Climate and Energy

Rethinking the Social Cost of Carbon Dioxide
The Energy Rebound Battle
Clean Energy Mind Games
The Age of Weaponized Narrative
The Science Police
Should AI Be Regulated?
Truth and Trust in the Public Sphere
Art inspired by Henrietta Lacks
Advanced information technologies are adding a new dimension to regional and global conflict and asymmetric warfare. The United States is an especially vulnerable target.

WHEN I WAS IN COLLEGE MANY YEARS AGO, the concept of “narrative” was simple: it was a story told by a literary character, or, more broadly, the story itself. Starting with the French literary theorist and philosopher Roland Barthes and others in the 1970s, however, narrative was turned into a far more complex idea, as social scientists and humanists began to appreciate that stories structured reality, created and maintained identity, and provided meaning to people, institutions, and cultures. Political organizers, activists, and others learned to use narratives of oppression and marginalization to attack dominant cultural narratives of elites, while companies learned to generate narratives that supported their brands. Eventually, nations began to see narrative as a tool of foreign policy that they could use to undermine their enemies: weaponized narrative.

The easiest way to see how narrative works is to look at popular advertising. Pepsi, for example, once urged young counterculturalists to “Come alive! You’re in the Pepsi Generation!” As the media expert Tim Wu noted: “Pepsi, of course, did not create the desire for liberation in various matters from music to sex to manners and dress. Rather, it had cleverly identified with a fashionable individualism.... For ultimately what the Pepsi Generation were consuming wasn’t so much cola as an image of themselves.” But archrival Coca-Cola was no slouch at narrative, either: as The Economist notes, “it was Coca-Cola that popularized the image of Santa in the 20th century.”
These bubbly examples illustrate in a simple way several of the underlying principles that guide the way narrative is understood and deployed today. First, narrative is a highly adaptable strategy that can be applied in a wide variety of contexts—from soft drinks to soft power. Second, as with any tool applied to achieve a competitive edge, those who seek to wield narrative in contested settings are quick to adopt new knowledge that can improve performance—in this case, quickly and effortlessly incorporating new research or findings even from academic fields such as neuroscience, evolutionary psychology, and behavioral economics. Third, narratives become strategically useful when they are not just stories, but when they draw on or create the frameworks from which societies, cultures, and individuals derive their identity and thus meaning—as consumers, as political actors, as individuals, as citizens. And finally, narrative is power: it is a vehicle for manipulating individuals so that they are more inclined to do what you want, not because you have forced them to, but because you have convinced them that they want to do what you want them to.

Consider: On May 13, 2017, a small group of alt-right protesters led by the white supremacist Richard Spencer gathered in Charlottesville, Virginia, to protest a decision to move a statue of Confederate Gen. Robert E. Lee. Among the crowd's chants were, “Russia is our friend!” This might seem absurdly irrelevant but is actually a measure of the success of the campaign that Russia has waged for several years to develop a favorable narrative among the global alt-right.

A second example involves the political consulting group Cambridge Analytica, a big data mining and analytics firm that among other jobs worked on President Trump's election campaign; similar firms worked on the Brexit campaign in the United Kingdom. Based on the enormous amounts of data that can be accumulated on each voter, some people claim that such firms have the ability to target select voters with customized individual narratives based on their personal data profiles in order to manipulate their political choices and their decision whether to vote or stay home. Experts disagree on whether these techniques were decisive in the Brexit vote or the US election, but that is beside the point. Technological evolution, in this case involving big data and analytics fed by social media and online data aggregation techniques, is rapidly developing the ability to custom-design narratives that can effectively manipulate political behavior on an individual basis. If it isn't already here, it will be soon.

**Story is power**

Weaponized narrative is the use of information and communication technologies, services, and tools to create and spread stories intended to subvert and undermine an adversary's institutions, identity, and civilization, and it operates by sowing and exacerbating complexity, confusion, and political and social schisms. It is an emerging domain of asymmetric warfare that attacks the shared beliefs and values that support an adversary's culture and resiliency. It builds on previous practices, including disinformation, information warfare, psychological operations (psysops), fake news, social media, software bots, propaganda, and other practices and tools, and it draws on advances in fields such as evolutionary psychology, behavioral economics, cognitive science, and modern marketing and media studies, as well as on technological advances in domains such as social media and artificial intelligence.

Given the nascent state of the art and the rapid evolution of the relevant science, technology, and geopolitical and cultural trends, our definition is necessarily vague, but it does enable clarification of a few important points. First, commercial and nongeopolitical narratives are generally excluded, although of course the insights from such domains can be rapidly integrated into weaponized narratives. Second, narratives intended for internal audiences, either to consolidate or maintain power, are excluded. The Nazi Germany and Soviet examples of the Big Lie, or modern examples such as the narratives of Mother Russia and religious orthodoxy supporting Russian president Vladimir Putin's regime, are thus excluded. Narratives often serve multiple purposes, however. For example, the Russian narratives deployed in Eastern Ukraine, including the idea of Russia as a Eurasian empire, Ukraine as an integral part of greater Russia (often labeled “Novorossiya”), and the rebuilding of an Eastern Orthodox/Mother Russia power, were intended both to facilitate the invasion of Crimea, a weaponized narrative deployment that fits within our definition, and to support internal Russian narratives of the resurgence of Russia as a respected world power, which falls....
Weaponized narrative operates at both the tactical and strategic levels. At the tactical level, the goal could be to debilitate potential adversaries without resorting to conventional kinetic warfare. At the strategic level, weaponized narrative is a major means by which otherwise powerful adversaries can be weakened over time so that their ability to interfere with the attacking entity’s plans and interests is reduced or eliminated. Russia’s use of weaponized narrative as part of an integrated Ukrainian invasion is an example of the first; Russia’s broad interference in US and European elections in a long-term effort to weaken and divide the West is an example of the latter.

Weaponized narrative is facilitated by a diverse kit of tools and techniques. Some of these, such as character assassination, creation of fake news outlets (“sockpuppet websites”), and planting false stories, are the traditional stuff of propaganda and disinformation campaigns, but can be much more effective given today’s information technologies; others, such as waves of social media spreading false memes at lightning speed through botnets, are new. Each confrontation or campaign is unique and will thus call forth a different mix of techniques and tools.

Nonetheless, it is possible even at this preliminary point to differentiate between the tactics and methods that are a part of weaponized narrative and its strategic deployment. On the tactical side are such tools as “troll farms” that disrupt online communities by sowing racial, social, and ethnic tension in target societies; timed and selective release of stolen internal documents and e-mails to influence an election; designer narrative packages enabled by data mining and big data techniques targeted at individuals; or activities and campaigns intended to weaken reliable media in target countries. In contrast, an example of the strategic deployment of weaponized narrative using varied and shifting social, cultural, ethnic, and disinformation tools might be the long-term suborning of Baltic and Eastern European states by Russia.

The domain of weaponized narrative is not yet stable or predictable; rather, it is in a period of wild experimentation. For example, the self-proclaimed Islamic State (ISIS) has used modern, but not breakthrough, media techniques to develop a message that appeals to alienated Islamic youth, one of their target markets. Russia developed its weaponized narrative capabilities, as it did its internal narratives of Mother Russia and the Eurasian Empire, by rapid prototyping, testing, and revision. Russia probably did not expect its weaponized narrative campaign deployed during the recent US election to actually elect Donald Trump. But it likely regarded as a victory anything that weakened the moral authority and soft power of the United States and correspondingly could be positioned as validating the soft authoritarianism of the Putin government and the global importance of the Russian state.

Weaponized narrative is an ideal asymmetric strategy for adversaries of the United States that find themselves unable to compete in conventional warfare. It enables projection of power without significant risk of triggering conventional military responses; it favors offense over defense, as many cyber-based weapons do; it is inexpensive. It is particularly useful for a country such as Russia, with a weak petro-state economy, to use against the United States and Europe; moreover, because of Russia’s Marxist and Soviet history, disinformation and information warfare techniques are part of the state’s experiential DNA, which means it has a strong base in relevant experience on which to build the new capabilities that enable weaponized warfare. Cyberweapons such as bot armies, troll factories, and deceptive sockpuppet websites are far cheaper than traditional munitions. Moreover, success doesn’t require constructing a coherent counternarrative; it’s sufficient to cast doubt on existing narratives and attack existing institutions such as the media or security agencies. And the increasing political and social fragmentation in many European countries and the United States only makes this easier, as it enables a sophisticated attacker to nudge groups to respond in ways that they take to be patriotic and self-evident, but that are the result of deliberate manipulation. Witness the demonstrators in Charlottesville shouting “Russia is our friend.”

Not the same old disinformation

Although there’s a goodly amount of traditional information warfare deployed in today’s conflicts, current trends suggest that weaponized narrative is arising during a unique historical shift that makes it particularly effective as a weapon of choice against otherwise conventionally well-armed adversaries. In the long run, in fact, the United States may be uniquely vulnerable. To understand this, consider some of the relevant trends and their implications, which taken together make it likely that the changes enabling weaponized narrative are fundamental rather than either episodic or matters of scale.

Begin with the observation that individuals, their institutions, and their societies and cultures may be
many things, but one thing they all are is information-processing mechanisms. Change the information environment dramatically, and you change how societies function. Accordingly, perhaps the most important trend pertinent to the rise of weaponized narrative is the dramatic increase in volume, velocity, and variety of information to which virtually every person around the globe is exposed. In 2014, for example, the marketing communications expert Susan Günellius found that every minute Facebook users shared nearly 2.5 million pieces of content; Twitter users tweeted nearly 300,000 times; Instagram users posted nearly 220,000 new photos; YouTube users uploaded 72 hours of new video content; Apple users downloaded nearly 50,000 apps; e-mail users sent over 200 million messages; and Amazon generated over $80,000 in online sales.

And that was three years ago. This growing stream of information is increasingly augmented by tools such as bot armies, targeted news and designed facts, and social media structures that don’t just network people into like-minded bubbles, but create an environment where everyone has an enhanced opportunity to seek out, select, and align facts and information to support the community narrative that they find most appealing—and a reduced need or incentive to integrate, or even be aware of, other ways of organizing knowledge and information into coherent narratives. As the surrounding information environment continues to grow in complexity, the results can include social fragmentation; substitution of moral condemnation for reasoned argument; increased fundamentalism as individuals retreat from complexity into strong, familiar, identity-supporting narratives; the rise of ring-fenced communities that reject the legitimacy of any who oppose them; and golden opportunities for adversaries who wish to use weaponized narrative not to conquer but to weaken and fragment—and to legitimize their own internal narratives by contrast.

Meanwhile, geopolitical shifts resonate with changes in the information environment to encourage further retreat to fundamentalism and institutional failure. For example, after World War II few questioned the ethical principles of the victors, especially the United States, which were consequently enshrined in the United Nations’ Universal Declaration of Human Rights in 1948. But the “universal values” appearing in that document have turned out to be not so universal after all: Russia, China, and a number of Islamic entities now reject them. China, for example, in a 2013 policy report titled “Document 9: Communique on the Current State of the Ideological Sphere,” called Western constitutional democracy “an attempt to undermine the current leadership and the socialism with Chinese characteristics system of governance” and asserted that promoting Western “universal values” is “an attempt to weaken the theoretical foundations of the Party’s leadership.” ISIS and jihadist Islam reject any secular form of government, including the nation-state, which does not reflect their interpretation of scripture. Institutionally, private military companies, large multinationals, and nongovernmental organizations of all stripes increasingly function as independent power centers.

One result is that large areas of the world, especially in sub-Saharan Africa and the Middle East, increasingly lapse into what the foreign policy expert Sean McFate calls “durable disorder,” a neomedieval devil’s brew of religions, ideologies, clans, governments, armed activists, and various internal and external powers. In short, individual commitment to larger state and social identities is weakening. The state-based Westphalian system of international law and institutions, although still dominant in many ways, is failing, and it is being replaced by a complex pastiche of private, public, non- and quasi-governmental, and ad hoc institutions, power centers, and interests. Geopolitics is growing ever more complex even as the societies and institutions that must manage them are retreating into more simplistic worldviews and narratives. Each outbreak of fundamentalism or nativist nationalism reflects its own idiosyncratic environment, yet the tides are global and inclusive.

Another geopolitical trend of importance is the development of new strategies by potential adversaries in response to US dominance of conventional military capabilities. Russia and China in particular have emphasized a shift to asymmetric warfare, with strategies that extend the zone of warfare far beyond traditional combat to engage across cultures and civilizations as a whole. Thus, China has adopted “unrestricted warfare,” and Russia “hybrid warfare”; in both cases, weaponized narrative becomes an explicit part of acceptable strategy, and one that can be deployed in the absence of any traditional war.

Again, such formulations are not completely sui generis. The Cold War and various insurgencies have included cultural and ideological as well as military confrontation, and much of the Cold War was fought in what might be called a demilitarized zone of competing cultural narrative (Western impe-
Weaponized narrative is the use of information and communication technologies, services, and tools to create and spread stories intended to subvert and undermine an adversary’s institutions, identity, and civilization, and it operates by sowing and exacerbating complexity, confusion, and political and social schisms.

A new exceptionalism?

Meeting the challenges of weaponized narrative involves two separate tracks. The first, the operational, short-term track, requires an assessment of the challenge to US society and institutions posed by the current situation. As NATO analyst Keir Giles warns, “recent Russian activities in the information domain would indicate that Russia already considers itself to be in a state of war.” The sense of urgency such an observation implies is still somewhat lacking in Europe and the United States. Moreover, it is not just the offensive but the defensive responses that need attention, a particular problem since defending against weaponized narrative is more difficult and complex than mounting an offense. But even in the near term, the challenges are significant. Weaponized narrative combined with hybrid or unrestricted warfare strategies is not just a military threat; its targets and theaters of operation cut across all aspects of society, from finance to infrastructure to personal information. Wikileaks, internal media, Cambridge Analytica, theft of personal data, integration of criminal and state cyberespionage assets, bot armies supporting alt-right twitter feed and websites, media spoofs, and sockpuppet sites are all nonmilitary, and most engage private firms and infrastructure. That’s part of why the West doesn’t understand weaponized narrative and is having a hard time responding: it jumps legal and operational domains, especially the Constitutional divide between civilian and military functions, and the equally strong differentiation between the private and public spheres.

The longer-term track is existential. Since the Cold War, neither Russia nor China nor any other entity has had the traditional military capability to overpower the United States. Rather, the danger is that the cultural, intellectual, and institutional assumptions and frameworks on which the United States and Europe are based are becoming obsolete; in this sense, weaponized narrative is simply one indicator, albeit an important one, of this process. The United States especially faces a unique challenge because it is the world’s leading Enlightenment power, founded on the principles of applied rationality, balance of power, and individual rights voiced by philosophers such as Voltaire, Locke, and Montesquieu. The founding fathers of the US experiment were deeply influenced by and committed to Enlightenment thought. Rule of law, separation of military and civil spheres, and an emphasis on the primacy of an informed, educated citizen are hallmarks of Enlightenment governance. If it is the case, then, that trends such as qualitatively different information environments are resulting in citizens and voters who increasingly locate themselves outside the dominant cultural narratives, changes that are in turn enabling manipulation of governance systems outside of the legal and institutional structures, then the challenge may indeed be to the very survival of the post-World War II Western world order.

Thus, even as incremental and immediate responses to cyberattacks and disinformation campaigns are required, the real challenge is to establish cultural practices and government institutions that are consistent with Enlightenment principles and at the same time adapted to a rapidly
evolving information environment. Such adaptation is doable, but it requires a clear vision of how individual psychology, institutional competency, and cultural structure are being affected by information technology. Developing and supporting mainstream media can be an important counter to the alternate facts that support confusion, and thus vulnerability, in target societies. We will never return to the media environment of the twentieth century, where an individual such as the newscaster Walter Cronkite could be an almost universally trusted source of information, but it is nevertheless important in the near term to restore faith in quality journalism.

Addressing the deeper, longer-term threat requires, first, that we understand weaponized narrative. In the face of a set of new weapons and new strategies, it would be foolish in the extreme to simply continue business as usual, either conceptually or institutionally. Remembering that it took years before analysts developed a stable strategic framework for managing nuclear weapons (or steel-hulled ships, or gunpowder, or metal stirrups), we should not expect this understanding to be achieved easily or without cost.

Second, the source of US power has historically not been just economic or military. Rather, it has been the soft power of the American Dream, the attractiveness of a culture that within its clear and explicit laws lets you be whatever you wish and accomplish what you can. The energy, the optimism, and the simplicity of such soft power, underlain by a trust in US institutions and their essential goodness, have been fading since the Vietnam War. No great power stays great without unpredictable change in ways that enhance US soft power and its attractiveness to audiences around the world. Such civic experimentation turns the strength of US pluralism toward the recognition and regeneration of common interests and a common future, and thus demonstrates once again for all citizens the power of shared narrative.

Braden R. Allenby (braden.allenby@asu.edu) is a professor at Arizona State University and the author, most recently, of The Rightful Place of Science: Future Conflict & Emerging Technologies (2016).

Recommended reading


Qiao Liang and Wang Xiangsui, Unrestricted Warfare, CIA trans. (Beijing, China: PLA Literature and Arts Publishing House, 1999), available online: www.c4i.org/unrestricted.pdf.