

Trends to Watch in 2020 & Beyond



Acknowledgements

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This trend report captures mounting global shifts as we approach a new decade. Climate change and a “generational cauldron.” Belonging and erasure. Social unrest and geopolitical realignment. The future of warfare. As many have said, and many of us have felt, we are in dynamic and uncertain times. But our future isn’t written. As we’ve seen demonstrated by young leaders around the world, individuals seeking meaning, and people joining together to fight for recognition and representation, our greatest struggle can bear the sweetest fruit.

“We did not come to fear the future. We came here to shape it.”

— Barack Obama



New Climate Narrative

If there is one trend likely to define the next decade, it is climate change.

Rising sea levels, accumulating greenhouse gases, intensifying temperatures: The signals are clear and continue to worsen. According to National Geographic, children born 2012 and after [haven't lived a single day unaffected by climate change](#); and it has altered global weather for nearly the entire life of anyone 18 years or younger. Though shocking, this isn't necessarily news. For several years, scientists have been speaking concretely about the global consequences of climate change, connecting it directly to [current events](#). What's different now is the rising public urgency alongside it—new leaders across youth activists and island nations are raising a global rallying call to action, inspiring new energy, commitment, and alliances.

But while momentum builds among activist leaders, innovators, and scientists, climate-based politics remain far from any [genuine watershed moment](#). Polls show people are demanding action, but international governments have [deliberately blocked](#) and stymied progress. At the COP25 meeting in Madrid, the

Australian government worked to lower its commitment to the UN Paris agreement [while bush fires wreaked havoc](#) across the country. At the same meeting there was an effort to [block the words “climate urgency”](#) in text, from Brazil and Saudi Arabia. Regardless of incremental progress, climate change remains one of the most [intractable political issues](#) we, as a global society, have ever faced.

New leaders have risen to this challenge. So while the outlook remains dire, we take our cue from them, and hold out hope that where there is a will ([and there is that!](#)), there is a way, and the new decade will continue bring with it renewed climate narrative, and action.

Climate-Based Youth Movements & The “Generational Cauldron”

Young people are channeling [anxieties](#) about climate change into activism, and the results are astounding. In November 2018, more than 1,000 students around [Australia](#), inspired by Swedish student Greta Thunberg, walked out of school to protest the government’s inaction on climate change. On March 2019, it was estimated that 1.6 million students from 125 countries participated in a strike, leaving classes and taking to the streets. Student-led efforts in 2019 culminated in September, when young people from 150 countries around the world—Afghanistan, Bangladesh, El Salvador, Pakistan, Nigeria, South Africa, and more—participated in the largest global demonstration ever in the fight against climate change: [6 million people](#) across 4,500 locations, in the youth-organized [Climate Strike rally](#), “Global Week for Future.” This preceded the first of its kind [UN Youth Climate Summit](#), on Sept 21, 2019, prior to the UN Climate Action Summit, on Sept 23. One hundred youth activists were selected from a group of more than 7,000 applicants, ages 18-29, working to address the climate crisis and advance solutions around the world, to travel (as carbon neutral as possible) to the event.

Activism has spread at a dizzying pace, creating new networks and

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organizations, and doubling down on existing ones—from the [Sunrise Movement](#) in the US, to [Green New Deal for Europe](#), to [African Youth Climate Hub](#), not to mention global coalitions like [Fridays for Future](#) and [Global Climate Strike](#). Tactics have had to adapt to country context—youth voices are not always heard so readily everywhere, and yet global coordination persists in elaborate, decentralized, and lean organization.

One of the palpable pressure points surrounding climate-based youth activism relates to generational tension. Generations of people have long struggled to fully understand one another, but today environmental degradation is a highly salient and growing intergenerational flash point. Many young people feel disillusioned and angry at preceding generations, which they blame for doing little to nothing to address what they consider an inherited long-term crisis and [deadly legacy](#)—e.g., witness the rise of “[OK, Boomer](#),” a phrase US Gen Z has used to call out older adults on their collective lack of action on climate change and other progressive issues.

Political Timebombs:

This global phenomenon of unfulfilled youthful aspirations is creating political timebombs—one of which is climate policy. For left-leaning young people in the US, the [Green New Deal](#) offers a glimmer of hope by creating a framework for a shift to a new, green economy built on economic reform, sustainability, and social justice. One of its greatest merits is connecting the casualties of modern day neoliberal economics—environment, economic equality, and social justice—in one plan (not the first attempt to do this), rather than pitting them against each other. But ultimately, the plan has struggled to gain federal momentum among more seasoned reps and [commentators](#), who consider its advocates unrealistic and inexperienced. Meanwhile, pressures continue to mount in a generational cauldron between youth activists demanding change and older leaders refusing to give it.

Climate Change and Global Politics: New Leaders and Alliances

New global political leaders are taking the stage alongside youth, filling in a gaping hole left by the world's leading economies and largest polluters. The 2019 [climate summit](#) that came ahead of the UN general assembly was the most significant climate meeting since the Paris summit was signed in 2015. More than 60 heads of state convened and announced a series of new climate targets, with about 66 countries pledging to reach “net zero” carbon emissions by 2050. However, many countries did not present at the summit, including the US, Japan, Australia, Saudi Arabia, and Brazil. China, the world's largest emitter, gave only a muted announcement.

New Zealand Prime Minister Jacinda Ardern, German Chancellor Angela Merkel, and Marshall Islands Prime Minister Hilda Heine, on the other hand, opened the national commitment portion of the summit with their countries' [plans to increase climate ambition](#). International Renewable Energy Agency (IRENA) Director-General Francesco La Camera voiced [support for small island developing states \(SIDS\)](#) in the battle against climate change. [The SIDS Lighthouses initiative](#) received financial support from Denmark, Germany, Norway, and the UAE. And as UN climate talks in Madrid reached their closing this past December, a group of 31 countries have agreed on the [San Jose Principles for High Ambition and Integrity in International Carbon Markets](#), which “constitute the basis upon which a fair and robust carbon market should be built.” Countries include: Costa Rica, Belize, Colombia, Paraguay, Marshall Islands, Cook Islands, Grenada, Estonia, Trinidad and Tobago, Tuvalu, and more.

Moreover, [US\\$9.8 billion has been pledged by 27 countries](#) to replenish the UN's Green Climate Fund (GCF) for the next four years, surpassing what was originally pledged. This is “in spite of [Australia's turndown](#) and President Donald Trump's [decision to block](#) \$2 billion of the \$3 billion promised by the Obama administration.

Both countries are among the [top 20 polluters](#) in the world. To compensate for the gap, 75 percent of countries increased their pledges in domestic currency, and nearly 50 percent at least doubled their pledges. The largest donors were the UK (\$1.82bn), France (\$1.76bn), Germany (\$1.75bn), and Japan (\$1.5bn), while Slovenia donated for the first time.” The funds, from public and private sectors, will be invested in low-income countries to help reduce their emissions and adapt to the negative impacts of climate change. This was a significant move as climate finance remains contentious. “It has long been argued that richer nations (whose industrial revolutions were founded on fossil fuels) do not give enough to address climate change, for which they bear ‘responsibility.’ A report titled [‘Extreme Carbon Inequality’](#) by Oxfam estimated that the richest 10 percent produced half of the world's carbon emissions.”

Funders are also joining the fray. According to [Green Biz](#), twenty-nine mostly US-based philanthropic institutions plan to spend an [unprecedented total of \\$4 billion](#) over the next five years addressing climate change. The [11th Hour Project's](#) climate and energy program, for instance, seeks to reduce reliance on fossil fuels and accelerate the use of renewable energy primarily in the US. Though admirable, philanthropy's commitment to global warming is reported to be less than 3 percent of its annual giving. Critics from within philanthropy have [admonished this amount as much too low](#), especially considering the threat climate change poses to ongoing impact work. And there are those who use philanthropic dollars to impede progress. Much of the [funding for US climate change-denial groups](#) can be traced back to 140 different foundations. “Between 2003 to 2010, these foundations were found to have sent over \$558 million worth of grants and donations each year to 91 groups skeptical of climate change. ... Around 79 percent of these foundations are listed as charity organizations—meaning they can get tax relief—that promote conservative values or neoliberal free-market ideology.”

Hope in Climate Adaptation

For global communities suffering the impacts of climate change, [climate adaptation](#) has become increasingly important. Adaptation involves reducing the risks faced by both humans and natural systems; it helps ensure that we can cope with the effects of climate change. For example, building [sea walls](#) to protect coastal communities from rising sea levels and developing drought- and heat-resistant [crops](#). Climate [adaptation policies](#) are in place in over 170 countries, but the future demands more innovative solutions.

Rise of Green Infrastructure:

It is time that we “think of our natural systems as this incredibly valuable technology,” conservation biologist Letitia Grenier is quoted saying to nonprofit news source [Marketplace](#). She and other scientists promote using plants and soil as valuable infrastructure to prevent flooding and purify water, “in an era of rising seas and severe storms” that “call into question the reliability of traditional levees, a form of hard infrastructure.”

Materials Technology:

This new gel “works like a [vaccine](#) for wildfires.” When the flame-retardant material is sprayed on vegetation, it will protect the plants from igniting for months.

Converting Waste into Energy:

What if human waste was considered a resource? India’s “\$62 billion sanitation economy” is fueling a growing number of companies and “[sanipreneurs](#)” to cash in by finding ways to turn human waste into valuable resources, including renewable energy.

P2P Energy Sharing:

Peer-to-peer electricity trading on a nanogrid is already making inroads in many industrialized countries, such as New Zealand, Germany, and the US. In the Netherlands, [Power Peers](#) connects home energy producers with consumers wanting clean energy. Solar power can be bought from relatives’ and friends’ panels even at a long distance, and community solar panels can

be built and the power shared locally. [PowerPaired](#) is a “new, free online platform which provides a matchmaking service to bring together community energy groups and the owners of sites with potential for renewable energy generation.”

Growth of Bioplastics:

[Thailand](#) is “attracting billions in investments in bioplastics from global and local players seizing the opportunities the country offers as a [production hub for bio-based industries](#) due to its abundant raw materials, existing value chain, and supportive government policies.” Japan is now funding the bioplastics industry in [South Africa](#), and sustainable and plant-based alternatives, as excessive plastic waste comes under scrutiny in the country. And [Chilean start-up Valnux](#) is “transforming discarded walnut shells into a biodegradable thermoplastic with naturally occurring antibacterial properties.”

There are also a host of innovations on the horizon, including:

Energy:

[Pavegen flooring tiles](#) can convert kinetic energy from people’s footsteps into electricity. Not only will pedestrians produce their own [clean electricity](#) as they walk, they can also “generate data by relaying their footsteps, via the wireless API embedded in the tiles, to Pavegen’s website as digital currency, which can be exchanged for discounts.”

Researchers are trying to [turn fatigues into power sources](#). They have created a “flexible electronic ribbon that contains solar cells and a super-capacitor that stores energy harvested from the sun. When interwoven with cotton threads in a military uniform, the ribbon would connect to adapters that soldiers could use to recharge depleted gear.”

[Carbon Clean Solutions](#) is working to turn CO₂ into baking powder. Canadian company [Carbon Engineering](#) can remove CO₂ from the atmosphere and turn it into fuel. And a new technology uses [synthetic diamonds](#) formed from nuclear waste to “create a low-current battery durable enough to outlast human civilization.”

Circular Economy and Recirculative Design:

A [circular economy](#) is an industrial system that is restorative or regenerative. Mimicking natural systems, it designs out waste and pollution, keeps products and materials in use, and regenerates natural systems through “the superior design of materials, products, systems, and business models,” that can otherwise reinforce an extractive and destructive industrial process. The concept has been around since [1966](#) (or the beginning of time, to [indigenous](#) and other groups who have long aspired to live in balance with nature), but has picked up steam, most notably as a key topic at [Davos 2020](#). How sincere are Davos attendees about the World Economic Forum’s powerful call? We won’t wait to find out, but instead take inspiration from efforts like this one to encourage [regenerative agriculture](#) in the US.

Recirculative Design:

Recirculative Design takes circular economy a step further, to incorporate regenerative and nature-inspired design with environmental circularity, zero waste and toxicity, and rapid technological and scientific innovation (e.g., bioengineering, synthetic biology, 3D printing).

[Self-repairing materials](#) based on proteins from a squid’s teeth can make rips in clothes fix themselves. A [magnetized ink](#) can make wearables heal themselves when broken by sticking back together and allowing the electrical currents to keep flowing.

Adidas created a line of [biodegradable shoes](#) made from synthetic spider silk.

The world’s first [3D-printed neighborhood](#) was built in Mexico for families living on \$3 per day.

An electricity-free lamp is powered by bioluminescent [octopus bacteria](#).

[Thermoelectric paint](#) captures the waste heat from hot painted surfaces and converts it into electrical energy.

Challenges

There are many optimistic signals for positive momentum behind climate change, but while we hope and expect this to grow, climate change itself will also get worse, bringing with it a host of new problems.

Could Climate Change be Fueling the Rise of Neonationalism?

[New research suggests](#) that climate change and nationalism may be closely related. Today, the liberal, globalist system of alliances, institutions, and norms is struggling within from [growing populism, nationalism, and authoritarianism](#). Climate anomalies (e.g., hurricanes, droughts, forest fires) have a “tightening” effect on cultures—and as these events happen more frequently, it might be driving more people toward politicians with “inflammatory rhetoric.” This may create a vicious cycle, in which the threat of climate disaster and [far-right neonationalism](#) feed off of one another.

Climate change refugees and [asylum seekers](#) are on the rise, likely fueling neonationalism further. The World Bank estimated three regions (Latin America, sub-Saharan Africa, and Southeast Asia) will generate [143 million more climate migrants in 2050](#). Approximately 800,000 of Myanmar’s Rohingya minority have fled ethnic cleansing by moving to Bangladesh, now [occupying refugee camps](#) that are prone to flash floods during monsoons. Land bordering the camps has been deprived of its forest cover, leaving tents and huts [vulnerable to being washed away](#). Numbers of migrants are [growing faster than the world population](#), new UN figures show. International migrants currently number [3.5 percent of people on Earth](#) (272 million), also increasing rapidly. About a quarter are refugees and asylum seekers, pointing to a disturbing instability in geopolitical dynamics. The [number of global refugees](#) grew by 13 million people between 2010 and 2017. There is also a new generation of authoritarian leaders using climate change to [seize power](#)

Climate Change & the Rise in Global Conflict:

According to a [2016 research paper](#), climate change will increase the risk of armed conflict across Africa by 50 percent by 2030. Eastern Africa is particularly vulnerable. Even countries with robust economies and democracies are susceptible. In Kenya, for example, severe drought has led to rapid inflation of food prices, doubling the number of [food-insecure people](#) since 2014. That has contributed to violent conflicts, threatening the country’s political stability. A [study](#) published in 2015 drew a direct link between the 2007–2010 drought in the greater Fertile Crescent and Syria’s 2011 civil war, which has forced millions of people to [seek refuge](#) in Europe. Their arrival has helped inflame [antidemocratic movements](#) throughout the continent.

Other issues will arise and intersect as well: As fans, cool air, even AC units become more of a necessity—and more expensive to run—how will poorer individuals cope? And how will the swings in load demand affect brownouts and blackouts? And as the heat increases the incidence of tropical diseases in northern climates, or [releases ancient viruses](#) from melting glaciers, how will we cope—and how will our public health systems, spaces, and transportation all need to adapt?

Demand for Innovative Climate Solutions

The next decade will likely bring—and demand—tremendous leadership and innovation in climate-related solutions. Imaginative cities of the future could become increasingly smart, connected, sensor-laden, and responsive in real-time to residents’ needs. They could also integrate innovations like P2P energy sharing on a big data-driven mass scale. Developing countries could leapfrog outdated Northern infrastructure, becoming earlier-adopters of newer climate-based technologies, at national or state levels but also at the individual and community levels, as young consumers are inspired by more novel, grid-less technologies.

Municipalities, urban developers, designers and manufacturers will increasingly have to think both innovatively and imaginatively around climate-based solutions, particularly as more people crowd into already crowded urban areas. The wasted goods and byproducts of today must be the raw materials of tomorrow. But we need urgency and coordination behind innovation to ensure it grows, sustains, and has impact. And while youth leaders show us a path, and a will, to change, we cannot rely solely on them. As Greta Thunberg admonished at her UN talk September 2019, “My message is that we’ll be watching you. This is all wrong. I shouldn’t be up here. I should be back in school on the other side of the ocean. Yet you all come to us young people for hope. Shame on you!”

The question remains for the “rest of us”, how do we become allies in the fight to save our planet? How do we bridge climate, justice, equity, economy, and innovation, and across generations? How do we change our own behaviors, hold each other to account; and how do we make room, among old power, for new?



Erasure

*The Roman decree *damnatio memoriae*, “condemnation of memory,” punished individuals by destroying every trace of them from the city. It was considered a fate worse than execution.*

[Erasure](#) refers to the “practice of collective indifference that renders certain people and groups invisible.” It is used to describe how “inconvenient people”—ethnic, religious, and racial minorities, women, the LGBTQIA community, lower classes, servants, and slaves—are dismissed in recorded history; and how their contributions, struggles, and achievements are ignored, removed, or undone. Groups have long been written out of history. The Roman decree *damnatio memoriae*, “[condemnation of memory](#),” punished individuals by destroying every trace of them from the city. It was considered a fate worse than execution. If history is written by the victors, then it is the group that sits most in power whose perspective prevails, especially in formal institutions or structures of power. In many ways, technology, with its distributed networks and information, has allowed for more perspectives to emerge and flourish, alongside a general move toward more inclusion in storytelling. But in recent years, we see indications of this trend toward erasure reemerging, and coming to

encompass something far greater and more ethically nuanced than it has before, at the intersection of technology, culture, and public policy.

Technological Erasure

Technology is amplifying a bifurcation where, on the one hand, more stories are emerging and being told from the perspective of people who would otherwise have been erased; but on the other hand, it is now easier to [dismiss people](#) we disagree with and views that make us uncomfortable.

Rise of Cancel Culture:

One way we see erasure manifesting is through the rise of [cancel culture](#)—“a movement in which the goal is to seemingly reject, through avoidance and erasure, things that many have deemed unacceptable or problematic.” Although done in earnest, to show protest or disagreement, even solidarity for a group that one feels is being treated unfairly, the result is often lost dialogue and connection to those who disagree, leaving no room for growth and evolution. It can even have an anti-thetical impact on the movements that are trying to bring the issues to light, and break down important allegiance as, in great irony, “[You can really only be cancelled by your own side.](#)” Former US President Barack Obama recently [urged young people to leave cancel culture behind](#). A mob quickly rose to the [defense of cancel culture](#), sprinkled with a bit of “[OK, Boomer](#)” judgment.

Cancel culture now turns thoughtless comments into [firing offenses](#) where flawed humans face swift and immediate erasure at the impulse of modern morals. The cancellation of flawed women from the internet, in a “[trial by Instagram](#),” is another troubling manifestation. As Elle Contributing Editor Pandora Sykes writes, “When a male celebrity screws up, he is duly lambasted, before rising, a few weeks later, from the keyboard’s ashes. But when a woman screws up, her error is used as a calling card for her total erasure. Her mistake is no peccadillo; it is proof of her worthlessness.” And just how far will the judgment of other people’s morality go? How do you un-cancel the cancelled?

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Erasure from Social Media:

This type of erasure takes many forms. It is common practice for people to erase posts, even remove contacts, when they see content or opinions they do not believe in or subscribe to. [Far-right activists](#) are increasingly getting kicked off platforms like Twitter, erasing their presence, history, and connection to the network, which emboldens them as martyrs among their supporters. Memes shared on social media also reflect cultural erasure (and cultural appropriation), especially when shared across social media channels. The internet is now more aware of the damage done by majority cultures [borrowing elements of minority cultures](#) and [brands exploiting marginalized consumers](#).

Personal Privacy and Erasure as a Right:

Originally, data erasure referred to how “personal data must be governed, collected, processed, and erased.” For the first time, the [right to be forgotten](#) is found in the EU’s General Data Protection Regulation (GDPR), in addition to the right to erasure. And data subjects are entitled to revoke consent (and access) at any time. Social media accounts of children should be [automatically wiped](#) when they reach 18, according to a new study. A report by the London School of Economics (LSE) into kids’ attitudes toward the

internet found that they “overwhelmingly wanted a ‘grand erasure’ of their online footprint to stop childhood mistakes from affecting their future.”

Media-Sponsored Erasure

The 2019 Ethiopian Airlines crash counted among its fatalities [passengers](#) from 35 countries. But in the aftermath of the tragedy, many [Western media outlets](#) “stripped their reporting of emphasis on Africa almost entirely, framing the tragedy chiefly in terms of its impact on non-African passengers and organizations.” In her 2016 book “[In the Wake: On Blackness and Being](#),” Tufts University professor Christina Sharpe argues that “black people in the US and around the world exist in a state of nonbeing and constant erasure.” The long-time erasure of black women led to the [#SayHerName](#) movement, which drew attention to black women believed to be victims of police brutality. Missing black and brown children [receive much less media coverage](#) in the US than their white counterparts, while black men are [overrepresented as perpetrators](#) of crime in US media.

A [major study on diversity](#) has found that Hollywood is still “under-representing women, disabled people, lesbian, gay, bisexual, and transgender people and those from ethnic minority backgrounds, both on screen and be-

hind the camera.” These findings show that the erasure of different groups is still tolerable to some. Hollywood is also under fire for the whitewashing and [erasure of East Asian characters](#). However, the media can also have the opposite effect. For instance, the internet has [made trans people more visible](#). Few marginalized groups have experienced such a profound change of fortune during the last decade. But some argue that it has also made them more vulnerable in the so-called “culture wars.”

Government-Sponsored Erasure

New forms of erasure are emerging at the intersections of technology, surveillance, government-centralized control, and policy.

Africa:

[Kenyans](#) are being asked to choose between legal erasure and “being commodified as data by their own government.” The Kenyan government recently mandated [DNA-linked national IDs](#) void of data protection. “This mass registration exercise would see the issuance of new digital ID cards for all Kenyan residents. Many Kenyans refused to register, either because of concerns over privacy and data security, or simply as a protest to the government’s threats, coercion, and bullying tactics.”

Asia:

China has wiped memories of [Tiananmen Square](#) off the internet. The Chinese military killed as many as [10,000 people](#) during Beijing’s violent suppression of pro-democracy protesters 30 years ago. But today, those victims and the gruesome events in Tiananmen Square have been [virtually wiped from China’s collective memory](#). Beijing has “achieved this mass erasure through an unprecedented crack-down on all forms of public speech in the streets and online, relying on advanced technology to automate much of their efforts.” Add to this the fact that the [Communist Party](#) wants to construct a unified nation by erasing differences in culture, religion, and ethnic identity. [Uyghurs](#) and Tibetans,

who together still make up most of China’s westernmost regions, bear the burden of these systematic efforts to [erase ethnic identity](#). And in [Hong Kong](#), ongoing protests against a controversial [extradition bill](#) is leading to the steady erasure of the Hong Kong identity.

US:

The United States once stood up against the erasure of intellectual freedom. But the lukewarm response of the Trump administration to the [murder of Saudi critic Jamal Khashoggi](#) is an example of why the global defense of freedom of the press and speech is [no longer an American priority](#). As Hannah Arendt argues in “[The Origins of Totalitarianism](#),” the [erasure of truth, facts, and standards](#) of reference furthers the collapse of democratic institutions.

Several issues surrounding erasure loom ahead of the 2020 US Census. In what some have referred to as “[paper genocide](#),” the erasure of Native people from the US census “amounts to a systematic destruction of Native identity by reclassifying people into non-Native racial groups on government records.” An [LGBT category](#) will also not be featured on the 2020 Census. This perceived erasure matters for both practical and symbolic reasons, as it shows that the fight for LGBT equality is historic and continuing. [Immigrant communities](#) also fear erasure with the proposed addition of a citizenship question on the Census.

Erasure is also making its way into legal statutes to counteract recognitions of identity to groups whose populations were decimated by repeated attempts to deny rights and identity. For example, the [US Indian Child Welfare Act](#), enacted in 1978, made it very difficult for non-Native parents to adopt Native children, a counter-measure to “correct” decades of forced removal and conversion of Native children that made obsolete their Native American heritage and identity. [This law is being challenged](#), leading some to fear cultural erasure and endangerment of affirmative action laws and tribal rights.

Erasure of Historical Memory

For all the progress being made, erasure is leading to a war against memory through the rewriting of past narratives and the espousal of revisionist history (e.g., [Holocaust](#) denial, the separation of Muslim history from Indian history, censoring the [US confederate past](#)). [Alabama](#), along with many other former Confederate States, is struggling with how to teach children about its slave history. Holocaust history is being rewritten in parts of [Eastern Europe](#). Anyone suggesting that [Poland was complicit in the Holocaust](#) could face fines or even imprisonment of up to three years under a [controversial new law](#). In 2017, [Marine Le Pen](#) tried rewriting France's history by questioning the country's role in the Holocaust.

The concept of erasure is even going the way of "fake news," being twisted to apply to contexts that are, if anything, attempting to do the opposite. For example, US conservative commentators were calling the [removal of Confederate statues](#) an act of erasing the past, rather than an attempt to de-valorize men who committed atrocious acts against enslaved people, despite the fact that no history was being rewritten or denied.

Where does the cleansing of memory stop? In a world where the lines between fact and fiction become increasingly blurred, what impact will this have on historical erasure? How will this affect what children learn, or are taught, in school? What laws could be undone? Will history be viewed as something malleable rather than factual? Context and interpretation will take on greater urgency.

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The Age of Unrest & Dismantling the Status Quo

Around the world, we see two major, seemingly opposite shifts happening simultaneously. On the one hand, established democracies are experiencing the rise of prolific nationalist, populist, or authoritarian movements. This is well-chronicled. [Tribalism](#) remains a powerful force everywhere; in recent years it has begun to [tear at the fabric of liberal democracies](#) in the developed world, and even at the postwar liberal international order. We see features of this manifesting in places as dispersed as the [US, UK, much of continental Europe, Brazil, Australia, Sri Lanka, the Philippines](#), and many more countries. The Economist Intelligence Unit's [2019 Global Democracy Index](#) fell to the worst average global score since its inception in 2006, in a “democracy recession” that shows scores of nearly every region of the world either decline or stagnate.

On the other hand, traditionally less democratic countries are experiencing social unrest and political counter-movements. In [Hong Kong](#), protests are being driven by increasingly disillusioned youth populations

anxious over the looming impacts of the Chinese government's overreach into their autonomy and civil liberties. Violent protests in [Lebanon](#) are aimed at reforming a corrupt and sectarian system of government. [Tunisia's](#) authoritarian government, which has been dying a steady death thanks to pragmatic consensus building across diverse and opposing political groups, has seen 10,000 protests every year since 2016. In [Chile](#), ranked as a "flawed democracy" by the EIU before 2019, violent protest [triggered by a 30 peso \(\\$0.04\) metro fare hike](#) of all things, has driven a widespread push for political reform.¹ In 2019, mass protests erupted across Sudan, Algeria, Iraq, Ecuador, Haiti, Guinea, Bolivia, Iran, Brazil, Columbia, Venezuela, India, Nigeria, South Africa, Egypt, and more.

But what does this mean? Protests in authoritarian or hybrid (states with both autocratic and democratic characteristics) [regimes are nothing new](#)—is this part of the natural ebb and flow of political movements as we've always seen, important but otherwise isolated and unrelated? Or [are we witnessing a global revolution](#)? Will the new democratic leaders of the next decade come from more autocratic countries? Will we see a switch in the liberal order, countries like Chile leading the way as paragons of democracy, while countries like the US fall behind to hybrid autocracy? And are these opposing trends, rising autocracy in democracies and rising democracy in autocracies, or actually one in the same—rising social unrest at a global scale, regardless of government, driven by popular discontent and disillusionment with corruption and inequity in political institutions and economic systems, and with social media to enable, power, coordinate, and amplify the protest? We cannot be sure, of course. But when studying the drivers, interesting patterns emerge among less democratic countries.

In a world more interconnected and globalized than ever before, and also more unequal and volatile, citizens are clinging dearly to those identities they feel most inherently define them, and make them feel seen. This fuels the rise in tribalism, and in turn social unrest, we see manifesting globally.

Tensions within Multiethnic States

In a world more interconnected and globalized than ever before, and also more unequal and volatile (see later sections), citizens are clinging dearly to those identities they feel most inherently define them, and make them feel seen. This fuels the rise in tribalism,² and in turn social unrest, we see manifesting globally. In many multiethnic autocratic and hybrid states, powerful figures of one group rise to power, excluding other groups in turn. The examples are too exhausting to count, and not limited to "less democratic" countries. In [Syria](#), President Assad, a member of the Alawite minority, exerts authority over a country that is 74 percent Sunni. [Sunnis in Iraq](#) are still fighting for representation. The risk of rebellion increases dramatically when joined with economic inequality along ethnic lines, sometimes remnants of entrenched "[divide and conquer](#)" tactics used by colonizers decades earlier, to create infighting and deter coalition building and rebel-

lion. Germany and Belgium gave the already powerful Tutsi minority political authority over the majority Hutus in Rwanda. The British did something similar with the Tamil minority in Sri Lanka. And though the resulting civil war outbreaks are years old (a decade, in Sri Lanka's case), the feeling of normative [threat to one's identity and culture can remain](#), fueling later tribalism and infighting with even other groups. It is tinder waiting for a spark. Ethnically diverse but still somewhat stable countries most at risk of future violence are said to be [Ethiopia, Iran, Pakistan, and the Republic of the Congo](#), all developing countries with histories of conflict, where minorities face both discrimination and exclusion from power.

And, across the Middle East, [Kurds are pushing for long-denied rights, and collaborating across national boundaries](#). This could profoundly reshape the entire region. Kurds in the four traditionally distinct parts of Kurdistan—Turkey, Syria, Iran, and Iraq—are looking to become one single Kurdish nation. Taken together, all of this highlights a drive toward greater representation that cuts across many less developed regions of the world.

1 This political participation drove Chile's EIU ranking to a "full democracy", ranking it four places higher than the US, which has been ranked as a flawed democracy since 2016.

2 For a deeper read on Neotribalism, check out our [Trends to Watch in 2018](#), where we cover the "Rise of Neotribalism" (pg 10) as one of 10 trends to track that year.

Rising Inequality

The prosperity, or vulnerability, of global populations is a primary catalyst of social unrest. But inequality is a more complex concept than it once was. It can fall along many different continua: economic, demographic, reproductive, climate and water, information, algorithmic, or digital/media literacy. And while [economic insecurity](#) as a contributor to political unrest is well-captured, especially [when accompanied by structural vulnerability](#), we share a couple of less-talked about aspects of inequality and their connection to social unrest in less democratic countries.

Climate & Water Inequality:

Climate-related conflicts and displacements have already impacted politics in many nations. A report by the UN Human Rights Council outlines an impending [“climate apartheid,”](#) characterized by an even greater rift between global haves and have-nots. The report predicts 120 million people will be thrust into poverty by 2030 by climate change. It further highlights how the poorest 3.5 billion people in the world account for only 10 percent of the world’s greenhouse gas emissions, while the richest 10 percent is responsible for half. One of the gravest areas for concern when it comes to climate inequality is access to water. Countries that are home to [one-fourth of Earth’s population face a risk of running out of water](#). By 2030, the number of cities in the “extremely high” stress category is expected to rise to 45, and encompass almost half a billion people.

Information Inequality & the Internet Shutdown:

“Information poverty” has long been a major impediment to global development. Greater internet access correlates with improved outcomes across a variety of measurable categories (e.g., health and education). Growing a poor nation’s mobile internet use by 10 percent correlates with an average 2 percentage-point increase in GDP, and [electronic channels have been effective in making governments more responsive to citizen concerns](#). However, access remains

unequal, with women and those who live in rural areas lagging in internet use, limiting access to economic opportunities and government services (though [local markets are already driving bottom-up solutions](#) to this).

That said, unequal internet access doesn’t necessarily correlate to social unrest—in fact, [some would argue the opposite](#). This mentality has led [many countries](#) to institute forced internet cuts during periods of social unrest, lasting a few days to “digital sieges” that go on for months, as we’ve seen in Syria, India, Sri Lanka, and Cameroon (there were an estimated [188 shutdowns in 2018](#) alone, and they are [getting longer each year](#)). But while it may be true social media apps have fueled violent unrest via misinformation—and also aided peaceful protest—it has not been proven that the removal of these tools results in a reduction in violence. In fact, several researchers have found the opposite—that [“shutting down social media does not reduce violence, but rather fuels it.”](#)

One factor resonates clearly across less democratic countries experiencing social unrest—the decline in trust. The global [2020 Edelman Trust Barometer](#) results showed that, even with a relatively strong global economy and near full employment, “none of the four societal institutions that the study measures—government, business, NGOs, and media—is trusted.” There is a growing sense that economic and political systems are built to benefit the few over the many. Edelman reported income inequality as affecting people’s trust more than economic growth. The [EIU](#) found “protests were driven by frustration with a government that was seen as corrupt and self-serving, and unwilling or unable to tackle the political and socioeconomic inequalities facing its people.” As an example, in Latin America, mass protest across Bolivia, Chile, Colombia, Ecuador, Haiti, and Venezuela, was driven by things like electoral fraud, corruption, and austerity measures. “All expressed distrust in the political class and dissension from governments’ policy decisions.”

The Global Youth Bulge: The Most Connected Generation Ever

We are currently witnessing the largest global youth population ever. There are 1.8 billion people between the ages of 10 and 24, and this number is growing. Over the next 13 years, almost 2 billion people will become part of the world's youth cohort. In most developing countries, [children and adolescents make up the majority](#) of the population. This global [youth bulge](#) has already begun to ignite political unrest, and that dynamic will likely accelerate.

Youth populations have always been more idealistic than their older counterparts, but [today's youth cohort is also the most connected in history](#). Global youth are nearly twice as networked online as the general population. And in the least developed countries, they are three times more likely than the general population to go online. That leads to the exponential cross-pollination of culture, arts, media, entertainment, knowledge, ideas, and networks—as well as aspirations and demands for their countries, and tools and tactics to organize, [hold their leaders to account](#), and protest (see the New Climate Narrative trend for the climate demonstration of this). As ideas, tools, and networks spread online, it becomes a natural corollary for youth populations to coordinate and demand more from those in positions of authority. [Edelman](#) captured this new sentiment well as a global shift to “taking the future into their own hands.”

Global Social Media Warfare and Engineered Volatility

According to a recent Oxford report, the number of [countries engaging in social media manipulation more than doubled to 70](#) in the last two years. There is evidence of at least one political party or government entity in each of those countries spreading disinformation (via bots, fake social media accounts, and hired trolls) to discredit political opponents, bury opposing views, interfere in foreign affairs, or, as researcher [Anita Gohdes asserted](#) in

2015, “[surveil, manipulate, and censor](#) the digital flow of information in their own country.”

Facebook, Twitter, and WhatsApp remain top social networks and tools for disinformation. [Russia is reported to have been testing new disinformation tactics in a big Facebook campaign in parts of Africa](#) ahead of the 2020 US presidential election. Malign foreign powers have weaponized the infrastructure that underpins democratic societies, hacking the internet, media, and voting databases to sow disinformation. Other states are gravitating toward this high-impact, low-cost strategy. Weeks before [Mexico's 2018 presidential election](#), there was a surge in Twitter bot accounts sharing inaccurate stories. The majority of news sources shared by bots originated in Argentina, Iran, and Venezuela (as well as Russia).

Even as we describe the flow of this information linearly, we suspect it is far from that in reality. Experts still can't model how misinformation moves and impacts outcomes like election results or political protest, but we suspect, as 70 countries deploy bots, fake accounts, and trolls to spread misinformation and discontent, they have no idea what new issues—in what geographies—may be picked up and amplified in the process, or even boomerang back to impact an unrelated issue domestically. The result is engineered volatility and weaponized protest, alongside genuine effort.

And while, for now, [foreign meddling operations remain largely in the purview of state actors](#) and their proxies, other actors will enter the fray as new technology and AI lower barriers to entry. One of the easiest ways for non-state actors to manipulate public opinion will be through the use of increasingly sophisticated “deepfakes”—highly realistic and difficult-to-detect digital manipulations of audio or video. [The most worrisome future deepfake applications may be in politics and international affairs](#). And social media is fertile ground for proliferating deepfakes.

Where Could This Lead?

Secessionism:

[Secessionism is on the rise](#). In 1915, there were eight movements seeking their own independent state. In 2015, there were 59. Even though more groups are trying to break away, fewer are resorting to violence, but rather protest and civic engagement. Secessionists are increasingly connecting with one another, often with the help of NGOs like the [Unrepresented Nations and Peoples Organization](#). UNPO provides a forum for groups, including many secessionists, which lack official representation in major international organizations.

Predicting Political & Social Unrest—An Imprecise Science:

Ultimately, even the most expert observers will have a hard time projecting where social unrest will flare up next. [Coups and revolutions present unique challenges for forecasters](#). One of the most advanced forecasts comes from [One Earth Future \(OEF\)](#), an NGO that publishes a predictive model, [CoupCast](#). Factors in that model correlating most strongly with the risk of a coup include: the rate of economic growth; how long a regime has been in power; how long since a country's most recent coup; and whether it has faced extreme weather. Understanding how difficult it is to forecast where, when, and how this type of unrest might manifest next, there are still several questions we should consider. Since democracy appears to be in global decline, what new political models for reform may exist in the near future? Will they be hybrids or offshoots of conventional democracy? Or even autocracy? Or are we overdue for a new model that we haven't even conceived of yet? Will social media ultimately prove to be a greater tool for citizen organization or suppression?

Growing tensions within multiethnic states, increasing inequality, declining trust, a youth bulge throughout the developing world, and engineered volatility, are all serving to ignite social unrest and cross-cultural consciousness, especially in countries with aging

leaders that do not represent their young constituents. Most significantly, taking a few steps — whether in a democracy, autocracy, or something in between, the current state of social unrest doesn't look all that different. [Dictators are in as much trouble](#) as democratic leaders. As we look to this next decade, more political upsets are on the horizon. "People have come to understand that [their destinies are linked but their anger and activism is still framed in reformist claims](#). The new is built on the wreckage of the old, but we have no idea yet how the new might materialize."³

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³ Open Democracy, Koenraad Bogaert, Jan 27, 2020. "[From the Haitian revolution to the spectre of Tahrir: is a global revolution possible](#)".



Belonging: Searching for Place In a Lonely World

As economies evolve, so do the societal constructs and belief systems that they embody. For many years, we witnessed the [loss of faith in traditional religions](#), institutions, and communities that have failed to adapt to modern times, evolving perceptions of right and wrong, new familial structures, and changing lifestyles. Widespread education, globalization, even interfaith marriages, have led to more secularization, especially in countries with high religious diversity. Across many religious orders—Christian, Judaic, Buddhist, Islamic, Hindu—disillusionment with actions taken in the name of religion or religious identity has led some to embrace “[new secularism](#).”

In the US, the share of the population who does not identify with any organized religion is growing. [Religious “nones”](#) in the US now equal the number of evangelicals and Catholics. [According to the Public Religion Research Institute](#), the number of Americans with [no religious affiliation](#) has been steadily rising since the late 1980s. Young people around the world are less religious by several measures.

A [2018 Pew Research poll](#) across 106 countries found that adults under the age of 40 are “significantly less likely to be affiliated with a religious group.” The gap is also common in Latin America, where it applies in 14 out of 19 countries. Alongside the expansive innovation, economic growth, and globalization of the past many decades, people took their faith out of unyielding religious institutions they were raised with, and put it into new institutions—science and technology, politics and law, media, new social networks, business, capitalism, and more.

But we are now living in uncertain times: changing geopolitical, economic, and sociocultural landscapes; greater volatility, complexity, and inequity; [increasing loneliness and anxiety](#), and [declining trust](#) in institutions, leading to heightened mental and emotional strain. Despite good macro-economic indicators, many people feel uncertain about their future. The ritual of going to a place of worship each week once had an important role to play, in finding kinship and community, making sense of life’s challenges, finding stillness and peace beyond day-to-day routine. In times of disruptive change and declining trust, where are people putting their faith? How do they find belonging, meaning, or a sense of place in a lonely world? We are seeing new pillars of belonging emerge.

Reviving Traditional Religion

Rise of Celebrity Churches:

From [Kanye’s Sunday Service](#) to churches like [Zoe and Mosaic](#), Los Angeles’ new breed of [celeb-laden ministries](#) have people, mostly young, searching for salvation, authenticity, and spirituality. This form of evangelical Christianity involves fashion, music, social media (especially [Instagram](#)), and celebrity. Recent attempts by churches to be more attractive to secular populations have led [cool churches](#) to emphasize “relationship” over “religion.” [Prayer candles](#) have even undergone a pop culture rebirth with [independent boutiques](#) and Etsy shops selling updated versions that replace the saints with celebrities.

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Rise of the Celebrity Guru:

On the footsteps of legendary gurus such as [Osho Rajneesh](#) in the 1970s, Indian acolytes are meeting the demands of renewed religious fervor in the country and around the world. Mystic Sadhguru brings his message of [Inner Engineering](#), building off of modern appreciation for and frustration with materialistic achievement and aspiration. “As there is a science and technology to create external well-being, there is a whole dimension of science and technology for inner well-being.” Though he is not without [critics](#), Sadhguru’s YouTube channel has over 4 million subscribers; his message is clearly resonating. Art of Living founder [Sri Sri Ravi Shankar](#) is a spiritual humanitarian leader and teacher with true global presence. Sri Sri tours globally to spread his vision of “a Stress-Free, Violence-Free World,” teaching his Art of Living course and leading meditation sessions from India to Russia to Amsterdam. His work and teachings are estimated to have reached 450 million people across 156 countries.

Church Planting and Silicon Valley:

Silicon Valley [remains](#) one of the least religious parts of the US. [Transforming](#)

[the Bay with Christ](#) is “a nonprofit organization working to jumpstart a Jesus movement in the Bay Area that results in spiritual and societal transformation.” The [movement](#) has made significant inroads within the last five years, with 500 churches across 30 locations in the Bay Area. A new church has even been planted solely for [Walt Disney World employees](#). And just as surely as Silicon Valley is being impacted by churches, churches are being impacted by Silicon Valley. Concepts like “[KROI](#)” (Kingdom Return On Investment) help direct funding in new church planting endeavors, backed by Evangelical groups who developed the concept of “church planting” 20 years ago, when trying to solve for a basic problem—loss of the young members they needed to sustain their churches.

New Forms of Leadership:

Pope Francis and his [push for openness](#) toward migrants, Muslims, and gay people, may have less influence on the global political stage, where nationalists and the far-right dominate, but his impact on the church is sizable. By appointing cardinals and bishops on the front lines of the faith,

Francis is [reconstituting a church](#) that is willing to consider the challenges of the modern world with those of other faiths and with atheists.

Many other religious traditions are undergoing remaking and revival as well—and have been for some time. A New Age version of [Kabbalah](#), the ancient mystic Jewish tradition, came into favor among celebrities in the 2000s. Buddhist and Vipassana meditation teachings have been taken on with zeal around the world, in the form of modern new movements like [Against the Stream](#), and integrated into other spiritual and mental well-being practices as well. But as quickly as these movements rise, they can also fall due to [financial corruption](#) or [worse](#). The evolution of these newer versions of traditional practice is likely to continue.

New Forms of Ritual and Renewal

Work Devotion:

For many college-educated Americans, [work](#) has morphed into a religious identity, promising transcendence and community, but often failing to deliver. The decline of traditional faith in the US has coincided with an explosion of [new atheisms](#). Some people worship [beauty](#), some worship [political identities](#), and others worship their children. But [workism](#) is among the most potent of the new religions. [Hustle culture](#) is obsessed with striving. “Rise and Grind” is both the theme of a [Nike ad campaign](#) and the title of a [book](#) by a “Shark Tank” shark. The concept of [productivity](#) has taken on an almost spiritual dimension, particularly as the overworked seek a sense of greater meaning.

Technology Culture:

If work is the new religion, who are its gods? From Lagos to Colombo, tech culture permeates startup hubs, as the young and motivated look to Steve Jobs and Jack Ma for billionaire inspiration, and tech founders become [deified](#). It is as if the innovations themselves have become sources of faith. Tech culture is built on a sense of greater belonging and purpose. Two of the tech

world’s main personalities with cults are [Jack Dorsey](#) and [Elon Musk](#). Many followers of Musk also have an almost cult-like devotion to his company, [Tesla](#).

And further out, it may be less about who is worshipped and more about what. We may be reaching a point when AI becomes so smart it will outperform human capabilities, leading to a superhuman intelligence that some will view as “divine.” Some predict that an [AI god](#) will emerge by 2042 and write its own bible. And new [robotic priests](#) can bless, advise, and even perform funerals. As more religious communities incorporate robotics (and AI), it will change how people experience faith.

Fitness Fanatic:

Flywheel, SoulCycle, Pure Barre, Barry’s Bootcamp, CrossFit, CorePower Yoga, and others attract a fanatical following. High-end fitness studios configure working out as a means for [spiritual renewal](#) and self-realization. [Cult gyms](#) are booming. [Supermarkets](#) are even capitalizing on the trend. [Hy-Vee](#) teamed up with high-intensity training gym OrangeTheory to build studios attached to its stores. And [Whole Foods’ flagship store](#) in Austin, Texas, partners with barre, spinning, and yoga studios.

Community across Generations

Beyond traditional religion, members of [Gen Z](#), the least religious generation but also most tolerant, are [remaking religion to suit their values](#). Many do not adhere to sacred teachings, but rather are “looking to impart a new doctrine that allows each person to choose their own worldview.” Young people’s use of technology is also helping them [create new communities](#), “ones that can amplify the positive potential of a radically diverse generation.”

On the other end of the generational spectrum, seniors are also using technology to address [isolation and loss of belonging](#), and create a greater sense of identity and community. E-sports, or video game playing as a competitive spectator sport, is one example. [Sweden’s Silver Snipers](#) and now Finland’s Grey Gunners (“[We Will Finnish You](#)”), are a group of over-65

gamers breaking the traditional mold of video gaming. And Senior Planet is a community of people 60 and older who are “harnessing technology to change the way they age.” Their mantra is “[age with attitude](#).”

Other types of communities are forming, too. The move toward “coming together”—communal dining, discussion salons, affinity group travel—is a natural extension of the trend toward “aloneness.” Dinner with Strangers is part of a [growing community](#) that, yes, throws dinner parties for strangers. And Starbucks was one of several retailers to mainstream the communal table model. Airbnb invited people to “[Belong Anywhere](#).” [Cuba](#), cut off from the US for more than 50 years, is the fastest-growing market in Airbnb’s history. Traditional pastimes are booming, too. [Bowling alleys](#) are becoming popular again because people want to create a sense of belonging by doing something together and fostering real interaction.

Festivals & Belonging

[Burning Man](#) is an annual arts festival and temporary city erected in [the Nevada desert](#) that attracts approximately 70,000 people. It is dedicated to community, extreme self-reliance and self-expression, sexual openness and freedom, unconditional [gifting](#) and [decommodification](#). Since the first Man burned in 1986, Burning Man became a refuge for people who felt excluded from the mainstream and traditional society, looking for alternative belonging. Its 2017 event theme was “[Radical Ritual](#),” derived from global religious symbols. Many regular attendees “viewed this as the next step to becoming a [full-fledged religion](#). Noting that humanity now exists without a defined religion linked to a tribe, festival organizers announced plans to place [the Man](#) (the large wooden effigy ritually burned at the culmination of each event) inside a symbolic temple before burning it.” For many longtime Burners, some have even asked for a “[separation of church and my burn](#).” To many, it has become something of a [religion](#), with Burners referring to festivals as [yearly](#)

[pilgrimages](#). Many [advocate for kids](#) attending the festival. Others view Burning Man as a place for positive [personal growth](#). But the idealism may be waning. The festival has suffered from a perception by some that it is a “utopian [playground for privileged white people](#)” and [Instagram influencers](#). About [1 percent of attendees are black](#). An impending [federal clamp-down](#) on Burning Man’s huge environmental impact may also jeopardize its [free spirit ethos](#).

Beyond Burning Man, [festivals](#) continue to retain spiritual appeal despite commercialization. Witness the rise of [Bonnaroo](#), or [Envision](#)—which is one of more than 200 “transformational” festivals. These festivals, such as [Tomorrowland](#) in Belgium, [Shambhala](#) in Canada, Transmission in Prague, and Psychedelic Circus in Germany, “have an ethos of community building, personal growth, and creative expression.” More [music festivals](#) than ever have a psychedelic focus. Festivals are even being used to directly tackle and address difficult issues, like [Good Grief, Bristol](#), a gathering exploring loss taking place in Bristol, UK.

Tolerance, diversity and inclusion could all become core tenets of belonging, identity, and connection in the future. But how do we reconcile belonging for all with belonging for some? How can we create an environment that fosters human connection, and also honors individual and group identity?

Belonging in Exclusion and Protest

Neotribalism⁴: When Belonging becomes Exclusion:

Belonging is a human need that is often unmet and expressed differently between individuals and populations. But desire for belonging can also descend into [dangerous tribalism](#), with religious undercurrents. Today, the world is being shaken by people who feel dispossessed and disrespected, and it is little prepared for disruption. Some believe that the [real clash](#) is between “those who want to exercise their religious allegiances and those who have been modernized by an increasingly secular West.” Increasingly, the world is being divided into those who identify more with others around the world, and those who identify more with their locale or “tribe.” There is increasing skepticism of the [glory of globalization](#).

All of this is very much a part of “us/them” efforts, including neonationalist uprisings, terrorist online recruiting tactics, and [identity politics](#)—but also empathy for, and desire to defend, one’s own. Trumpian nationalists, authoritarian populists, and Islamic jihadists could be considered different versions of the same anti-pluralist [movements of hate](#), against the diversity, fluidity, and the interdependent nature of modern life. According to columnist David Brooks, “Anti-pluralists yearn for a return to clear borders, settled truths, and [stable identities](#).” But do these movements manipulate one’s desire for belonging, or simply fulfill it?

Belonging in Protest:

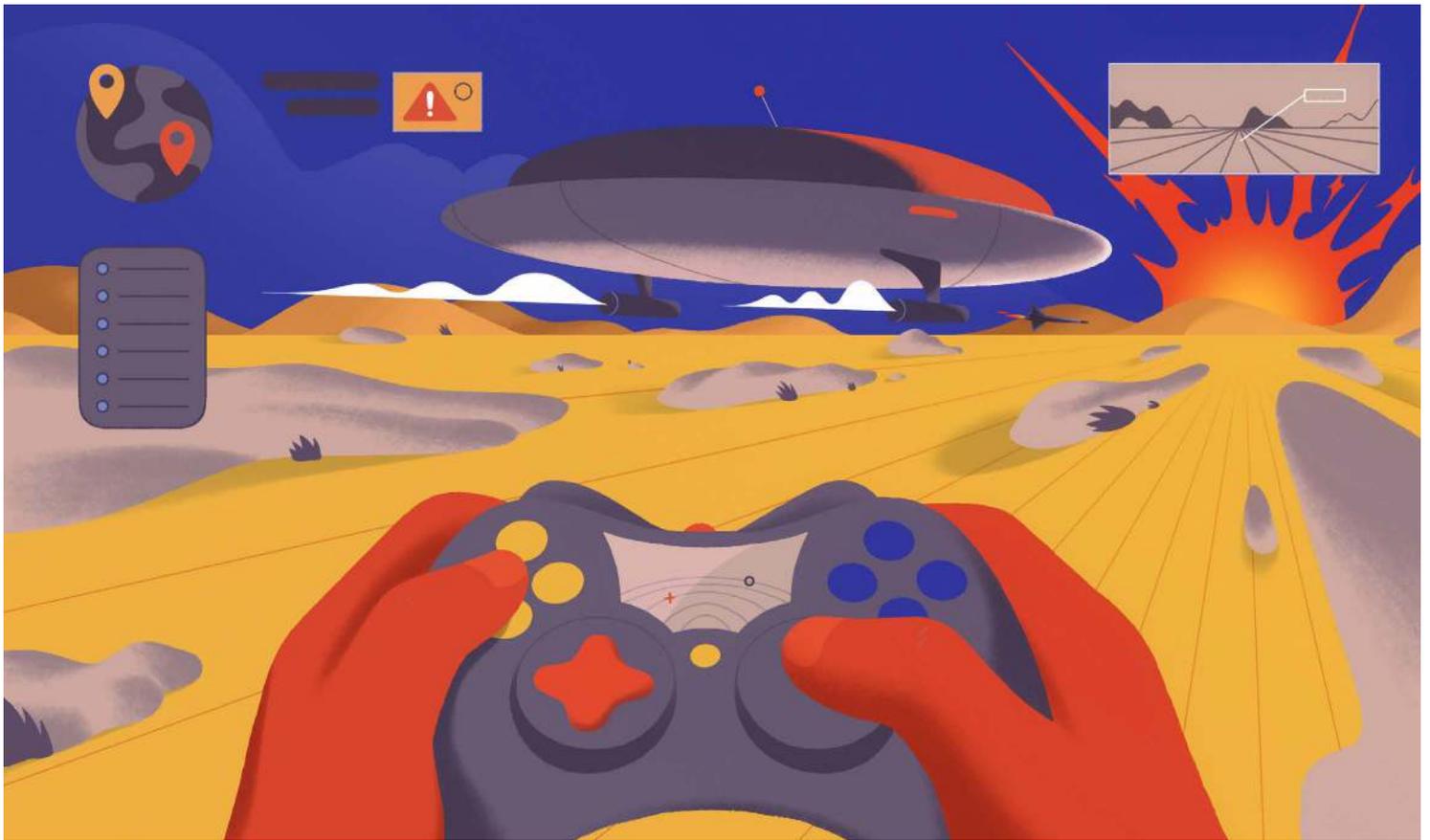
In reaction to this rise in tribalism is the rise in cohesion, togetherness, and collective action to battle it. Black Lives Matter, climate activism (see the New Climate Narrative trend), Women’s March; people are banding together to protest political oppression and inequality. In January, [thousands gathered in cities](#) across the country as part of the [nationwide](#)

[Women’s March rallies](#), focused on issues such as climate change, pay equity, reproductive rights, and immigration. The [Black Lives Matter movement](#) served as a source of empowerment and social identity for many who felt disenfranchised. And protests that denounced President Trump’s [immigration policies](#) demonstrate how people can come together to promote familial belonging in the face of adversity. But as we see increasing bifurcation across media channels, social networks, political parties, and more, split between “globalist” and “nationalist” camps, do these groups become the antithesis of each other, or a mirror image?

Future of Belonging

As humans, we have the desire to belong. Belonging is closely connected to identity. Now some portend we are moving toward a [post-demographic world](#), with “fluid identities and blurring gender roles, as well as a significant improvement in the rights, freedoms, protections, status, and empowerment of particularly women and members of the LGBTQ community.” Younger generations, too, are growing up in a world of greater choice and are less prone to following a linear path from education, to work, to family formation. Tolerance, diversity and inclusion could all become core tenets of belonging, identity, and connection in the future. But how do we reconcile belonging for all with belonging for some? How can we create an environment that fosters human connection, and also honors individual and group identity? How can we decouple the need for belonging from isolation, bigotry, judgment, and hate? How do we address inequity and hurt? What new structures might we dream up and create as a salve to our lonely, fragmented world?

⁴ For a deeper read on Neotribalism, check out our [Trends to Watch in 2018](#), where we cover the “Rise of Neotribalism” (pg 10) as one of 10 trends to track that year.



Wargaming: The Future of Warfare and the Rise of Third-Party Actors

While deaths decline, broader human impact rises. The theaters for war are changing, and the barriers for participation are dropping.

War and conflict, and the threat of both, remain realities of daily life for people in much of the world. However, research indicates that [global deaths from war and related violence have long been in decline](#). This is a trend that both historians and futurists alike point to when discussing how the human condition is improving. Much of this can be attributed to the changing nature of warfare itself. With advanced technology, modern global warfare is as much characterized by the threats of advanced weaponry and terrorism as it is by actual human combat. But, as we look deeper into the changing nature of warfare, we see something else happening. Warfare—and cyberwarfare—is increasingly digital and autonomous, online, distributive, and subversive. While deaths decline, broader human impact rises. The theaters for war are changing, and the barriers for participation are dropping.

The Weaponization of Artificial Intelligence (AI)

The future of warfare will [increasingly be influenced by AI](#). Many applications still remain theoretical, due to technological limitations and the ethical considerations which cast a shadow over the widespread adoption of these technologies. However, many other applications are already well in development, while some are already having an impact. Combat will be increasingly populated by [specialized drones](#) and robots that are either fully autonomous or operated remotely by human pilots. And, within this context, AI itself may soon decide who lives or dies. We may be fast-approaching a future characterized by what some might call “[algorithmic warfare](#).” The US Army wants to build [smart, cannon-fired missiles that will use AI to select their targets](#), out of reach of human oversight. The project is called Cannon-Delivered Area Effects Munition (C-DAEM). Unlike laser-guided weapons, which utilize human operators, C-DAEM will find targets for itself. Currently, these types of robotic and autonomous applications are more easily deployed via air-based weapons systems, versus within what remains a far [more complex ground-based combat environment](#). We are also rapidly entering the era of [unmanned naval warfare](#).

The US is not the only country developing these types of smart missiles and bombs. [Russia](#) is at the forefront of the race to AI-guided missile technology; [Israel](#) is currently developing the Spice-250 bomb; [China](#) has developed lethal autonomous drones; and European firm MBDA has developed “[fire-and-forget](#)” missile systems called Meteors to be deployed by several countries’ armed forces. Many protesters demand that such weapons be banned. These include the [Campaign to Stop Killer Robots](#), a coalition of NGOs that want use of force controlled solely by humans. But, going beyond conventional warfare, there is perhaps no combat theater more directly influenced by AI today than cyberwarfare. [The last three years have signaled a rise in automated bot](#)

If someone is remotely operating a drone, versus flying the plane in combat, how might their calculations of risk or ethical decision-making change? If something malfunctions with a partially or fully automated technology, who bears the responsibility?

[attacks](#), including the first AI-powered cyberattack, which was [detected in India](#) in late 2017.

“[Machine behavior](#)” is a new field of scientific inquiry designed to study how artificial agents interact “in the wild” with humans, their environments, and each other. It was initiated by Iyad Rahwan, who directs the [Center for Humans and Machines at the Max Planck Institute for Human Development](#)—with the help of colleagues from robotics, computer science, sociology, cognitive psychology, evolutionary biology, AI, anthropology, and economics. The nascent field has not been in existence long enough to collect the kind of longitudinal data necessary to make concrete conclusions yet. But it is well on its way, and just in time, as autonomous systems are impacting more aspects of our lives than ever before, and the “behavioral” outcomes of these systems are proving hard to forecast by simply examining the underlying code or technological engineering. It will be important to see how advancements in this nascent field will influence the future of AI-driven warfare.

One of the ways in which warfare has changed most profoundly has been in the systematic blurring of

human accountability and personal risk. If someone is remotely operating a drone, versus flying the plane in combat, how might their calculations of risk or ethical decision-making change? If something malfunctions with a partially or fully automated technology, who bears the responsibility? The rules of engagement change dramatically.

The Weaponization of Social Media

Traditional war is expensive, politically unpopular, risky, and rarely effective. But competition over land and limited resources, and the desire for security, global influence, and economic dominance, haven’t diminished; if anything, they continue to rise. States have been moving to more subversive, online forms of warfare in pursuit of objectives, via mainstream social media and sharp power tactics, manipulation of digital systems and smart architecture, and the dark web. ISIS was the first terrorist group to hold both physical and digital territory, and it served as a harbinger of things to come. Future prominent terrorist groups may be likelier to have extensive digital operations than control physical ground.

ISIS operates as a pyramid consisting of [four levels of digital fighters](#). And that is all part of its [broader social media and disinformation strategy](#), designed to spread propaganda and recruit new members.

The World Economic Forum ranks massive digital misinformation, “[digital wildfires](#),” as one of the world’s greatest geopolitical risks. And DARPA has developed its [Social Media in Strategic Communication](#) program. According to a report by researchers at Oxford University, the number of countries engaging in [social media manipulation more than doubled to 70](#) in the last two years. Foreign meddling operations have thus far largely been the purview of state actors and their proxies, but [other actors will have similar capabilities in the near future as AI lowers the barriers to entry](#).

As information warfare expert [Brett Horvath](#) shared with us, “This creates an environment where instances of social and economic volatility are increasingly enticing openings for bad actors with an agenda. That could be a rival faction in an authoritarian regime, domestic or international economic interests, or a foreign nation-state. As volatility attracts speculators to financial markets, social instability may be a magnet for a range of bad actors, armed with weaponized technology and an incentive to make a dangerous situation worse.”

But these efforts in engineered volatility may not be the most dangerous outcome. As Horvath goes on to say, “Perhaps one of the greatest risks is that neither the actors behind these efforts, nor independent researchers, have a scientifically reliable way to model the non-linear second- and third-order risks that result from constantly escalating influence operations. I worry that unless we move beyond simple detection and attribution of misinformation, and toward something that accurately models emergent risk, actors like Russia, China, and the US may not be able to understand the information warfare equivalent of ‘Mutually Assured Destruction’ before it’s too late.”

One of the easiest ways for non-state actors to manipulate public

opinion will be through the use of increasingly sophisticated “deepfakes”—highly realistic and difficult-to-detect digital manipulations of audio or video.

Emerging Battlefield Technologies

Researchers have long been moving toward a future where human soldiers with enhanced abilities (e.g., exoskeleton suits) operate more like real-life superheroes than they do as conventional soldiers. The Pentagon’s Skunk Works is creating technology to build the “super soldier” of the future. This is part of DARPA’s new Squad X Core Technologies (SXCT) program, which could [equip soldiers with unprecedented awareness, adaptability, and flexibility](#). And military robots inspired by various animals will soon work alongside South Korea’s human soldiers. South Korea’s Defense Acquisition Program Administration (DAPA) plans to [incorporate “biomimetics” equipment into military operations](#) by 2024.

Role of Big Tech

US Big Tech:

The US Pentagon has long been trying to establish supremacy in the race toward advanced, autonomous, and AI-driven defense capabilities. In order to do so, it enlists the help of the world’s leading technological minds, enabled by [the tech industry’s ability to poach talent](#) from the defense and intelligence world. One of the most well-publicized examples is Google’s [Project Maven](#) contract, which helps intelligence analysts identify military targets from video footage. The project was disbanded because Google employees protested the company’s involvement. It remains [a harbinger and warning](#) of both the capabilities unleashed by these types of public-private partnerships involving big tech, and the internal employee unrest triggered. In late 2019, Amazon CEO Jeff Bezos provided a pessimistic outlook for the US if tech companies avoid working with the Pentagon. He, along with many others, believe that it is US big tech’s partnership with de-

fense groups that is the more humane path: “[We are the good guys.](#)” His comments came during a time when Amazon was competing with Microsoft for the Pentagon’s cloud-computing JEDI contract.

Perhaps no tech firm is as intertwined with the US government defense function as [Palantir](#). For years, Palantir has provided advanced, and controversial, data analytics and surveillance services to the US intelligence community and Department of Defense. This partnership is equal parts lucrative and secretive, and it is laden with myriad ethical considerations for how data is collected and leveraged.

Global Private Sector Tech:

The conversation around big tech’s role in warfare is rapidly becoming more important—and complicated. But complications become even murkier as we watch this pattern play out around the world. [Israeli spy tech](#) is some of the best in the world, and has been used by [at least 130 countries](#) to invasively track and surveil external enemies and domestic activists. Companies like [NSO Group](#), [Verint Systems](#), [Circles Technologies](#), [Elbit Systems](#), and [Fifth Dimension](#) specialize in snooping on smartphones and laptops, infiltrating social media tools like WhatsApp and Facebook, and have sold systems to Bahrain, South Sudan, United Arab Emirates (UAE), Nigeria, Botswana, Mexico, Azerbaijan, India, and more. Israeli tech has also been used to [disrupt elections](#).

In China, tech companies and government have little barrier between them. As Chinese private sector tech quickly catches up to US tech dominance (and in fact already leads in areas like [drones, 5G cellular networks, and more](#)), we can assume that technology is available and accessible to the government as well. To add further complication, Chinese tech companies may have collaborations with foreign firms. For example, many US tech companies have had [ties to Chinese tech companies that have ties to Beijing](#).

How will exports of warfare tech evolve with global political dynamics? Is every state actor as strong as the

tech companies it can partner with and buy from? Small countries with limited military forces but deep pockets—or access to deep pockets—can be just as powerful and threatening as large ones. What are business, [patriotism](#), and security in our new world? How do globalized business models and supply chains adapt to nationalist governments, and what are the implications?

Rise of Third-Party, Non-State Actors

One of the most important considerations when examining the future of warfare is how these emerging autonomous and gamified combat technologies and cyberwarfare tactics will become less prohibitive and expensive, and more accessible, than conventional weapons. The barriers to entry will be far lower for third-party, rogue nation-state or non-state actors (e.g., guerrilla groups, terrorists, hackers, or other groups or individuals that sit outside of our known parameters of public sector, private sector, and multilateral entities). Individual hackers with insidious goals could theoretically do as much damage to large governments, institutions, and companies as any other actor. The future is one characterized by cyber-insecurity, in that no single technological system—irrespective of how sophisticated—can be fully safeguarded from outside threats. That said, prominent “hactivist” activity, best epitomized by the notorious, decentralized, and global Anonymous hacker collective, [has been on a steady decline](#) over the last several years, due in large part to more sophisticated cybersecurity countermeasures and a fracturing of the group from within. Will security tactics be able to improve at pace with warfare tech?

A recent drone attack in Saudi Arabia targeted Abqaiq, the world’s largest oil processing facility, and the Khuaru oil field, which produces around 1 million barrels of crude oil a day. The Iran-backed Houthi group in Yemen claimed responsibility. [Houthi rebels have used increasingly sophisticated drones for several recent attacks](#). In addition, Russian company Kalashnikov has developed a suicide drone that

may [revolutionize war by making sophisticated drone warfare technology widely and cheaply available](#).

There is also an enforcement vacuum that helps create the fertile conditions that allow such rogue actors to thrive. In conflict zones around the world, 1.5 billion people live under the threat of violence. UN peacekeepers comprise the [second-largest military force deployed abroad](#), after the US military. But they are often given few resources with which to achieve their objectives.

Open Questions

The Future of Wargaming “Talent”:

What will the future pipeline of wargaming talent be, from a human perspective? If war is being increasingly fought digitally, will it change who fights the wars? Will it mean more female soldiers? Older soldiers? Physically disabled soldiers? Will it allow smart military minds who are incapable of conventional physical fighting (e.g., amputees) to potentially return to the battlefield and still engage in “combat?” And what new skills will people have to learn? It is wholly conceivable that teenagers skilled in advanced videogaming (both gameplay and design) will become compelling candidates for recruitment. What would a draft look like in the future?

The Future of Diplomacy:

In a world where technology is blurring the lines between what is real and what is fake, what will diplomacy look like? It is already difficult to discern between authentic and forged images and videos of the world’s most prominent leaders, and such enabling technologies are still fairly rudimentary. What happens when it advances even further? Will formal diplomacy as we know it continue to morph into something that is enacted through various other technological platforms (e.g., Twitter)? Will we have to develop entirely new protocols to safeguard diplomatic communications? Trust has now become a luxury; how will we optimize it in the future?

Peace in a New Decade:

The most pragmatic justification for weaponizing all of the technologies contained herein will be their ability to make combat more efficient, inexpensive, and precise. Going beyond that, the future perception of these technologies by the public will be driven by one key metric: Will they make the world safer, and ultimately decrease the toll on human lives? But more questions remain. Will these technologies require fewer people to be employed in traditional military capacities? Who is ultimately responsible or liable for decisions that fully or semi-autonomous weapons make? If the center of control is taken away from humans themselves, does the impact of war become less personal, and thus more justifiable? We might see combat start to take on the features of a videogame. Conflict might also become more unpredictable, if it is increasingly enacted by rogue or third-party actors, through means like cyberwarfare, terrorism, or information warfare. How do we enable peace in a new decade? When we look at this trend in isolation, it is terrifying to imagine its escalation, and yet we know trends are rarely as simple as that. Counterreactions emerge as trends play out, impacting what occurs. The end of this story is not yet written. We can still actively shape it.

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Special thanks to Brett Horvath, information warfare expert and founder of Guardians.ai, for his contributions to this brief.

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