest, faintest, fastest ones, which sustain and drive the others. That is, they form a carrier wave of interoception and control.

To find the central carrier-wave, we ought to look for precise timing signatures and lowamplitude motions. What are the tiniest, fastest signals in a body? Which vibrations carry the most information? Let's look as tiny as we can, at the quantum scale.

The quantum of muscular motion is molecular, as actin and myosin filaments slide past each other, consuming energy to tug a tiny bit. Every whole muscle is made of thousands of such fibers which fire in concert. A single filament's length is one millionth of a meter, that is one millionth of the hand-wave at our friend. The filament's motion endures about one billionth of a second, almost a million-fold faster than anything humans can hear. Yet because our muscles are made of those nanoscopic fibers, in aggregate those molecular tugs create everything we feel and do.

The principle of aggregating muscle pulses is like ocean surf, but backwards. When a wave crashes in the surf, a big, single, heaving thing turns into millions of tiny hissing droplets. Big breaks up into small, all by itself, which is all that can ever happen without adding energy. But life can add energy, so it can run that process backwards, amplifying little things into big ones.

Take a tight flock of seabirds, flapping as they skim the waves. Their vocal cries synchronize their nervous systems tighter than milliseconds, and their eyes see the flapping of each other's wings almost as precisely. So all the time, each bird can see and hear exactly how her fellows flap, and can arrange her wingflaps right in line, dead center. Meaning her brain can amplify the tiny, subtle correlations of collective resonance, then add her own energy to sharpen up the central peak. In this arrangement each bird takes in only tiny signals, but by timing magic makes the whole flock heave as one. Turning small and fast to big and slow is the opposite of surf.

So tiny muscle firings, synchronized and lined up just so, produce gross motions in our bodies, just like single flapping birds produce a flowing flock. How could the brain resolve its timing sharp enough to make that work? By

recycling the "wasted" information from those same muscle firings.

The brain as frequency manager

Human brains are special-purpose timing processors, encased in solid bone and kept at constant temperature, computing by using nanoscopic wavefronts passing inside neurons. In function a brain is roughly a vibrationreplicator, anticipating and sculpting vibrations, as fed by echoes from the recent past. Human brains send about a million neural pulses out to muscle fibers every second, and receive about million pulses back from neural sensors. Every tiny "pluck" between actin and myosin filaments, as triggered by a pulse, radiates ultrasound waves in all directions. If those plucks add up coherently—the brain's goal then some wavefronts will be strong enough to trigger pulses back, telling the brain what's going on and how to make it better. the same dynamics a "supercollider" uses to shape its packets of protons. It uses the process of tracking precisely-timed kicks.

Please bear with me while I calculate some nervous system bandwidths. Or skip the next four paragraphs, restarting with the phrase "grand mystery." So let's do the numbers: first interoceptive bandwidth, then visual.

How many interoceptive nano-vibrations might fit inside a human body? **Fifty** kilograms of muscle roughly takes up fifty litres, each containing 1015 cubic chunks of micron on a side (the size of an actin filament, cubed). Of course independent fixed chunks are nothing like smooth, ever-moving But chunks make calculating vibrations. information easy. By that admittedly clunky standard, at any one time a body contains 5*1016 volumetric elements (voxels), meaning roughly 1016 bytes of information capacity. Now multiply that by frequency (109 /sec) to get an upper bound on internal bandwidth of 1025 bytes/second (ten million billion billion). 1025 bytes/second is the

maximum bandwidth we can hope for in a body. That bandwidth is the resource converting molecular tugging to motion.

In particular, precise synchrony determines whether motor output is efficient vs. inefficient. In the efficient version, micro-tugs synchronize into macro-tugs. In the inefficient version, the microtugs are jumbled, they cancel each other, and dissipate as heat instead of force. Sculpted microvibrations are also the best way for muscles to nudge clumsy blood-cells through narrow capillaries. And the only way to sense squishy soft mucus clogging squishy soft lungs, and the only way to aim muscular force to expel it.

How does visual resolution compare to the crazy 1025 bytes/second bandwidth of Imagine your whole 3D visual interoception? world has the same resolution as a highdefinition TV. That is, imagine a Virtual Reality environment having HDMI spatial resolution (5 pixels/mm) spanning a cube 40m on a side. (This flight of simulation fancy is just for calculation, it isn't how brains actually work....that's actually the point). The total number of volume elements (voxels) in the simulator-cube is (40*5000)3, i.e. 8*1015 That spatial voxels, or 8 peta-voxels. resolution is insane by current standards of VR technology (and also MRI tomography). But it's is still less than we calculated for interoception.

The brain as creative artist

The grand mystery is this: our bodies, and also separately our eyes, have spatial resolution in the neighborhood of 1016 dots at least. But our spinal cords, and also separately our eyes, receive as input only 106 neural pulses per second. The ratio between the two is ten billion to one. Meaning (roughly) that the brain synthesizes and confabulates ten billion dots for every actual data point it gets. By this calculation, our brains make up 99.9999999% of what we see and feel.

Likewise, the nervous system runs at up to a billion "clock cycles" per second, but our conscious minds can only manage a few words or thoughts per second. By this calculation, our conscious brains miss 99.999999% of our internal processing. Thus in terms of both data and time, humans brains basically fake it.

The proof of a good idea is how much work it does. Here are some teasers for applying these principles of vibration and confabulation to your life:

• The spine is the center of everything.

Nanovibrations run fastest down the center of the spine and myofascial tissue, making the spine the physical channel, akin to an optical fiber, containing the carrier wave. A central spine is the perfect trunk-line for coordinating metabolism, interoception, muscular motion, and breath. In fact people with perfect spinal and breath control, like Harry Houdini and the Iceman Wim Hof, can "clench" their spines and breath muscles so that most muscular energy is intentionally "wasted" as heat to keep them (i.e. muscular warm activity thermogenesis, not motion). A bonus is that according to deep geometric principles, when a spine is operating optimally it ought to feel ecstatically extended and inflated, enlightened in multiple senses. Spinal bliss is what humans ought to feel all the time.

• Emotions are vibrations too

Certain sounds made by many species, not just humans, originate in specific spinal zones, and carry emotions: whining, roaring, laughing, gasping, snarling, moaning, crying.

Emotional connection cross-correlates vibrations

Eye-gazing, singing together, praying together, holding hands.

• Accelerometers can measure biorhythms.

Silicon accelerometers are everywhere, even in smartphones (like the Sensie platform I helped design), small, fast, and cheap. While they are still far too slow to detect the carrier wave directly, by sheer dint of bandwidth they could still measure emotional connection via cross-correlation, or individual synchrony by algorithmic measures like symmetry and 3-D power spectrum.

Energy is information.

What sensitive people colloquially call "energy"—the various internal sensations including tingling, opening, connection, electricity, "chi," and heat-in biophysics corresponds to vibratory information flow. Vibrations flow along meridians concentrate in chakras. Those stripey sensations arise in the myofascial conduits tracing the spine and limbs, then are simplified into sensation by the brain's often-mistaken motor data map (or mental That virtual map tries whiteboard). valiantly to know exactly which conduit runs where, even without good data.

• Discomfort is data.

A brain can learn that map correctly (from healthy experience), or incorrectly (from trauma, constraints, overtraining, or lack of experience). A bad map has defects like wrinkles, kinks, or knots. Defects lead to inconsistencies, which create zones in the body the brain mis-locates, can't control, can't make sense of, or can't even feel. A brain doesn't like operating in such zones and wants to avoid them. But dodging discomfort worsens the problem avoiding exactly the data the brain needs to fix its map. The good news is that "good pain" (intense neuromechanical discomfort short of tissue damage) delivers clean fresh data and improved motor function in direct

proportion to felt sharpness and intensity. Every pop, click, opening, release, or even spontaneous cramp results from removing a map-wrinkle, acting and feeling like snapping back to grid. Each shift instantly increases motor operating space, often feeling weird or wobbly while getting used to it.

• Ultrasonic grounding = ultragrounding

The weirdest new trick for recalibrating the motor map consists of pressing heavy hard things against central bones, like draping one's back across iron weights. Pinning down painful myofascial "trigger points" against a heavy inert object provides the brain a guaranteed "zero vibration" reference signal. The pain might even feel sweet. Beyond "foam rolling," imagine "iron rolling." Deliberate discomfort, pain on purpose.

In summary, multiscale vibrations describe virtually everything in a body, in particular how nanovibrations help it sense and move. The better we know our bodies' operating principles, the better we can fix and tune them up.

All that in about 2600 words. Is that simple enough to defy logic?

*William Softky is a biophysicist who was among the first neuroscientists to understand microtiming, and among the first technologists to build that understanding into algorithms.

The Debate On Transgender Athletes Is Fundamentally About Fairness

Jennifer Wider July 30, 2022 Science tells us that there are biological differences between women and transgender women. Allowing them to compete together is unfair to those born as women and the fear of even discussing this issue is unhealthy for our society.

pandemic, the US engaged in a national debate on who was eligible to compete in women's sports. As a country which was founded on the principle of "all men are created equal," most would argue that this rule never applied to women and minorities. Over time, the US has striven to become a more inclusive country. Both women and minorities have the vote. Many have risen to top positions in the country. Even with all of these achievements, the road to equality for female athletes has been incredibly bumpy and many would argue we aren't there yet.

In 1967, Kathrine Switzer became the first woman to run the Boston Marathon. She was assaulted physically by numerous including the race director who tried to remove her bib number and throw her out of the race. Switzer's courage became a symbol of the struggle for inclusiveness in sports. Her determination paved a path for so many other women athletes. Billie Jean King is viewed as one of the most iconic women in tennis. In 1973, she founded the Women's Tennis Association and led the fight for equal prize money for women in tennis tournaments. In 2007, Venus Williams pressured Wimbledon to offer the same prize money to women as they do to men, actualizing the goal envisioned many years before. Simone Biles won a total of 25 world championship medals, the most global competition series medals out of any male or female gymnast ever.

Gender is Controversial

Women have been fighting for equal footing in

sports for decades, so it's no surprise that the idea that gender is a choice is proving to be controversial. At the heart of the debate is Lia Thomas, a transgender woman who swam for the University of Pennsylvania (UPenn) located in the historic city of Philadelphia where the Founding Fathers of the US signed the declaration of independence in 1776. Thomas competed on UPenn's men's swim team from 2017 to 2020. Thomas then started competing on UPenn's women's team from 2021. In 2022, she become the first transgender athlete to win the National Collegiate Athletic Association's (NCAA) Division 1 national championship in any intercollegiate sport. The event was the women's 500-yard freestyle race.

Thomas began hormone replacement therapy in the spring of 2019. It was at this time that she came out as a transgender woman to her coaches and friends. She was required to swim for the men's team during the time she was going through hormone treatment. Thomas swam for the women's team in the 2021-22 season. The 2020-21 swimming season was canceled due to COVID-19. Thomas competed in intercollegiate swimming after adhering to all of the guidelines set forth by the NCAA to compete as a woman.

Nonetheless, Thomas found herself in the middle of a national firestorm. Her taking part in women's swimming elicited criticism from her teammates, coaches and national and international competitors. Thomas also received support from current and former NCAA swimmers, Team USA and international swimmers across the globe. In December 2021, Thomas achieved the nation's fastest times in the 200- and 500-yard freestyle races, smoking the competition.

Thomas's record-breaking success caused public uproar. Legislators introduced bills to restrict the participation of transgender athletes in women's sporting events. Many were concerned that Thomas' participation would destroy women's sports and rob cisgender

(denoting or relating to a person whose sense of personal identity and gender corresponds with their birth sex) women of achievements. The number of transgender athletes competing in women's sports is probably very low and this data is not collected formally. Regardless, the argument on the transgender issue is fierce and many question the difference between assigned biological sex and gender identity.

The American Psychological Association (APA) defines transgender as "an umbrella term for persons whose gender identity, gender expression or behavior does not conform to that typically associated with the sex to which they were assigned at birth." The APA goes on to state that "gender identity refers to a person's internal sense of being male, female or something else."

Making Sense of the Controversial Transgender Debate

I am a women's health doctor and a former collegiate athlete. It goes without saying that I am a feminist. I have and will always be a staunch supporter of women's rights. I have fought for equality in women's sports since I was in grade school. The boys lacrosse team at my high school would always compete on the best field with an electronic scoreboard while the girls team, of which I was the captain, was relegated to an inferior field at the back without a scoreboard. I was part of a very vocal group that fought for the girls team to be treated the same as the boys team.

I believe in equality in sports and I fully support the right to transition to another gender. But we have to recognize the anatomic, physiologic advantages that a transitioned woman (XY) has over a biological woman (XX), regardless of hormone treatment. If we ignore that, it's almost like we are partaking in a version of the Emperor's New Clothes, ignoring what is obvious because we want to be politically correct, progressive and inclusive.

Men and women have different bodies. We

have recognized this from the beginning of time. We can try to distill the differences down to hormones, but that we would be oversimplifying and quite frankly, ignoring inherent differences that are on a variety of different levels.

Once a biological male body hits puberty, there are a host of physical changes that result in larger muscle mass, denser bones and higher fractions of lean body mass. It's the reason why male athletes on average run faster, can lift more weight and throw farther than the average female athlete. And the differences can be seen on a microscopic level. Take skeletal muscle kinetics and muscle fiber composition for example. One of the many research studies on the subject tells us: "The identification of over 3,000 genes differentially regulated in male and highlights muscle the complex differences that occur in skeletal muscle from both sexes."

This study reveals that gender differences are present across numerous species. It observes: "Sex-based differences in skeletal muscle fiber-type composition and function are apparent in numerous species and are present in specific anatomical locations. Here, we present findings on sexual dimorphisms present in the mammalian musculoskeletal system." These scientifically observed differences simply cannot be wished away.

Many famous biological women athletes are against the inclusion of transgender women in competition. Three-time Olympic swimming gold medalist Nancy Hogshead-Makar told ESPN: "We need to prioritize fairness for biological women in sports. A category that is for half the world's population is worth defending. Only then can we talk about ways to include transgender men and women, ways that respect everyone with all their differences and that don't harm biological women."

A cohort of swimmers from the University of Arizona, including several former Olympic athletes wrote a letter to the NCAA after Lia Thomas decisively won at a swim championship in Atlanta, GA. The letter blamed the NCAA Board of Governors for "successfully failing everyone by allowing Thomas who has distinct biological advantages, to compete against women to 'appease everyone."

In a recent interview with The New York Times, internationally recognized sports physiologist Ross Tucker pointed to peer-reviewed studies that highlight top transgender women athletes having a substantial edge over top biological women. Hormones aside, biologic men who transition have inherent advantages. He says, "Lia Thomas is the manifestation of scientific evidence. The reduction of testosterone did not remove her biological advantage."

Not everyone in the scientific community agrees, Dr. Joshua Safer, an internist and executive director of the Mount Sinai Center for Transgender Medicine and Surgery in New York was quoted by the American Civil Liberties Union (ACLU) as saying, "A person's genetic make-up and internal and external reproductive anatomy are not useful indicators of athletic performance. According to Safer, "For a trans woman athlete who meets NCAA standards there is no inherent reason why her physiological characteristics related to athletic performance should be treated differently from the physiological characteristics of a non-transgender woman."

Genetic advantages may not be limited to assigned gender at birth, according to some experts. Discussing genetic advantages is a slippery slope, Alexi Kuska, swimming and diving coach at University of Wisconsin, Milwaukee says. "Every elite swimmer has a genetic advantage." Analysis of 23-time Olympic gold-medalist American swimmer Michael Phelps illustrates this point. Kuska says, "His measurements (height, wingspan, etc) are inches beyond of what the 'perfect' swimmer would be." This raises the

question: Should someone like Phelps be sidelined?

An Issue of Fairness

But in my opinion, that's not really the point. Everything can be distilled down to genetics and gender definitely plays a role in sports. It's really about where you draw the line, and a line must be drawn in order to maintain fairness in women's sports, an ideal that has been fought for, for decades. Assigned gender at birth is a rational and very reproducible method for delineation.

The debate continues to rage on. Fédération internationale de natation (FINA), the world's swimming governing body, recently banned transgender women from competing in women's events. It has decided to permit only those tansgender swimmers to compete in women's events who transition before the advent of puberty, which they have set as 12. FINA has also proposed an "open competition category," for trans swimmers to compete in. This ruling makes sense to me but clearly not to everyone involved.

We are living in a time where people are afraid to offer their opinion, where facts don't seem to matter as much as they should. The transgender issue is one where people are afraid of expressing themselves lest they be damned like the noted Scottish writer JK Rowling. In 2020, she took a strong view about the current debate.

Rowling argued:

"We're living through the most misogynistic period I've experienced. Back in the 80s, I imagined that my future daughters, should I have any, would have it far better than I ever did, but between the backlash against feminism and a porn-saturated online culture, I believe things have got significantly worse for girls.

She went on to make the case that there was indeed a difference between trans women and women. She found the demand that "women must accept and admit that there is no material difference between trans women and themselves" unacceptable. In her memorable words:

"But, as many women have said before me, 'woman' is not a costume. 'Woman' is not an idea in a man's head. 'Woman' is not a pink brain, a liking for Jimmy Choos or any of the other sexist ideas now somehow touted as progressive. Moreover, the 'inclusive' language that calls female people 'menstruators' and 'people with vulvas' strikes many women as dehumanising and demeaning. I understand why trans activists consider this language to be appropriate and kind, but for those of us who've had degrading slurs spat at us by violent men, it's not neutral, it's hostile and alienating."

Rowling has a right to raise these issues as do I. If we are afraid to speak out aloud about the issues that matter most to us, everyone is bound to lose out.

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