

Vital Signs

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Senegal: A Liberated Nation?

BY CAROLINE DREYFUSS

On April 1, 2000, Abdoulaye Wade assumed office as the President of Senegal. For the next twelve years, Wade would mold the West African nation into the region's most stable democracy. However, his presidency has been marred by infrastructure problems, particularly power cuts, and a high cost of living. In the midst of all of these issues, Wade commissioned the African Renaissance Monument, an enormous bronze statue that cost \$27 million. Unveiled in April of 2010, the monument drew harsh criticism from many, including Ndeye Fatou Toure, a member of the Senegalese parliament, who said that the statue is an "economic monster and a financial scandal in the context of the current [economic] crisis" that has been plaguing Senegal since markets fell worldwide in 2008.

In 2011, however, Wade's façade of democracy completely gave way. He proposed multiple constitutional amendments that directly affected his own office, such as the reduction of the percentage of votes

necessary to avoid a runoff election from 50% to 25% and the creation of an elected vice presidency, which many saw as a way for Wade to set his son up to succeed him. Though protests forced Wade to withdraw these proposals, his most controversial amendment was yet to come. Wade's decision to run in the 2012 elections was in direct violation of the 2001 Senegalese constitution, until the country's Constitutional Council ruled in Wade's favor and permitted him to run. Suddenly, the capital city of Dakar was overtaken with deadly protests unusual for the region's most peaceful nation.

However, after weeks of strife, including at least six deaths, both rounds of voting took place peacefully, with Macky Sall defeating the incumbent Wade. Though there was speculation that Wade would not accept the results, he conceded his defeat in a statement. Addressing his "dear compatriots," Wade acknowledged that, "at the end of the second round of the vote...the current results indicate that Macky Sall has won." This was a decisive and defining moment for the future of Senegal. With Wade's concession, "the whole country...won," said one of Wade's spokesmen. The international community agreed—the African Union said "Wade's concession showed 'maturi-



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*On the Cover:
Anonymous group
members gather in
Los Angeles in thier
signature Guy Fawkes
masks.*

ty,” while the European Union called Senegal “a great example.”

Sall’s win seems to have ushered in a new era for Senegal. However, one question still remains—how different are Sall’s ideals from Wade’s? Sall was a member of the Wade-led Democratic Party of Senegal for a long time, during which his political career flourished. From 2004 until 2007, Sall served as prime minister under his then-friend Wade, after which Sall went on to become the president of Senegal’s National Assembly (the lower house of the Senegalese parliament), a position that he held until early November 2008. During his time as leader of the National Assembly, however, Sall’s relationship with Wade faltered due to Sall’s questioning of the role of Karim Wade, President Abdoulaye Wade’s son, in suspected irregularities in the construction of sites for the Organization of the Islamic Conference, which was held in Dakar in early 2008. Those loyal to President Wade saw Sall’s accusations as a “covert attempt to undermine Karim” as a potential presidential candidate in order to improve Sall’s own prospects.

After the falling-out with Wade, Sall created a new party—the Alliance for the Republic (APR-Yakaar). It was under the auspices of this party that he ran his successful presidential campaign, which mainly focused on the reduction of the powers of the presidency (greatly augmented under Wade), as well as on the reduction of the cost of food and other basic amenities. Notwithstanding Sall’s seemingly successful attempts to distance himself from Wade and the ex-ruling party, there are still some who associate Sall with Wade, even after his decisive victory. “Nobody can dismiss Mr. Sall from what this [Mr. Wade’s] party has brought in negative terms to the social infrastructure of this country, in terms of destroying the democratic fabric and allowing corruption to develop exponentially,” said Adama Gaye, a Senegalese writer and journalist. “I don’t see him as being different from Abdoulaye Wade,” Gaye continued. “Really, he is a Wade boy.”

Nevertheless, Macky Sall clearly has more than a few people convinced. He garnered more than enough support from Senegal’s 12 million citizens to definitively defeat Wade, 66% to 34%. Therefore, to a large majority of Senegalese, Sall’s win is a huge step in the right direction. As Arame Tall, a technical adviser



Senegalese President Macky Sall.

for West and Central Africa for the International Federation of Red Cross and Red Crescent Societies’ Climate Centre, recently wrote in an opinion piece for Al Jazeera, “peace has returned to Senegal.” Only time will tell whether or not Sall will, in Tall’s

SHERIFF BOJANG JUNIOR

words, “deliver on the substantive democracy that the Senegalese youth called for under their resonant slogan *y’en a marre* (we have had enough).” “Whatever ensues,” Tall concluded, “one fact remains certain: the new Senegalese citizenry...whom we saw willing to fight to the death for its democracy and constitutional sovereignty, will be watching over him [Sall], alert and vigilant.” Therefore, the Senegalese have made their choice, one that they hope will improve the internal policies of a state much lauded by the West for its ‘democratic’ system. One can only hope that Sall maintains the positions that he was elected on—otherwise, the dark shadow of discontent that stemmed from Wade’s failings will continue to blanket Senegal.

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Demonstrators in Dakar protest President Abdoulaye Wade’s bid for a third term.

Senegal.. A Personal Perspective

BY CAROLINE DREYFUSS

In March 2011, I spent 15 days in Dakar, Senegal, where I lived my friend Aïda Sarr and her family. Getting there, however, was more complicated than I expected. At first, I was planning on traveling with a Pingry group. As time went on, though, those plans disintegrated as more and more students pulled out of the trip. Throughout the entire process, I had kept in contact with Aïda, whom I had met when her class visited Pingry in April 2010. I expressed my disap-

pointment with the cancellation of the Pingry trip to Aïda, who then offered me the opportunity to stay with her. Thrilled at the prospect, I immediately spoke to my parents, who got in contact with Aïda's parents to make the formal arrangements. With all of the details worked out, I left for Dakar as soon as school let out for break.

ALL PHOTOS BY CAROLINE DREYFUSS (VI)



My first impression of Dakar was that it was a relatively run-down city. There were pedestrians everywhere, and driving was dangerous enough to warrant my host family's hiring of a driver to take Mme. Sarr to work every day.



What I did not know, however, was that the generally bleak façades were hiding some elegant houses and villas, such as the home of my host family, pictured here. Though the homelessness and poverty that many associate with Africa were clearly present, I most certainly did not experience any of it.



As mentioned in my article, Senegal has recently been plagued with political strife. Tensions were running high during my stay last year as well. When I stopped to take this picture of the presidential palace, I was told that it was prohibited to photograph the palace by the gate. I was then led across the street, which was apparently an acceptable distance from which to take a photo. A few days later, a long power outage that began in the middle of a much-anticipated soccer match led to a minor protest in which burning tires blocked a main road.



My trip to Senegal was much more than just seeing the sights. I had the wonderful opportunity to attend school with Aïda almost every day, an activity I really enjoyed. Not only did I really get to practice my French, but I also made some great friends with whom I am still in contact.

Though I was only there for 15 days, my time in Senegal really affected me. Because of my experiences there, I am now irrevocably interested in the politics of the region, a topic that I tended to overlook in the past. I also learned that, though most things about Senegal were totally different from home, there were definitely similarities. Some things, such as the dynamic between teenagers, transcend borders and cultures.

KONY 2012?

HARRY TUTTLE/WIKIMEDIA COMMONS



Joseph Kony, leader of the Ugandan guerilla group, the Lord's Resistance Army (LRA).

BY ELLEN CAHILL

On the night of March 5th, every social networking website was suddenly flooded with posts that read “Stop Kony 2012,” and over three million Facebook users shared the 30-minute-long KONY 2012 video. Created by Jason Russell, co-founder of the Invisible Children organization, the video jumpstarted both support and criticism for his cause. Within minutes, it seemed as though our entire generation had swiftly and unanimously backed the Invisible Children organization, whose YouTube video has generated over 85 million views since its explosive release. The very next night, social media sites were once again filled with messages regarding the movement. But this time, posts read “Phony 2012,” and users cautioned others to beware of the scam, supplying statistics regarding where the money really goes. Should we back this supposedly worthwhile organization, or is it a money-hungry deception? In actuality, The KONY movement is more of a media-focused scheme that we as individuals and as a country should beware of before emptying our pockets and sending troops in support.

The Invisible Children organization claims on its website that it “uses film, creativity, and social action to end the use of child soldiers in Joseph Kony’s rebel war and restore the LRA-affected communities in Central Africa to peace.” There is no doubt that the organization has achieved its goal of spreading its message, considering the success of the video in influencing millions of viewers to support its efforts. The video claims that the main problem in Uganda is that the leader of the Lord’s Resistance Army (LRA), Joseph Kony, is forcing thousands of children to take up arms and kill their families. Yet, many

agree that this portrayal reveals how the emotional video oversimplifies the issue at hand.

In 1980, Kony began the LRA to overthrow the Ugandan government, and made extensive use of child soldiers in his campaign. Surprisingly, Kony saw himself as a liberator and even had loyal allies throughout his campaign. It is undoubtedly true that Kony has committed horrifying crimes, but, as Rosebell Kagumire of Channel 16 News said, the KONY video “paints a picture of Uganda six or seven years ago, and that is totally not how it is today.” In reality, the last time the LRA was active was in 2006. Since then, Kony has moved to the Democratic Republic of Congo and no longer leads the campaign.

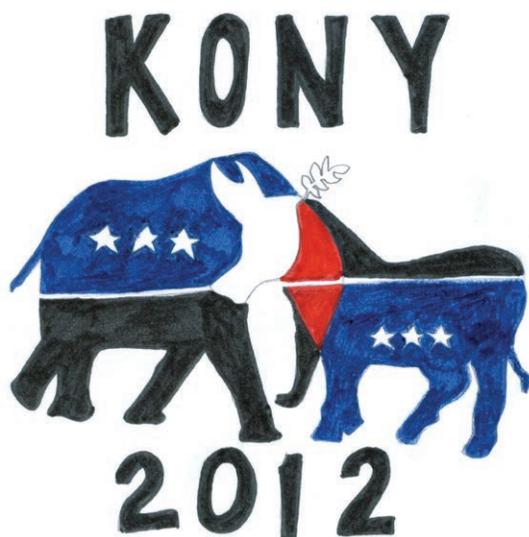
It is quite simple to understand the atrocities committed by Kony, but the Invisible Children organization does not provide its benefactors with political context. Rather, it presents the LRA and Kony as issues to be solved with a large military operation. However, America needs to focus instead on the governmental aspect of the Ugandan situation in order to stop radical military groups, because sending more troops will only add to the violence of the current civil wars in Africa. Killing Kony will not solve the more deeply rooted political problems in Uganda.

In fact, it might make matters worse. Dr. Beatrice Mpora of the health organization Kairos in Gulu, Uganda has asserted that the video could “cause us more problems than help us.” The Ugandan government itself has committed abuses against civilians. Therefore, it is irresponsible and contradictory for the United States to overlook the misdeeds of the Ugandan government while working with it to eradicate Kony. When the KONY video was shown to Ugandans, they reacted with frustration because Kony is no longer present in the country.

Social media is an effective tool for rallying and uniting Americans around a cause. It allows everyone to join forces for a common effort by both informing people about a serious problem and proposing an emotionally appealing solution. However, the KONY 2012 video manipulates viewers and misleads them. Russell uses special effects to exaggerate the number of children being used by the LRA. Plus, most of the frightening scenes in the video are the work of actors. Finally, the video makes use of celebrities who apparently support the cause. In actuality, not one of these supposed proponents has commented on the video or confirmed their support.

Watching the KONY 2012 video makes us feel like we can easily make a difference in Uganda by donating to the organization. By taking the “white-man’s burden” to a whole new level, Russell tries to whip up Americans into thinking it is their responsibility to support the efforts in Uganda. Invisible Children continues to capitalize on the ease with which it is able to manipulate people into supporting the cause without knowing the true Ugandan situation.

The leader behind KONY 2012 might be as unreliable as its presentation of the Ugandan situation. On March 18, Jason Russell, the motivating spirit behind Invisible Children, was diagnosed with brief reactive psychosis and was admitted to a hospital. He had been seen running through the streets, screaming incoherently while committing lewd acts in public. His wife, Danica Russell, said the state was brought on by “exhaustion, stress and dehydration.” The outburst came just days after Invisible Children was criticized by social media for not spending donations on the advertised cause. Russell is an incompetent leader for the organization, evident by his crumbling in



CARTOON BY CHARLOTTE ZEE (IV)

The War for Cyber Security: Anonymous, China, and Shutting Down the Internet

BY EDWARD KONG

The classic movie computer hacker is the genius who can disable security systems, access bank accounts and breach invading alien ships using nothing but a Mac PowerBook and printer cable. As portrayed by Hollywood, hackers are capable of anything – which is ironic because the movie and recording industries are often targeted by real-life hacker collectives. These hacker activists (“hacktivists”) crash websites and steal personal information in order to make political statements or dispense their own brand of Internet justice under the guise of anonymity. Hacktivist actions do have a significant effect, but their loud “activist” displays mask the dangers posed by their involvement with silent hackers capable of breaching corporate networks.

One hacktivist group, Anonymous, began as an innocuous Internet meme on the image board *4chan.org*, but developed into a loosely-organized international hacking syndicate in fewer than ten years. In January, the organization, described by CNN as “one of the three major successors to WikiLeaks,” brought down the websites for the US Department of Justice, the Copyright Office, the FBI, and the CIA in retaliation for the Megaupload.com shutdown. Anonymous is defined by its mantras, which include “doing it for the lulz.” One self-description, from a video protesting the Church of Scientology, warns: “We are Anonymous. We are Legion. We do not forgive. We do not forget. Expect us.”

public in reaction to critics.

It is of utmost importance that we take caution before supporting this organization. Of course, Joseph Kony is an appalling criminal who should be punished for his actions. However, it is also clear that the Invisible Children organization does not have Uganda’s best interests in mind. Charity Navigator, a noted watchdog organization, gave Invisible Children a shocking two out of four star rating for its aid programs. This poor rating is deserved since only 32 percent of donated funds actually go to service in Uganda. It is easy to get wrapped up in the emotions of the cause and the persuasiveness of the video, but researching any charity before clicking “donate” is crucial. The capture and criminal prosecution of Kony is not a goal to be abandoned; however, we need to focus our efforts on a more genuine charity to assist the victims of violence in Central Africa.

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Anonymous recently appeared to be setting its sights higher when it threatened to take down the Internet in retaliation for the arrests of about 25 of its members in February. The planned attack, nicknamed “Operation Global Blackout,” also focused on what Anonymous thinks is the continuing threat of Internet censorship posed by the Stop Online Piracy Act (SOPA) and Protect IP Act (PIPA). Both legislative proposals were ultimately put on hold due in part to the popular controversy fueled by Anonymous and large websites such as Wikipedia and Google.

As the March 31 date approached, Anonymous denounced rumors that it was planning to shut down the internet through two Twit-



CARTOON BY ANDREW ALDER (IV)

ter accounts linked to the organization, and indeed the web did *not* go down on the day appointed. After all, Anonymous threatened to take down Facebook, but didn't. Crashing websites is relatively simple, whereas temporarily shutting down the Internet is an entirely different matter, and there are many who doubt that Anonymous has the juice to do so. According to Radware Security VP Carl Herberger, some members may also "worry about losing the high moral ground" if they were to act on such a scale without popular support. A digitized audio statement on *The Best of the Internets* (purportedly from Anonymous) says the idea "doesn't have a set time of when it will go into effect, as it is an ongoing operation" but stops short of withdrawing the attack threat.

However, observers like Herberger would rather err on the side of caution. Brian Honan, a security expert at BH Consulting, says that vulnerabilities in the servers *do* exist, even though they shouldn't. Anonymous may not have the capability to shut down the Internet, but it could still slow it down and do damage. And the organization is accustomed to having its way. When YouTube deactivated an account associated with the group, Anonymous accused YouTube of a First Amendment violation, threatening to "unleash hell" if the account was not restored within 72 hours. The account, TheAnonMessage, was restored the next day.

Part of what makes Anonymous unique is its ability to attract worldwide passion and resources for its cause. According to Herberger, it is not motivated by money but by changes in policy. This may be why the group had essentially dared anyone to try to stop Operation Global Blackout by announcing the date as well as the method of attack. It intentionally broke two basic hacking rules: don't tell your target in advance and don't give away your methods. But in Anonymous's case, says Herberger, "you almost by definition have to file your grievance – tell them you're angry with them."

DAVID/WIKIMEDIA COMMONS



Occupy Wall Street protestor wearing the signature Anonymous mask.

“America is losing the war to talented, opportunistic hackers that are able to extract valuable information while remaining truly hidden.”

When Anonymous isn't filing grievances to protect Internet freedom, it's busy being one of the biggest security threats facing companies and governments. According to Verizon's 2012 data breach investigations report, 58% of all data stolen can be attributed to hacktivism. Christopher Porter, principal of Verizon's risk team, highlights Anonymous as a key contributor to the rise of hacktivism, "indicative of discontent as a whole." Hackers target personal data 95% of the time, in an effort to "shame" individuals and companies. Financial data is rarely targeted by hacktivists; therefore, hacktivists pose little direct danger to the nation's overall stability.

While hacktivists may pose little danger at present, skilled hackers operating overseas have learned to easily circumvent existing cyber security measures. Richard Clarke, former cyber security and cyber terrorism advisor for the White House, recently testified that "your government [has] failed you" in maintaining cybersecurity, throwing a dark blanket of doubt on the United States' ability to deal with international hackers. According to Clarke, "Every major company in the United States has already been penetrated by China." He warned that routers, chips and hardware imported from foreign countries, including China, could contain "logic bombs, trapdoors and Trojan horses, all ready to be activated on command so we won't know what hit us. Or what's already hitting us."

Shawn Henry, the FBI's top cyber cop, said that "we're not winning," in terms of cyber security. According to Henry, companies need to "make major changes in the way they use computer networks to avoid further damage to national security and the economy," as the current approach is "unsustainable." Many company executives do not fully comprehend the financial and legal risks. Many do not even realize that their systems have already been compromised.

Hackers operating in China are especially dangerous because their attacks are so difficult to detect. According to Richard Bejtlich – chief security officer at Mandiant – cases traced back to Chinese hackers have gone undetected 94% of the time. In 2010, Chinese hackers breached the US Chamber of Commerce and gained access to everything on its systems, including information on over three million of its members. James A. Lewis, a senior fellow on cyber security at the Center for Strategic and International Studies, does not believe there is a single secure, unclassified computer network in the US.

This form of international stealth hacking could have a significant impact on the US economy. Clarke warns that "rather than having a cyber-Pearl Harbor event," we could "lose our competitiveness by having all of our research and development stolen by the Chinese," after spending hundreds of millions on R&D. According to Henry, companies can no longer simply react; they need to get leadership involved in developing cyber security strategies. For starters, the most

important information should be stored offline, he argues.

Thus, widespread gaps in corporate cyber security could put the US economy at risk of intellectual property theft on a grand scale. America is losing the war to talented, opportunistic hackers that are able to extract valuable information while remaining truly hidden. Hactivist groups thrive on the same cyber-insecurity, but cause more limited harm. However, such groups are highly visible and could help demonstrate the need for cyber-security reform. If nothing else, Anonymous deserves some credit for that.

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The Legitimacy of Iran's Nuclear Program

BY TANAY GUPTA

India has now become capable of delivering a nuclear warhead on a long-range missile after testing its Agni 5 in the middle of April 2012—an accomplishment to which the world has reacted mildly. North Korea also attempted to launch a long-range rocket just a week earlier, but the globe condemned the act. Iran has been widely believed to be developing nuclear weapons over the last several years, prompting severe criticism as well as the imposition of economic sanctions on the country. Thus, the question arises, how are Iran and North Korea different from India with regard to their nuclear ambitions?

In the case of Iran, the answer lies in America's common economic and strategic interests with India and its strong alliance with Israel. The media presents Iran's program as a very real threat to both the safety of Israel and the world at large. In 2007, the International Atomic Energy Agency (IAEA) reported that Iran could develop a nuclear weapon in three to eight years if it wished. However, much of Israel's astonishingly vast nuclear potency remains hidden to public eye. America condones both Indian and Israeli nuclear ambitions, while hypocritically rebuking nations like Iran and North Korea for pursuing the very same goal. In reality, alliances between nations—such as America and Israel—bias everything that the media broadcasts and create double standards, making it hard for countries like Iran to get their own perspective of what is going on understood internationally.

The beginnings of Iran's nuclear program date back to President Eisenhower and his Atoms for Peace experiment. Enriched ura-

nium is a key element in nuclear weapons, and America first supplied this uranium to Iran, among other countries, during the Cold War. According to Chicago Tribune reporter Sam Roe, in 1953, Former President Eisenhower unveiled this experiment, a program that “promised to share some U.S. nuclear technology with foreign nations that vowed to forgo atomic weapons.” He thought that by sharing technology, nuclear peace would ensue. Yet, Eisenhower quickly discovered the difficulty in controlling uranium use and monitoring nuclear progress abroad.

Israel has had an unsettled relationship with Iran starting from the creation of the state of Israel, but especially since the founding of Iran's Islamic Republic in 1979.

During World War I, Britain promised the Jews a homeland in what was previously Palestinian Arab-occupied territory. Despite this promise, only violence would force the Palestinians to hand over their land. Over the course of the next six decades, a number of neighboring nations have remained hostile towards Israel because of this disputed territory. The uncertainty about Iran's nuclear capability as well as Iran President Mahmoud Ahmadinejad's recent verbal attacks against Israel have damaged their relations further.

Iranian representatives, insisting that they are making every effort to cooperate with the international community, have tried to pacify lingering Western doubts about their country's nuclear ambitions. Iranian

IRAN INTERNATIONAL PHOTO AGENCY HANDOUT/GETTY IMAGES



The first fuel supply is loaded at the nuclear plant in Bushehr, Iran in November 2010. It has been speculated that the facility's uranium production will likely “fall well below the enrichment level needed for weapons-grade uranium,” despite the international criticism.

Foreign Minister Ali Salehi claims that according to their religion, the “use or threat of use of nuclear weapons, [is] illegitimate, futile, harmful, dangerous and prohibited as a great sin.” While one cannot easily prove this moral assertion insincere, few Western diplomats are buying into Iran’s self-justifications.

Iran may not precisely follow the nuclear Non-Proliferation Treaty (NPT), but it still consents to International Atomic Energy Association (IAEA) supervision. Israel, on the other hand, is one of only four countries (along with Cuba, India and Pakistan) that have not signed onto this treaty, a refusal that allows them total nuclear freedom. According to the Atomic Archive, the NPT attempts to undo the mistakes made in the Atoms for Peace experiment. In essence, the treaty says that weapons-related nuclear technology may not spread beyond the recognized weapon-possessing states and that the IAEA can oversee peaceful nuclear progress. The hypocritical nature of Israel and its Western allies is obvious because while India and Israel—aided by the West—built nuclear weapons unhindered by these rules, Iran has been disparaged for trying to progress to the same level as its regional neighbors. A recent NPR article by Olli Heinon is typical of the bias against Iran, saying that an Iranian enrichment plant was “better protected from prying satellites and, potentially, a bombing campaign. Worryingly, the plant appears designed to focus on producing higher enrichments.” Why is keeping a nuclear plant protected from a potential bombing run regarded as anathema?

America did not sanction Israel as it built nuclear weapons, a decision which has allowed Israel to develop capabilities that clearly pose a threat to Iran. Reuters’ Caroline Copley points out that “in Geneva, [Iranian foreign minister] Salehi accused the West of double standards for backing Iran’s arch-enemy Israel, the only Middle East state outside the nuclear Non-Proliferation Treaty and believed to have the only nuclear arsenal in the region.” Details about Israel’s nuclear program are easily accessible online, calling its hardline position against Iran’s program into question. An Israeli attack on Iranian nuclear test sites would be hypocritical, considering the breadth of Israeli nuclear capability. The Nuclear Threat Initiative is an organization that builds upon the resolutions of the NPT and hopes to “to strengthen global security by reducing the risk of use... [of nuclear] weapons,” thus fulfilling the NPT’s goals. NTI highlights three key facts about



Headquarters of the International Atomic Energy Agency (IAEA) in Vienna, Austria.

Israel: it likely has enough enriched plutonium for 100 to 200 nuclear warheads, it is “developing a comprehensive multi-layered missile defense system” and it has not signed onto any of the major nuclear treaties, giving it ultimate flexibility concerning its nuclear decisions.

Few are in disagreement about the degree of unpredictability of Iran’s nuclear ambitions. But many signs indicate that the media is exaggerating the aggressiveness and danger of the Iranian program, and underplaying repeated efforts by Iranian representatives to indicate that they are willing to cooperate. Still, it is worth noting that if Iran were secretly planning to build a bomb and use it, the repercussions for Israel and its allies would be drastic. *New York Times* journalist James Risen explains the difficulty officials are having with interpreting the signals, and quotes one official’s view that he has “about 75 percent confidence in the assessment that they haven’t restarted the program,” which was supposedly halted in 2007.

Several high profile figures in Israel have recently been sounding the same warning: politics, rather than facts, are driving the threats against Iran’s nuclear program. Former Israeli Prime Minister Ehud Olmert commented that the Iranian leadership has not crossed the line in their nuclear ambitions, indicating that they are “at least thoughtful...not rushing.” A widely respected former security official, Yuval Diskin, sees the disconnect between what Israeli Prime Minister Benjamin Netanyahu is telling the world and what is actually occur-

ring: the Israeli government is presenting “a false view to the public on the Iranian bomb, as though acting against Iran would prevent a nuclear bomb. But attacking Iran will encourage them to develop a bomb all the faster.” Another voice inside Israel, Lt. Gen. Benny Gantz, actually supports Iran’s claims. As reported by the CNN Wire Staff, Gantz said that “Iran is led by ‘very rational people’ and doesn’t appear poised to build a nuclear bomb that would threaten their nation.”

Near the end of April 2012, Israeli Prime Minister Netanyahu gave Washington an ultimatum: if sanctions and diplomacy do not produce significant results soon, Israel will launch its own military strikes against Iranian nuclear facilities within months. The former chief of Israel’s spy agency, Meir Dagan, has famously called this potential act of aggression a “stupid idea,” according to CNN’s Kevin Flower. It appears that lack of communication is an important factor in this issue, as Iran says that all of the accusations against it are invalid.

The value of the Iranian currency has dropped 12 percent because of this nuclear debacle, according to a BBC News report. The same report notes that “the UN Security Council has already passed four rounds of sanctions against Iran for refusing to halt uranium enrichment.” *Time*’s Tony Karon says that American-imposed sanctions have depressed the Iranian standard of living by fueling inflation and unemployment. Along with Israel, America has severely damaged its reputation abroad by weakening Iran,

waiting for it either to shut down its nuclear program altogether or to collapse economically.

Biases have prevented Iran from fully explaining its version of the story about its nuclear program. While Israel has developed into a great nuclear superpower because its allies have permitted it to ignore nuclear treaties, Iran's commitment to continuing with its nuclear development is met with stiff opposition. An opinion piece by Muhammad Sahimi published by PBS reveals the true nature of the latest IAEA report: "The report was deliberately hyped to make a case for much harsher sanctions, or war." It is likely that Iran does not have nuclear weapon capabilities.

Rather than threatening Iran and imposing sanctions, the West should consider putting less pressure on Iran, thereby reducing the tension between Iran and its neighbors and allowing for some stability in international public opinion. A looser grip on Iran could potentially improve Iranian-Israeli relations and allow for both long-term cooperation and a safer nuclear future for our world.

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Navajo Reconstruction

BY NICOLE BLUM

A high percentage of Native Americans lives at or below the poverty level; in fact, their poverty rate is higher than that of any other race or ethnic group in the US today. The Navajo tribe is no exception, living on their large reservation in the Arizona desert. Their harsh, underdeveloped land of sand, wind, and rock entails a daily struggle for survival. However, it also provides sustenance for the tribe in its rich tradition.

In an effort to bring some much-needed revenue to the tribe, the Navajo government aims to erect a large-scale building complex on the East Rim of the majestic Grand Canyon. This proposed destination complex, tentatively titled the "Grand Canyon Escalade," would consist of a resort and aerial tramway that would ferry tourists from cliff tops to the water's edge. "We need to develop businesses so we can create jobs and work toward being a self-sustaining nation," argues Navajo Nation spokesman Erny Zah.

The land that the complex is designated to be built upon, however, is hallowed ground, where Native Americans engage in their deep-rooted tradition of appreciating nature. And the natural beauty of northern Arizona is manifest—the sagebrush, rolling hills, arroyos, canyons, desert, and blue-green waters of the rivers paint a tranquil, quiet scene. Not only have generations of Navajo grazed their livestock in this particular area, but many Navajo people also hold dear memories of their experiences at the East Rim.

One Navaho man, Tyrone Tsosie, who once lived in the area, recalls the East Rim as his childhood backyard. There, his grand-

mother showed him how to use corn pollen to pray to the rivers for blessings. The yucca root, white flowers, and sage also are used for traditional religious and medicinal purposes. Tsosie serves as a voice of opposition to the project, stating: "The main thing right now for my generation, we don't want that kind of change, development out there because we don't want to lose that scenery and lose all those memories."

The proposition of building the resort complex is highly controversial because it conflicts with such beloved traditions. As a result, a split in opinion has occurred between those Navajo who are willing to sacrifice their sacred nature for an income and

others who find the proposition of developing such land as nothing short of a travesty.

Additionally, environmental groups who wish to preserve the East Rim land are fervently opposed to the large-scale building project. "This is just one more thing that is going to chip away at the solitude of the area, and it's really not the appropriate type of development for that area," said Alicyn Gitlin of the Sierra Club, a prominent environmental group. While environmentalists praised the Navajo government for at least verbally jettisoning previous plans for an airport, they are still worried about the unpleasant noise and light pollution that would inevitably arise with development on the East Rim.

CARA SOLINA (VI)



Grand Canyon National Park officials also wish to preserve the characteristic wilderness of the East Rim, which, although difficult to access, is popular with backcountry hikers. These officials also strive to ensure that endangered species, like the humpback chub, are protected even if the building project goes forward. Dave Ubueraga, the park superintendent, commented that the East Rim is “some of the most remote and pristine land in the park. Until it’s declared wilderness, we have to manage it as such. We’re charged with maintaining its solitude and wilderness value.” Navajo President Ben Shelly had initially promised not to tamper with sacred sites, vowing also to make choices that would favor protecting the wilderness and endangered animals. Now, he views the area as one of the premier locations on the reservation to draw tourist money.

The main reason that the building of this resort is so controversial is that its location, the “confluence,” as the locals call it, of the Colorado and Little Colorado rivers, represents some of the last land near the Grand Canyon without significant development. This piece of land has remained undeveloped for decades due to conflict between the Navajos and a neighboring tribe, the Hopis. Land disputes between the two tribes stem from the fact that both tribes have deep histories that trace back to the East Rim.

The “West Rim” of the Grand Canyon is controlled by the Hualapai tribe, which developed the area considerably, having constructed the Skywalk, a glass bridge extending over the canyon’s edge to give tourists a spectacular view of the Colorado River 4,000 feet below. Still, most tourists stay within the national park at the South Rim; or, alternatively, at the North Rim, where there is a seasonal lodge but less development than the South Rim.

The Navaho tribe’s plans would have a considerable impact on the East Rim land-

“The Navajo must seemingly decide between choosing the survival of their culture or their people...”

scape. An aerial tram would run from the East Rim and parallel the Colorado River before coming to a stop at the floor of the canyon, where a restaurant and amphitheater would be located. A half-mile river walk, also running alongside the Colorado River, would give tourists a view of the confluence but stop short of it. A hotel, a second restaurant, a museum and art center, two large parking lots, and housing for workers would be located on top of the canyon.

No sources of drinking water or electricity currently exist at the East Rim site. Building the infrastructure alone would cost at least \$60 million, but such work could be beneficial to jobless locals. About 27 miles of dirt road would have to be paved to reach the site, and water would have to be piped in from miles away.

If this entire complex were constructed, a dwindling Navaho nation would singlehandedly rob itself of access to its own cultural traditions. Is this what our modern world, with its ruthless competition for profit, has taught? In this case, however, the drive for profit, however, is also one for survival. The Navajo must seemingly decide between choosing the survival of their culture or their

people, but it is questionable whether one can exist without the other in the first place.

The tribal government expects 3 million visitors a year as soon as 2015, estimating revenue to flow in at a level between \$40 million and \$70 million annually. This is nearly half of the tribe’s budget excluding federal funds. In total, the project could approach a cost of \$1 billion to execute.

“We want people from all over the world to visit Navajo land and the Grand Canyon,” Ben Shelly said. “We have many of the world’s wonders in our midst.”

However, Lynn Hamilton of the canyon advocacy and environmental group Grand Canyon River Guides, uses Shelly’s words as a reason against development: “It’s not Disneyland. It’s one of the seven natural wonders of the world. To mar that somehow with such commercialism right there, in your face would just seem contrary to what the value of Grand Canyon is.”

While the Navajo continue to encounter dire financial problems, the potential break with tradition, while undoubtedly tragic, would not be a break from the recent history of the Native Americans. Gradually, as technology has advanced, the Native Americans have adapted to the surrounding Western culture in order to simply survive. If the Navajo do not build on the East Rim, they will most certainly search for another source of revenue, and there is a good chance that such another source would also question the Native American tie to tradition.

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The view of the Grand Canyon National Park may appear far different from this if the East Rim project is built.



DOUG DOLDE/WIKIMEDIA COMMONS

Blue Planet Lost

BY HUNTER STIRES

In several years, the global community will have to contend with one of the most difficult challenges ever faced by man: the world will start to run out of drinking water.

How could this tragedy be possible? Any elementary school student will tell you that 70% of the Earth's surface is covered with water. It's called the "Blue Planet" for a reason, right? But not all water is created equal.

An Illusion of Abundance

Of all the water covering our world, 97.5% is undrinkable salt water in our oceans. That only leaves 2.5% of the world's water as fresh water, and 99% of that water is locked up in ice fields and glaciers. Of the one percent that's left (0.007% of all the world's water), most isn't even potable because it has been thoroughly polluted by industrial chemicals, pesticides, and other harmful substances. So, only 7 hundred-thousandths (that's 0.00007) of all the Earth's water is available to hydrate, clean, and fuel *seven billion* thirsty humans plus countless flora and fauna that happen to live here with us. Water has the unfortunate characteristic of creating an illusion of abundance that makes humans take its gift of life for granted. In light of the facts, though, that glass of water becomes truly precious.

What you may or may not know is that our society is gravely mis-managing and ultimately wasting its water supply. One *billion* liters of water is used in some capacity (mostly industrial) every few seconds. In the United States alone, the volume of water we use in one day exceeds the volume of oil we consume in a year.

Much of the water in the U.S. and in other developed countries comes from underground aquifers. This is the cleanest, safest water we can find—but it comes at a price. If we drain our aquifers at a faster rate than rainwater can fill them back up, then the land literally sinks beneath us. In Mexico City, cathedrals have begun to tilt because their formerly secure foundations are being hollowed out as the aquifers are consumed. This problem is exacerbated by urban development. If rain falls on streets and roofs instead of more permeable grass and soil, the water will flow down storm drains and into the sea, without returning to the aquifer. If most of the world's fresh water ends up in the oceans, then all we will have to subsist on will be increasingly inconsistent and unpredictable rainfall.

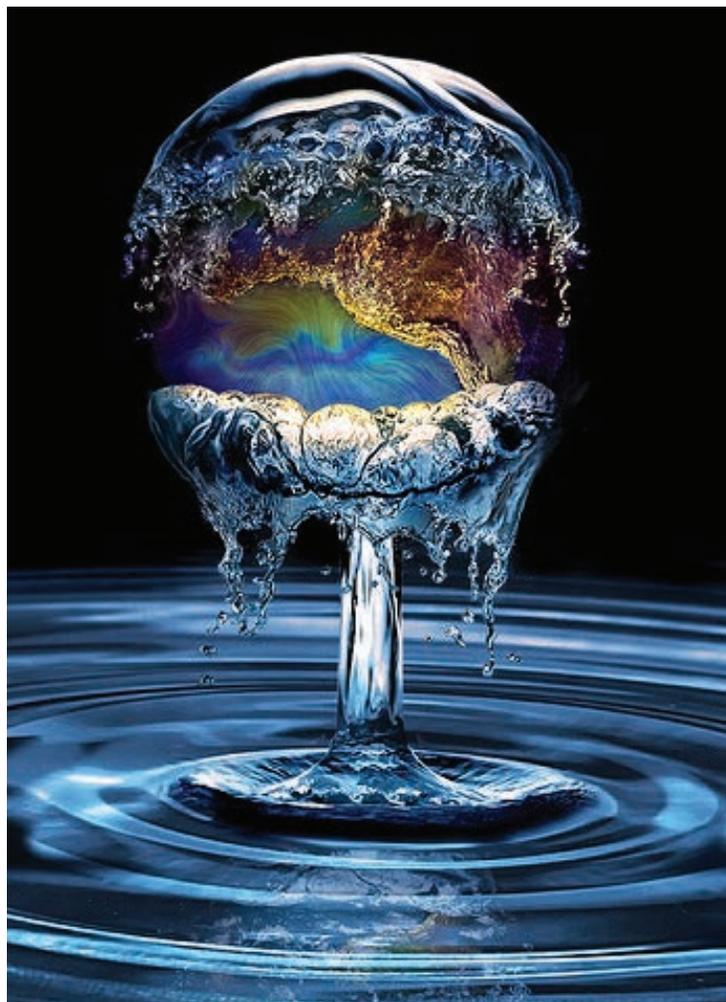
Scarcity = Turmoil

Human beings tend to respond aggressively to perceived or real scarcity. In almost every community, citizens will collect large amounts of supplies before severe weather hits because of uncertainty as to when these provisions can be replenished. This is a natural human response, and it applies to nations as well as individuals. As territory or natural resources become inadequate to provide for the well-being and security of the present population, countries make land-grabs and fight other nation-states for these resources. In 1941, the Japanese attacked Pearl Harbor because they perceived a threat from the powerful fleet of U.S. battleships and aircraft carriers in Hawaii to the vital oil-supply chain

from the Dutch East Indies, recently subdued by Japan. In our own time, the United States has gone to war in the Middle East on several occasions to ensure continued access to the oil reserves of the Persian Gulf. Even now our country is preparing for potential conflict with Iran over its threat to blockade the Strait of Hormuz, through which 35% of all the world's (and therefore the United States's) seaborne oil supply passes. So if the nations of the world are willing to sacrifice their citizens' blood and wealth to secure oil to fuel their economic and military ambitions, what will they do to secure a natural resource that is essential to all known life?

The peoples of China and India represent almost one-third of the world's population. These countries also happen to have two of the largest militaries in the world. They have major water needs, both to sustain their inhabitants and support their rapidly expanding industries, and their water supplies aren't as secure as they would like them to be. Water activist Tony Clarke, featured in the documentary film *Blue Gold: World Water Wars*, observed that the Chinese symbol for *water* also means *control*. Domestic conflicts have already emerged within China. In one case, neighboring communities became combative when one village used

If we don't start finding easily accessible water sources and using our groundwater responsibly we may begin to run out of drinking water across the globe.



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cloud seeding methods to encourage clouds to release their precipitation, thereby “stealing” the rain from the next village. Meanwhile, India is unable to provide its citizens with twenty-four-seven access to water in most cities and villages. Residents in the slums are compelled to get up every morning at 5:30 to carry home the day’s water in any container they can find, many of which have previously held dangerous chemicals and other toxic substances. There is growing concern that these two highly populated, economically developing military powers will consider steps beyond their respective borders to secure water supplies in a manner that could lead to global instability.

Even the U.S. isn’t above using the armed forces at our disposal to secure our water supply.

During George W. Bush’s Administration, Secretary of Defense Donald Rumsfeld went to South America to explore possible ways to expand American presence in the region, particularly in Paraguay and Brazil. On the border of those two countries lies the Guarani Aquifer, the largest freshwater source in the world. After Rumsfeld’s visit, the United States opened a military base with 500 Special Forces troops in Paraguay, in close proximity to the Guarani Aquifer.

Enter the Private Interests

Nations are not the only ones noticing impending global water shortages. A situation featuring rising demand and finite supply creates a very compelling market environment for the private sector. Unlike nation-states, corporations do not have the interests of citizens in mind. The mission of these organizations is to make money for their investors, not provide for the well-being of ordinary people. In the case of water supplies, corporate involvement has created turmoil, sparking protests, riots, and deadly violence.

“Perhaps the most important step in stemming the impending worldwide water crisis... would be to increase awareness of the shortage itself.”

Those who saw the latest James Bond film, *Quantum of Solace*, may have thought the plot was the stuff of Hollywood’s imagination, but it was actually based on the very real events that took place in Bolivia about 12 years ago when a multinational corporation, Bechtel, was awarded control of the water supply in Bolivia’s Cochabamba region after the government was denied a \$25 billion loan from the World Bank to finance water infrastructure. As soon as Bechtel took over, prices soared to a whopping \$20 per month in a nation where many people make less than \$100 in the same timeframe.

People were literally forced to choose between water and food, so they rose up in popular rebellion. The Bolivian government deployed riot police against its own citizenry to protect the interests of a foreign corporation that had made an obscene attempt to loot the Bolivian people’s meager purses. Under pressure from Bechtel, Bolivia actually privatized the rain, making it illegal for Bolivians to capture rainwater for their own

ARNE HÜCKELHEIM/WIKIMEDIA COMMONS



A truck distributes water to residents of Kolhapur, India who don’t have a functioning water supply line to their houses.

consumption. Finally, the popular rebellion spread across the entire nation, and the government ordered Bechtel to leave the country, but not before hundreds of people had been killed and a sniper had put a bullet through the face of an innocent 17 year-old boy.

So Where Do We Go From Here?

Fortunately, there are alternatives to increasing economic hardship and political stress over water shortages. The first step to averting the crisis altogether would be to save water. The average American consumes upwards of 150 gallons of water per day to wash, clean, drink, and use various appliances. Turning off the tap while brushing teeth or shaving will save several gallons, and taking short showers can save significantly more.

In the meantime, we need to find more accessible water resources and stop using our groundwater irresponsibly. One ostensibly promising choice is desalination, where saltwater is taken from the oceans, put through a reverse-osmosis filter, and turned into drinkable water. However, the current byproduct of this system is water too salty to sustain any life. In a bay outside Perth, Australia, which relies on two desalination plants for its fresh water, this waste product has killed all wildlife in the vicinity. Also, current desalination processes generate unacceptably high carbon emissions. This clearly rules out desalination as a viable option until the technology advances.

If author and environmental activist Vandana Shiva’s warning that “the water crisis is the most pervasive, most severe, and most invisible dimension of the ecological devastation of the Earth” is correct, then perhaps the most important step in stemming the impending worldwide water crisis and the global instability that may accompany it would be to increase awareness of the shortage itself. Just as the world has now awoken to the reality of global warming, an awakening to the vital issues surrounding access to clean water is an essential first step toward addressing the problem through big and small initiatives across the global community. Education may just be the gateway to an ultimate solution.

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The Fossil Fuel Fix

BY PRADYUTH MAGANTI

What are fossil fuels? Merriam-Webster's Dictionary defines them as "fuels (as coal, oil, or natural gas) formed in the earth from plant or animal remains." Fossil fuels are created from the remains of plants and animals that lived millions of years ago. Refineries take these materials and process them into various energy-rich products. All of us have heard about these fuels and the world's dependence on them. Issues stemming from increases in oil and gas prices and their repercussions on economies around the world are common stories in the news, but there are clear short and long-term solutions to these increases.

The Energy Information Administration reported that in 2007, primary sources of energy consisted of 36.0% petroleum, 27.4% coal, and 23.0% natural gas, altogether adding up to 86.4% for fossil fuels in the world's primary energy consumption. The other 13.6% consisted of non-fossil sources such as hydroelectric, geothermal, and nuclear energy. The world is becoming increasingly reliant on fossil fuel as its energy source due to rapid population growth and the inability of alternative sources to keep up.

Of all fossil fuels, oil/petroleum is by far the most widely used. The most common products derived from oil are gasoline, plastics, diesel oil, indoor heating oil, and jet fuel.

As all of us know, oil prices are on the rise in the US, and have been increasing around the world for the last decade. Why? There are multiple reasons. First, the BRIC (Brazil, Russia, India, China) economies are all expanding rapidly, so they have to consume more oil and have forced other countries to dip into reserves that have not been touched previously. Second, prices increase whenever there is unrest in the Middle East. Currently, countries like Iran are threatening to cut off their oil to European nations due to political conflicts. Once oil becomes less abundant (or is feared to become so), the price goes up. It's just how supply and demand works.

Every economy depends upon oil and its cost per barrel. When

Despite the lack of scientific evidence against fracking, it has become a highly controversial method of extracting fossil fuel in both the US and Europe -- note this recent demonstration in France.



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the cost of oil increases, the cost of transportation increases. All products increase in price when the cost of transportation increases. Take this example: a store buys each bag of chips from a manufacturer for \$4 and the transportation costs \$1. The store sells the bag of chips for \$7. When transportation costs go up to \$1.50 the store needs to sell the bag of chips for \$7.50 in order to make the same profit. The only constant in this scenario was the cost of manufacturing the bag of chips, but even this would climb if the manufacturing process were energy intensive. The theory doesn't apply just to a bag of chips, but to all products in the marketplace.

There are three short-term solutions to the issue of the limited oil at America's disposal. First, the U.S. government could release some of its oil reserves and temporarily decrease its reliance on foreign nations to provide the U.S. with oil. Second, the U.S. government can open up more space for drilling. President Obama has already proposed to open much of America's coastline to drilling for oil and gas. Some of the areas he has proposed to drill in have never been open to drilling before. Third, the U.S. could expand production of oil and natural gas through "fracking," or hydraulic fracturing. The government has known for some time that there are sizeable reserves of oil and natural gas trapped in rock formations called shales. Drilling straight down into the ground will never help since the rock is so hard to break through. Instead, drilling horizontally will break through the rock. Notice that the name of the horizontal drilling process begins with "hydraulic." This reflects the fact that pressurized water is a main component in the mixture that helps break through the rock. More than 80% of fracking currently occurs in North America; thus the process has economically benefitted the United States more than any other nation. It is also cheaper than traditional types of oil drilling. Critics say that fracking is dangerous due to the risk of drinking water being contaminated with the water-chemical mixture that breaks up shale underground. However, convincing empirical evidence that properly conducted fracking contaminates drinking water has not emerged as yet. Furthermore, fracking is most probably the most effective short-term fix for the limited oil supplies at the U.S.'s disposal. All of these solutions, if correctly implemented, will allow America to rely on other countries far less, and limit price increases.

Long-term solutions exist as well. First, the U.S. government and the private sector must invest in mass transit to eliminate a significant portion of the demand for oil. Second, governments around the world must insist on fuel-efficient cars. To enforce this, the law could set deadlines by which everybody would operate a fuel-efficient car or face a government-imposed penalty. The world's dependence on fossil fuels must also be diminished through the increased use of alternate energy sources such as nuclear, solar, wind, and hydroelectric power—all of which are viable energy options.

It is evident that there are ways to fix the world's reliance on fossil fuels, but success is completely dependent on the speedy implementation of these solutions. The world must confront its energy crisis soon before it spirals out of control.

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Stalemate in Syria

BY KIRAN BHATT

While the wave of revolutions that swept across the Middle East last spring has slowed down in many countries, it is far from over, and the focus has now shifted to Syria, where violence between the government and rebel fighters has now gone on for several months. From afar, the situation in Syria seems most closely related to the one that unfolded in Libya. Both countries had oppressive, obstinate leaders: in Libya's case, Muammar Qaddafi, and in Syria's, President Bashar al-Assad, who has been quick to resort to using violence against protesters and opponents of his government. Fighting between Assad's government forces and rebels has gone on for more than half a year, and casualties are high: approximately 7,500 civilians have been killed in the past seven months.

Sadly, it appears that the killing in Syria will not stop anytime soon. Recently, Homs, a city in western Syria, was besieged by government forces, and staggering death totals were left in their wake: as many as 64 civilians dead in a day, and weekly numbers in the hundreds. From a human-rights standpoint, the bloodshed in Syria needs to end, but negotiating a lasting ceasefire will be tricky for the United States and the United Nations.

Numerous factors about Syria's government and its allies complicate the prospects for intervention. Perhaps most importantly, the United States is hesitant to get in a position to directly aid the Syrian rebels because of Assad's powerful foreign allies. Syria's three greatest allies—Iran, China, and Russia—are wary of any US involvement in the region. Iran, which has very little common ground with the US, and may be on its way to building a nuclear weapon, supplies arms to the Assad government. Russia has a naval station in the Syrian city of Tartus, and has set up air defense systems around the country.

All three of Syria's allies adamantly support the Assad regime: China and Russia recently vetoed a UN Security Council resolution which called upon Assad to resign. Russian Prime Minister Vladimir Putin has strongly warned against US involvement in

Syria, writing that “no one should be allowed to employ the Libyan scenario in Syria.” The “Libyan scenario” that Putin is referring to is the US and NATO support for the Libyan rebels, in which Western forces established a no-fly zone and bombed Qaddafi's strongholds, paving the way for rebel forces to advance. The no-fly zone and bombardments were solid successes for the Western military, and proved to be a savvy move on the part of President Obama and his NATO allies. Fortunately, US military forces completed their part of the mission without sustaining any casualties.

Of course, as Senator Lindsey Graham (R-SC) points out, “we can't do every war where you never lose an aircraft.” Neither is it fiscally responsible, others argue, to spend big on military operations (the Libyan intervention cost at least \$896 million, according

to the Pentagon) in the context of the wars in Iraq and Afghanistan. The presence of the aforementioned Russian air defense system only complicates things further. Another critical factor weighing against a US decision to bombard Syria is the possibility of civilian casualties—a likely effect of a US intervention. Even Defense Secretary Leon Pannetta admits that “there would be some severe collateral damage” were we to bomb Syrian military assets, many of which are in urban areas.

An interesting option for the US would be the creation of what the New York Times reporter Elisabeth Bumiller calls a “humanitarian corridor” that would forge a route for refugees to move into neighboring countries, like Turkey. This would, however, require the United States to “organize training, and literally, an army” out of Syrian rebels and others, says Senator Jack Reed of Rhode Island. Of course, we've seen how difficult it is to raise and train a military in the Mideast—attempts in Afghanistan, Iraq, and Pakistan have all taken far too long and have been ineffective so far.

In the midst of bloodshed and indescribable tragedy across Syria, the Assad regime has tried to pass off a new Constitution upon its people. The measure was passed by a staggering 90% of voters—meaning it can only be what Western leaders have called a “farce and a hoax.” Haithem el-Maleh, a Syrian activist living abroad, asked, “How can they hold a referendum in the shadow of war and tanks? Aren't they embarrassed?” They should be. Unsurprisingly, Assad's allies in Russia and China applauded the move, with the Russian foreign minister Sergey Lavrov calling it a “movement toward democracy.”

In today's tempestuous international climate, every major foreign policy decision must be scrutinized and thoroughly considered. In Syria, the Obama administration must consider factors ranging from the possibility of a bloodbath to the repercussions from Iran, Russia, and China—three states that have the capabilities to create an even larger conflict in the Middle East.

AL JAZEERA ENGLISH/WIKIMEDIA COMMONS



A protest in Cairo, Egypt in November 2011 against Syrian President Bashar al-Assad.

“In Syria, the Obama administration must consider factors ranging from the possibility of a bloodbath...to the repercussions from Iran, Russia, and China — three states that have the capabilities to create an even larger conflict in the Middle East. ”

What makes taking a stand in Syria so crucial for the US and world at large is the Assad regime’s attempts to create sectarian violence. Assad, who belongs to the Alawite sect, has begun to drive the majority Sunni population out of Syria. Some Sunnis have even reported that the Assad government has given arms to Alawite populations, who have in turn opened fire on their Sunni neighbors. For example, Umm Nasser, a Sunni woman, reported that neighboring Alawites have been given rifles and have attacked their Sunni neighbors. As she explains, “we know them. We used to live side by side.” These images bring back memories of previous attempts at ethnic cleansing in Serbia, Rwanda, and Kosovo. The United

Nations and the Arab League have attempted to coordinate diplomatic efforts to end the violence in Syria and find a formula for the Assad regime to relinquish power. In April, Former UN Secretary General Kofi Annan was able to arrange a temporary ceasefire between Assad and armed Sunni opposition groups, but hope for that effort has begun to evaporate amid news of renewed government actions against dissidents and the Assad regime’s failure to implement troop pullbacks in key cities. Before the level of violence starts to escalate anew, The US and its allies must help arrange a genuine ceasefire, or take military action to ensure that genocide will not happen in Syria.

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A pro-government demonstration in the Syrian port city of Latakia in June 2010.



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Is Our Food Making Us Sick?



CARA SOLINA (VI)

BY EMMA GALGANO

Allergies have been on the rise in the past decade, especially in the United States. Many individuals fail to recognize the profound impact allergies have on the nation's health. A survey found that approximately 54.6% of United States citizens test positive for one or more allergens. Specifically, food allergies have increased dramatically. So, what exactly is causing this increase? Why is the United States the most affected nation? There is newfound skepticism about the food produced in our country. Is it safe to eat? How can allergies be prevented or even cured? Although nothing has been proven, most attribute the immense number of people affected with food allergies to the increase in hormones and other additives in food. Maybe, however, there is some hope as researchers claim to have found ways to lessen the effects of allergies—and maybe even cure them.

Today, about eight percent of children in the United States have one or more food allergies. Since 1997, the prevalence of food allergies in children under 18 has increased more than 18%. Not only are allergies inconvenient, they are dangerous and, in some cases, fatal. Allergic reactions can range from hives to vomiting to anaphylaxis. Children with allergies are also two to four times more likely to develop conditions such as asthma, eczema or additional allergies. Clearly, this surge in allergies is harmful to the health of the average US citizen.

Why exactly are more people getting sick from food produced in the United States? It is most likely because of all the additives in the food. Rarely is “pure” produce and meat sold anymore. Farmers add growth hormones to animal feed so they can make a larger profit on the meat they sell (a larger animal equals more meat equals more money). Enzymes and chemicals are added to milk, fruits, and vegetables to make them last longer as well. While all of this might seem great for our economy, it is taking a toll on our health.

In many cases, people are not even allergic to the actual food they are eating. Rather, they have reactions to the hormones, chemicals, etc. added to it. For example, American milk is banned in some developing countries in addition to Canada because adding antibiotics to milk is illegal in those nations. Marc, a Canadian citizen commented, “Thank goodness I’m Ca-

nadian, where Bovine Growth Hormone is illegal and antibiotics in milk is a big no-no. I went to Florida last year and tried American chocolate milk. I can tell you one thing, I’ll stick with my Canadian milk.” It seems absurd, but it is almost impossible to buy milk that is simply milk in the United States. Some are starting to cut cow’s milk out of their diet completely, replacing it with healthier options such as almond milk, rice milk and coconut milk.

It seems that the obvious solution to solve the problem of allergies is to exclude additives from food produced in the U.S. But, the chances of this happening are slim to none, for this would most likely handicap our already weak economy. Thus, medical researchers have been left to search for other ways to solve the issue. As of now, there is no FDA-approved cure for food allergies, but researchers at universities such as Johns Hopkins and Duke are working on a treatment to allow people to eat foods they were once acutely allergic to. Dr. Robert Wood has been at the forefront of allergy research at Johns Hopkins, estimating that the treatment will be brought to the public within the next eight years. His strategy is to desensitize the individuals by giving them small amounts of the allergen. He is doing this study specifically with cow’s milk. Sublingual therapy has been introduced in the past, which involves putting miniscule quantities of the allergen under the patient’s tongue, but oral immunotherapy, Dr. Wood’s most recent strategy, has proven to be more effective.

Dr. Wood performed an experiment testing oral immunotherapy with 30 kids ages six to 18 who were all severely allergic to cow’s milk. The results found that the children who went through a year of sublingual therapy followed by one to two years of oral immunotherapy were less likely to have significant allergic reactions while undergoing the oral immunotherapy. This is not to say it eliminated all symptoms. 20% of the children had significant reactions and could not continue with the therapy. After the therapy, one third of the students showed long-term protection to milk, but others need regular exposure in order to maintain protection against the allergy. A study parallel to this has not yet been performed on adults, so Dr. Wood does not know if the treatment will affect the two age groups similarly. Unfortunately, to continue this study, much more funding is needed so that more experiments can be performed. Overall, it seems that in the future this could be a feasible treatment for patients with food allergies.

Other sources of hope may exist. Another treatment that has yet to be tested is the drug omalizumab (Xolair), which was originally approved by the FDA for the treatment of asthma. Some doctors believe that this drug could mitigate people’s food allergies as well.

Yet despite the rise in food allergies and some promising research into potential treatments, it does not seem like there will be a cure approved by the FDA in the next few years. In the mean time, it is important for Americans to try to eat as healthy as possible. This entails reading food labels and searching for unhealthy food choices that might be hidden in the small print. If the amount of hormones and antibiotics ingested by Americans were to decrease, the health of the entire nation would improve. We must be knowledgeable about what we are buying and putting into our system because certain foods may cause surprisingly negative effects on our health.

Sources: <http://thechart.blogs.cnn.com/2012/03/05/experimental-treatment-may-help-food-allergies>; <http://www.aaaai.org/about-the-aaaai/newsroom/allergy-statistics>; <https://nytimes.com/auth/login?URI=http://www.nytimes.com/2010/03/06/health/06patient>.

What's the Beef?

BY ELISE LANG

If there's one food that represents quintessential American cuisine, it's the burger.

Over the years, it has come to represent the face of the American diet, a mark of our cultural identity. Even its role in the larger beef industry has been significant: In 2010 the retail equivalent of the beef industry in the United States was valued at 74 billion dollars, and 26.4 billion pounds of beef were consumed in the US alone. Yet despite all of its overwhelming significance for our country, this American dietary symbol has suffered a humbling fall from grace over the past month—a descent chiefly precipitated by hysteria over the circulation of ground beef products that contain what former USDA microbiologist Gerland Zirnstein deems “pink slime.”

An ingredient in what Zirnstein estimates is 70% of the ground beef sold in supermarkets nation-wide, “pink slime” is a dysphemism for the product “lean finely textured beef” or “LFTB” that is produced by the company Beef Products Inc. The company has been thrown into the national consumer discussion due to the recent outrage over the process it employs in order render full-fat beef lean and bacteria-free.

The major bone of contention in the processing of LFTB is the use of ammonium hydroxide, a solution necessary to kill potentially lethal pathogens such as E.Coli O157:H7 or Salmonella that may lurk in untreated beef trimmings. After a beef carcass is stripped of the cuts of meat directly used for commercial purposes, left over trimmings are placed in a mixing-bowl like apparatus and heated to 100 degrees Fahrenheit to separate the fat from the lean portions of the meat. Once this separation

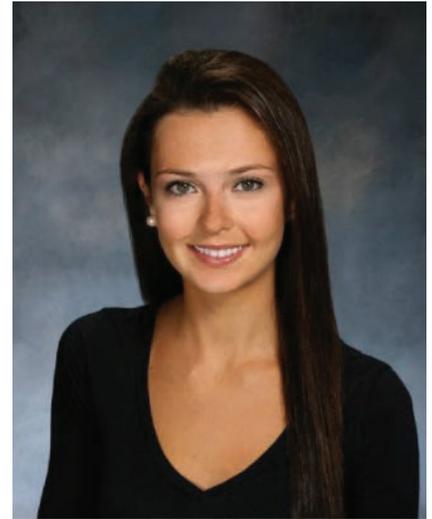
has occurred, a puff of ammonium hydroxide is administered to the lean remnants to raise the pH level of the beef and ward off bacteria.

Though BPI regards this puff of gas as “tiny” in size, many American consumers and scientists view it as colossal in its consequences. Take TV Chef Jamie Oliver, who got the ball rolling for anti-pink slime hysteria last April, when he exposed the product on a segment of his reality TV show, “Food Revolution.” Oliver has been at the helm of the movement against pink slime, urging his audiences and the population at large to consider the use of ammonium hydroxide as a fundamental crisis of consumer confidence. As he asked a terrified audience of mothers and their children, “Do you feel that any part of this clever scientific process involves any respect?”

Oliver's campaign, along with other exposés such as Robert Kenner's 2008 documentary film “Food Inc.,” has played a crucial role in fueling the negative media coverage of the pink slime question as well as a general sense of consumer panic. As a result, the media's ability to capitalize on growing public anxiety has led government officials, school administrators, and the general consumer to consider major changes in the way beef is distributed throughout our country. Major chains McDonalds, Burger King, and Taco Bell have all vowed to stop using the LFTB filler in their products, and many school districts across the country have decided to remove LFTB—or any ground beef at all, from cafeteria lunch menus.

At such extremes stand men like Charleston County Representative Chip Limehouse of South Carolina, who hopes to ban public schools from purchasing any food treated with ammonium hydroxide. As Limehouse said in a WTLX news interview, “I don't think anybody in South Carolina had any idea that we were feeding our school children beef fat trimmings off the butcher room floor, with ammonia poured on top of it cooked to 98 degrees and served up hot mixed in with ground beef.”

Limehouse and Oliver both touch upon a critical point in the argument against pink slime. Much of the anxiety over the use of ammonium hydroxide in our beef products stems from the notion that we have been “kept in the dark” about the type of food we are eating, putting ingredients into our body that we were completely unaware were present in our food.



There is a sense that there has been a breach in the fundamental relationship between consumer and producer—a rift that many view as a deliberate means of keeping the consumer unaware of a foul and potentially dangerous process. As Oliver told his audiences on his show “Food Revolution,” “I'd want to know when I'm eating this stuff. And I'd want it clearly labeled.” The heart of the matter here, Gerland Zirnstein echoes, is that of “fraudulent labeling.”

In an age in which health concerns, the media, and organic or “green” movements have forcefully coalesced to elevate consumer consciousness, the desire to know where and what our food comes from is a valid one. Media emphasis on Bisphenol A, high-fructose corn syrup, and MSG have left the average consumer more vigilant over the ingredients in and nutrition information for their favorite foods than ever before. That we deserve to know the substances we are putting in our bodies is a source of agreement among most Americans. In the case of pink slime, however, what really matters is whether or not we should care once we know.

The answer, according to the FDA, is no; the use of ammonium hydroxide is not only a safe, but common treatment for many of the products the American consumer buys today. Along with other ammonia-containing compounds, ammonium hydroxide is added to many of the baked goods, cheeses, condiments, beverages, dairy products, and of course, meats that we consume daily. It was scrutinized via thorough scientific research in 1974 to earn the official FDA stamp of

COURTESY OF KEN AVIDOR



approval, and was deemed “GRAS” or generally recognized as safe by the Select Committee on GRAS Substances (SCOGS). The committee supported the commercial use of ammonia-containing compounds stating that “ammonia and the ammonium ion are integral components of normal metabolic processes and play an essential role in the physiology of man,” and that “there is no evidence in the available information on... ammonium hydroxide... that demonstrates, or suggests reasonable grounds to suspect, a hazard to the public when [it is] used at levels that are now current or that might reasonably be expected in the future.”

For those who passionately argue that we ought to worry about LFTB, however, one of the primary motivations seems to be what Benjamin Radford of Discovery News calls the “ick factor.” In essence, their response is a predominately visceral one—one that Donald W. Shaffner, director of the Center of Advanced Food technology at Rutgers University feels is “grounded less in science than in instinctive revulsion.” This is largely a result of external image: LFTB was doomed in the public eye the day Zirnstein dubbed the beef “pink slime.” In and of itself, the name paints a picture of a sort of Pepto-Bismol colored mystery meat filled with unknown substances and oozing with secret, lethal chemicals.

Our emotional susceptibility to the ick factor is something that is heightened by the media’s ability to harness our cultivated misconceptions of risk. Aside from raising a question of consumer confidence, the pink slime debate illuminates the much more pervasive issues of our susceptibility to scientific fallacy and non-evidence based beliefs. With limited and often unreliable information, we often are too quick to judge our surroundings as dangerous.

The way in which the individual evaluates risk is complicated by emotions that often mask rationality. Thus we respond viscerally to media outlets that create frightening stories in order to make waves in the headlines, not to make factual sense. In particular, the media’s constant reporting of “freak accidents” and rare health threats provides us with a skewed perception of what dangers we may actually face and raises our fear level as a whole. On any given day, we are bombarded with stories about tragic death, disease, or disaster: such as the highly-publicized Asbestos scare in New York public schools, the Costa Concordia cruise ship that sank in Giglio Italy, or the recent Pfizer packaging mistake on birth control pills. Often what we see on the news is “the worst case scenario,” an overdramatized version of reality that renders us anxious and



Lean beef trimmings before the packaging process.

overly-concerned about our exposure to realistically unlikely risks. We worry about flying to visit a relative or eating a beef product treated with a small puff of ammonium hydroxide, when we really should be concerned about how much suntan lotion we are putting on or how fast we’re driving on the highway.

Yes, there are movers and shakers like Jamie Oliver, Robert Kenner, and Chip Limehouse who are genuinely and passionately against pink slime for what they view as well-supported reasons. Yet for the average consumer watching the news or reading the daily paper, arguments against pink slime are often grounded in an exaggerated and inaccurate representation of the facts. Most consumers are not educated enough on the nature of the topic to know that the treatment of the “slime” they are purchasing is actually a commonly used tactic for preventing E.Coli and Salmonella contamination. The typical viewer quakes at the mere mention of ammonia hydroxide, a chemical compound that seems more at home on the back of their Windex bottle than on the ingredient list for their lean hamburger.

At this point in the game, the FDA maintains its position on the safety of pink slime, leaving the American consumer with two options: lean finely texturized beef or its full-fat cousin. Many schools have already chosen the latter, labeling previous shipments of LFTB with “do not open” and leaving them in the freezer until they are generally accepted as unsafe for consumption. In a nation in which 17% of children and adolescents ages 2-19 are obese, whether schools should be denying children the option of lean meats is an important issue in itself.

What should not continue to be disputed, however, are the current benefits that ammonium hydroxide provides for lean finely texturized beef products. As the USDA un-

dersecretary for food, nutrition, and consumer services Kevin Concannon succinctly articulated, the use of LFTB is a no-brainer: “It’s safe, it’s leaner than other beef sources on the market, and it’s less costly.” The ammonium hydroxide treated beef is the only low fat, inexpensive option for those trying to reduce the fat intake in their diet—and not get salmonella or E.Coli while doing so. In the “cost-benefit” analysis of our wellbeing, if a small puff of ammonium hydroxide gas is the price we have to pay for lean beef, the health and pocket-book benefits clearly outweigh the perceived chemical costs.

In an ideal world, each consumer would be struck with the urge to “sapere aude” or “dare to know” the reality behind lean finely texturized beef—to take the time to pursue the truth and form their opinions on rational analysis of the facts, not just a thoughtless acceptance of alarmist stories. Yet maybe our present situation makes this too Utopian a vision. Maybe we are so consumed by the media’s presentation of our nation’s news that we are currently *incapable* of making this crucial distinction. For the average consumer unable to separate myth from reality, ignorance might just have to be bliss until we make fundamental changes to the way in which we are informed about our nation’s problems.

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