88 OPEN ESSAYS - A READER FOR STUDENTS OF COMPOSITION & RHETORIC



Sarah Wangler & Tina Ulrich
Northwestern Michigan College

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88 Open Essays - A Reader for Students of Composition & Rhetoric

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Licensing

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Introduction

This collection grew out of my work as a librarian with English instructors at Northwestern Michigan College as they struggled to adapt their composition courses to use Open Educational Resources in order to save their students the cost of an expensive commercial textbook. Composition textbooks include samples of writing that are copyrighted and cannot be printed or shared. This collection is intended to provide instructors with a wide variety of nonfiction examples of good writing that they can use to teach composition.

A smaller collection was my final project for the Creative Commons Librarian Certificate program which I completed in March of 2019.

These essays were collected from online magazines that offer their articles under Creative Commons licenses. A few are from individual authors who generously agreed to give their work an open license in order to share it for this collection.

Each essay has its own license (see Licenses and Permissions for details) but all essays can be shared, copied, printed, and distributed. We consciously created the collection as a Google Doc rather than as a PDF or Word document so that it can be easily shared, linked to, copied, downloaded, and edited without the use of proprietary programs. We envision instructors choosing the essays they want to use, renumbering them, and copying them into customized collections chosen especially for their students.

--Tina Ulrich

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- Thanks to Creative Commons for creating the infrastructure and guidance which made this collection possible.
- A special thank you to Linda González who midway through this project challenged us to include more voices from people of color which resulted in this collection becoming more diverse, more interesting, and more useful.

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Message to Instructors

We set out to create this anthology to provide a free and open resource to composition instructors and students, full of essays that could supplement OER rhetoric and writing texts that lacked readings. Over time, however, we came to see that this anthology, and its editors, subscribe to the notion, presented by Chimamanda Ngozi Adichie in her 2009 TED Talk, “The Danger of a Single Story” (included in this book), that “we reject the single story, when we realize that there is never a single story… we regain a kind of paradise.” That is, this anthology is designed to work for as many different rhetorical situations as college writing students might find themselves in.

All of the essays in this reader are versatile rhetorically and thematically; they’re impossible to pigeon-hole, and we wouldn’t want to. Instead, this anthology is set up alphabetically by author name. Each essay has a series of hashtags we think apply to the essay in some way. You can search for essays thematically that relate to topics like education, the environment, politics, health, heroes, etc.. You can also search for essays based on whether we see them as displaying composition concepts like analysis, synthesis, and research. You can search for essays that are based on shared values, essays that rely heavily on ethos, logos, or pathos, essays that are very kairos-dependent, and even essays that are scholarly.

Complete list of hashtags

#advice #analysis #argument #artsandculture #automotive #business #causalargument #civilrights #cognitivebias #currentevents #descriptive #disinformation #environment #ethos #finances #generations #global #health #heroes #intellectualproperty #kairos #language #logos #millennials #nature #pathos #politics #proposalargument #reportinginformation #research #review #scholarly #science #selfdiscovery #sharedvalues #systemanalysis #technology #writinglife

Thank you for considering and using this book, and please feel free to reach out to us if you have questions or suggestions for future editions.

--Sarah Wangler

Message to Students

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1: The Danger of a Single Story (Adichie)

By Chimamanda Ngozi Adichie



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I'm a storyteller. And I would like to tell you a few personal stories about what I like to call "the danger of the single story." I grew up on a university campus in eastern Nigeria. My mother says that I started reading at the age of two, although I think four is probably close to the truth. So I was an early reader, and what I read were British and American children's books.

I was also an early writer, and when I began to write, at about the age of seven, stories in pencil with crayon illustrations that my poor mother was obligated to read, I wrote exactly the kinds of stories I was reading: All my characters were white and blue-eyed, they played in the snow, they ate apples, and they talked a lot about the weather, how lovely it was that the sun had come out.

Now, this despite the fact that I lived in Nigeria. I had never been outside Nigeria. We didn't have snow, we ate mangoes, and we never talked about the weather, because there was no need to.

My characters also drank a lot of ginger beer, because the characters in the British books I read drank ginger beer. Never mind that I had no idea what ginger beer was.

And for many years afterwards, I would have a desperate desire to taste ginger beer. But that is another story.

What this demonstrates, I think, is how impressionable and vulnerable we are in the face of a story, particularly as children. Because all I had read were books in which characters were foreign, I had become convinced that books by their very nature had to have foreigners in them and had to be about things with which I could not personally identify. Now, things changed when I discovered African books. There weren't many of them available, and they weren't quite as easy to find as the foreign books.

But because of writers like Chinua Achebe and Camara Laye, I went through a mental shift in my perception of literature. I realized that people like me, girls with skin the color of chocolate, whose kinky hair could not form ponytails, could also exist in literature. I started to write about things I recognized.

Now, I loved those American and British books I read. They stirred my imagination. They opened up new worlds for me. But the unintended consequence was that I did not know that people like me could exist in literature. So what the discovery of African writers did for me was this: It saved me from having a single story of what books are.

I come from a conventional, middle-class Nigerian family. My father was a professor. My mother was an administrator. And so we had, as was the norm, live-in domestic help, who would often come from nearby rural villages. So, the year I turned eight, we got a new house boy. His name was Fide. The only thing my mother told us about him was that his family was very poor. My mother sent yams and rice, and our old clothes, to his family. And when I didn't finish my dinner, my mother would say, "Finish your food! Don't you know? People like Fide's family have nothing." So I felt enormous pity for Fide's family.

Then one Saturday, we went to his village to visit, and his mother showed us a beautifully patterned basket made of dyed raffia that his brother had made. I was startled. It had not occurred to me that anybody in his family could actually make something. All I had

heard about them was how poor they were, so that it had become impossible for me to see them as anything else but poor. Their poverty was my single story of them.

Years later, I thought about this when I left Nigeria to go to university in the United States. I was 19. My American roommate was shocked by me. She asked where I had learned to speak English so well, and was confused when I said that Nigeria happened to have English as its official language. She asked if she could listen to what she called my "tribal music," and was consequently very disappointed when I produced my tape of Mariah Carey.

She assumed that I did not know how to use a stove.

What struck me was this: She had felt sorry for me even before she saw me. Her default position toward me, as an African, was a kind of patronizing, well-meaning pity. My roommate had a single story of Africa: a single story of catastrophe. In this single story, there was no possibility of Africans being similar to her in any way, no possibility of feelings more complex than pity, no possibility of a connection as human equals.

I must say that before I went to the U.S., I didn't consciously identify as African. But in the U.S., whenever Africa came up, people turned to me. Never mind that I knew nothing about places like Namibia. But I did come to embrace this new identity, and in many ways I think of myself now as African. Although I still get quite irritable when Africa is referred to as a country, the most recent example being my otherwise wonderful flight from Lagos two days ago, in which there was an announcement on the Virgin flight about the charity work in "India, Africa and other countries."

So, after I had spent some years in the U.S. as an African, I began to understand my roommate's response to me. If I had not grown up in Nigeria, and if all I knew about Africa were from popular images, I too would think that Africa was a place of beautiful landscapes, beautiful animals, and incomprehensible people, fighting senseless wars, dying of poverty and AIDS, unable to speak for themselves and waiting to be saved by a kind, white foreigner. I would see Africans in the same way that I, as a child, had seen Fide's family.

This single story of Africa ultimately comes, I think, from Western literature. Now, here is a quote from the writing of a London merchant called John Lok, who sailed to west Africa in 1561 and kept a fascinating account of his voyage. After referring to the black Africans as "beasts who have no houses," he writes, "They are also people without heads, having their mouth and eyes in their breasts."

Now, I've laughed every time I've read this. And one must admire the imagination of John Lok. But what is important about his writing is that it represents the beginning of a tradition of telling African stories in the West: A tradition of Sub-Saharan Africa as a place of negatives, of difference, of darkness, of people who, in the words of the wonderful poet Rudyard Kipling, are "half devil, half child."

And so, I began to realize that my American roommate must have throughout her life seen and heard different versions of this single story, as had a professor, who once told me that my novel was not "authentically African." Now, I was quite willing to contend that there were a number of things wrong with the novel, that it had failed in a number of places, but I had not quite imagined that it had failed at achieving something called African authenticity. In fact, I did not know what African authenticity was. The professor told me that my characters were too much like him, an educated and middle-class man. My characters drove cars. They were not starving. Therefore they were not authentically African.

But I must quickly add that I too am just as guilty in the question of the single story. A few years ago, I visited Mexico from the U.S. The political climate in the U.S. at the time was tense, and there were debates going on about immigration. And, as often happens in America, immigration became synonymous with Mexicans. There were endless stories of Mexicans as people who were fleecing the healthcare system, sneaking across the border, being arrested at the border, that sort of thing.

I remember walking around on my first day in Guadalajara, watching the people going to work, rolling up tortillas in the marketplace, smoking, laughing. I remember first feeling slight surprise. And then, I was overwhelmed with shame. I realized that I had been so immersed in the media coverage of Mexicans that they had become one thing in my mind, the abject immigrant. I had bought into the single story of Mexicans and I could not have been more ashamed of myself.

So that is how to create a single story, show a people as one thing, as only one thing, over and over again, and that is what they become.

It is impossible to talk about the single story without talking about power. There is a word, an Igbo word, that I think about whenever I think about the power structures of the world, and it is "nkali." It's a noun that loosely translates to "to be greater than another." Like our economic and political worlds, stories too are defined by the principle of nkali: How they are told, who tells them, when they're told, how many stories are told, are really dependent on power.

Power is the ability not just to tell the story of another person, but to make it the definitive story of that person. The Palestinian poet Mourid Barghouti writes that if you want to dispossess a people, the simplest way to do it is to tell their story and to start with, "secondly." Start the story with the arrows of the Native Americans, and not with the arrival of the British, and you have an entirely different story. Start the story with the failure of the African state, and not with the colonial creation of the African state, and you have an entirely different story.

I recently spoke at a university where a student told me that it was such a shame that Nigerian men were physical abusers like the father character in my novel. I told him that I had just read a novel called "American Psycho" --

-- and that it was such a shame that young Americans were serial murderers.

Now, obviously I said this in a fit of mild irritation.

But it would never have occurred to me to think that just because I had read a novel in which a character was a serial killer that he was somehow representative of all Americans. This is not because I am a better person than that student, but because of America's cultural and economic power, I had many stories of America. I had read Tyler and Updike and Steinbeck and Gaitskill. I did not have a single story of America.

When I learned, some years ago, that writers were expected to have had really unhappy childhoods to be successful, I began to think about how I could invent horrible things my parents had done to me.

But the truth is that I had a very happy childhood, full of laughter and love, in a very close-knit family.

But I also had grandfathers who died in refugee camps. My cousin Polle died because he could not get adequate healthcare. One of my closest friends, Okoloma, died in a plane crash because our fire trucks did not have water. I grew up under repressive military governments that devalued education, so that sometimes, my parents were not paid their salaries. And so, as a child, I saw jam disappear from the breakfast table, then margarine disappeared, then bread became too expensive, then milk became rationed. And most of all, a kind of normalized political fear invaded our lives.

All of these stories make me who I am. But to insist on only these negative stories is to flatten my experience and to overlook the many other stories that formed me. The single story creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete. They make one story become the only story.

Of course, Africa is a continent full of catastrophes: There are immense ones, such as the horrific rapes in Congo and depressing ones, such as the fact that 5,000 people apply for one job vacancy in Nigeria. But there are other stories that are not about catastrophe, and it is very important, it is just as important, to talk about them.

I've always felt that it is impossible to engage properly with a place or a person without engaging with all of the stories of that place and that person. The consequence of the single story is this: It robs people of dignity. It makes our recognition of our equal humanity difficult. It emphasizes how we are different rather than how we are similar.

So what if before my Mexican trip, I had followed the immigration debate from both sides, the U.S. and the Mexican? What if my mother had told us that Fide's family was poor and hardworking? What if we had an African television network that broadcast diverse African stories all over the world? What the Nigerian writer Chinua Achebe calls "a balance of stories."

What if my roommate knew about my Nigerian publisher, Muhtar Bakare, a remarkable man who left his job in a bank to follow his dream and start a publishing house? Now, the conventional wisdom was that Nigerians don't read literature. He disagreed. He felt that people who could read, would read, if you made literature affordable and available to them.

Shortly after he published my first novel, I went to a TV station in Lagos to do an interview, and a woman who worked there as a messenger came up to me and said, "I really liked your novel. I didn't like the ending. Now, you must write a sequel, and this is what will happen ..."

And she went on to tell me what to write in the sequel. I was not only charmed, I was very moved. Here was a woman, part of the ordinary masses of Nigerians, who were not supposed to be readers. She had not only read the book, but she had taken ownership of it and felt justified in telling me what to write in the sequel.

Now, what if my roommate knew about my friend Funmi Iyanda, a fearless woman who hosts a TV show in Lagos, and is determined to tell the stories that we prefer to forget? What if my roommate knew about the heart procedure that was performed in the Lagos hospital last week? What if my roommate knew about contemporary Nigerian music, talented people singing in English and Pidgin, and Igbo and Yoruba and Ijo, mixing influences from Jay-Z to Fela to Bob Marley to their grandfathers.

What if my roommate knew about the female lawyer who recently went to court in Nigeria to challenge a ridiculous law that required women to get their husband's consent before renewing their passports? What if my roommate knew about Nollywood, full of innovative people making films despite great technical odds, films so popular that they really are the best example of Nigerians consuming what they produce? What if my roommate knew about my wonderfully ambitious hair braider, who has just started her own business selling hair extensions? Or about the millions of other Nigerians who start businesses and sometimes fail, but continue to nurse ambition?

Every time I am home I am confronted with the usual sources of irritation for most Nigerians: our failed infrastructure, our failed government, but also by the incredible resilience of people who thrive despite the government, rather than because of it. I teach writing workshops in Lagos every summer, and it is amazing to me how many people apply, how many people are eager to write, to tell stories.

My Nigerian publisher and I have just started a non-profit called Farafina Trust, and we have big dreams of building libraries and refurbishing libraries that already exist and providing books for state schools that don't have anything in their libraries, and also of organizing lots and lots of workshops, in reading and writing, for all the people who are eager to tell our many stories.

Stories matter. Many stories matter. Stories have been used to dispossess and to malign, but stories can also be used to empower and to humanize. Stories can break the dignity of a people, but stories can also repair that broken dignity.

The American writer Alice Walker wrote this about her Southern relatives who had moved to the North. She introduced them to a book about the Southern life that they had left behind. "They sat around, reading the book themselves, listening to me read the book, and a kind of paradise was regained."

I would like to end with this thought: That when we reject the single story, when we realize that there is never a single story about any place, we regain a kind of paradise.

Thank you.

Chimamanda Ngozi Adichie grew up in Nigeria.

She is the author of the novels *Purple Hibiscus*, *Half of a Yellow Sun*,and *Americanah*, which won the National Book Critics Circle Award and was named one of The New York Times Top Ten Best Books of 2013. Her 2009 TED Talk, The Danger of A Single Story, is now one of the most-viewed TED Talks of all time.

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2: The Story We Tell about Millennials — and Who We Leave Out (Allen)

By Reniqua Allen



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So on the surface, Troy is the kind of millennial that think pieces are made of. He's arrogant, self-centered and convinced that he is smarter than people give him credit for. His favorite topics of conversation are girls, sneakers and cars -- not a surprise for someone who was a teenager just a few years ago. But Troy's mannerisms -- they reveal the patterns of someone who is scared, troubled and unsure of the future.

Now Troy also embodies the many positive qualities his generation is known for. An entrepreneurial spirit, an independent streak and a dedication to his parents. He believes in hard work and has tried gigs in both the licit and underground economies, but he hasn't had any luck and is just trying to find his way and still dances between both worlds.

When I met Troy a few years ago, he had been employed as a golf caddy at a local country club, carrying bags for rich men and women who often never even acknowledged his existence. Before that, he sold sneakers on Facebook. He even tried selling candy bars and water bottles, but he wasn't making enough money to help his parents out or save up for a car any time soon. So Troy saw how hard his immigrant mother from Jamaica worked and how little she got back in return, and he vowed -- Troy vowed to take a different path. So he ended up selling drugs. And then he got caught, and right now, he's trying to figure out his next steps.

In a country where money equals power, quick money, at least for a while, gives young men and women like him a sense of control over their lives, though he said he mainly did it because he wanted stability. "I wanted a good life," he told me. "I got greedy and I got caught." Yet the amazing thing about Troy is that he still believes in the American dream. He still believes that with hard work, despite being arrested, that he can move on up. Now, I don't know if Troy's dreams came true. He disappeared from the program for troubled youth that he was involved in and slipped through the cracks, but on that day that we spoke, I could tell that more than anything, Troy was happy that someone listened to his dreams and asked him about his future.

So I think about Troy and his optimism when I think of the reality that so many young, black millennials face when it comes to realizing their dreams. I think about all the challenges that so many black millennials have to endure in a world that tells them they can be anything they want to be if they work hard, but actually doesn't sit down to listen to their dreams or hear stories about their struggle. And we really need to listen to this generation if we hope to have a healthy and civil society going forward, because millennials of color, they make up a fair chunk of the US and the world population.

Now when we talk about millennials, a group that is often labeled as entitled, lazy, overeducated, noncommittal and narcissistic, the conversations often swirl around avocado toast, overpriced lattes and fancy jobs abroad -- you probably have heard all these things before. But millennials are not a monolith. Actress Lena Dunham may be the media's representation of this generation, but Troy and other voices like his are also part of the story. In fact, millennials are the largest and most diverse adult population in this country. 44 percent of all American millennials are nonwhite, but often, you wouldn't even know it at all.

Now sure, there are similarities within this population born between 1981 and 1996. Perhaps many of us do love avocado toast and lattes -- I know I do, right? But there are also extreme differences, often between millennials of color and white millennials. In fact, all too often, it seems as though we're virtually living in different worlds.

Now black millennials, a group that I have researched for a book I recently wrote, are the perfect example of the blind spot that we have when it comes to this group. For example, we have lower rates of homeownership, we have higher student debt, we get ID'd

more at voter registration booths, we are incarcerated at higher rates ... we make less money, we have higher numbers of unemployment -- even when we do go to college, I should say -- and we get married at lower rates. And honestly, that's really just the beginning.

Now, none of these struggles are particularly new, right? Young black people in America have been fighting, really fighting hard to get their stories told for centuries. After the Civil War in the 1800s, Reconstruction failed to deliver the equality that the end of slavery should have heralded, so young people moved to the North and the West to escape discriminatory Jim Crow policies. Then, as segregation raged in much of the country, young black people helped spearhead civil rights campaigns in the 1950s and 1960s. After that, some people embraced black power and then became Black Panthers and then the next generation, they turned to hip-hop to make sure their voices were heard. And then Barack Obama, hopeful that he, too, may bring about change. And when that failed, when we realized we were still brutalized and battered, we had to let the world know that our lives still mattered. Now, when technology allows more video of our pain and struggle to be broadcast to the world, we wonder, like, what is next?

Our country feels more polarized than ever, yet we are still being told to pull up our pants, be respectable, be less angry, smile more and work harder. Even the attitudes of millennials themselves are overdue for an update. Research done by the Washington Post in 2015 about this supposedly "woke" group found that 31 percent of white millennials think that blacks are lazier than whites, and 23 percent say they're not as intelligent. These are, like, surprising things to me, and shocking. And these responses are not that much different than generations in the past, and it shows that unfortunately, this generation is repeating the same old stereotypes and tropes of the past. Now, a study conducted by David Binder Research and MTV in 2014 -- it found that 84 percent of young millennials were taught by their families that everyone should be equal. This is a really great thing, a really positive step. But only 37 percent in that group actually talked about race with their families.

So I could understand why things may be confusing to some. There are definitely black millennials who are succeeding. Marvel's "Black Panther," directed by black millennial Ryan Coogler and showcasing many others, broke all sorts of records. There's a crop of television shows by creatives like Donald Glover, Lena Waithe and Issa Rae. Beyoncé is, like, the queen, right? She is, like, everything. Young black authors are winning awards, Serena Williams is still dominating on the tennis court despite all her haters, and there's a crop of new politicians and activists running for office. So I don't want to, like, kill these moments of black joy that I too revel in, but I want to make it clear that these wins are too few and far between for a people that's been here for over 400 years. Like, that's insane, right?

And most people still don't really understand the full picture, right? Our stories are still misunderstood, our bodies are still taken advantage of, and our voices? Our voices are silenced in a world that still shows little concern for our everyday struggles. So our stories need to be told in a multitude of ways by a range of voices talking about diverse and nuanced topics, and they really need to be listened to.

And it is not just here in America, right? It's all around the world. Millennials make up 27 percent of the world's population. That's around two billion people. And with countries like India, China, Indonesia and Brazil, along with the United States, accounting for 50 percent of the world's millennials, it's clear that the white, often male, heterosexual narrative of the millennial is only telling half the story. Now, there's many people trying to broaden the palette. They're fighting to get their stories told and bust the millennial stereotype. Whether it's students in South Africa protesting statues of Cecil Rhodes, Michaela Coel making us laugh from the UK, or Uche Eze, who's framing views about Nigerian life, online. But I want to make it clear -- I want to make it really clear to everyone that just because things look more equal than they did in the 20th century, doesn't mean that things are equitable at all. It doesn't mean our experiences are equitable, and it certainly doesn't mean that a post-racial society, that thing that we talked about so much, ever became close to being a reality.

I think of Joelle, a middle-class 20-something who did everything the "right way," but she couldn't go to her dream school, because it was simply too expensive. Or Jalessa, who knows she can't be mediocre at her job the same way that her white peers can. Or Trina, who knows that people judge her unconventional family choices in a different way than if she were a white woman. Or actor AB, who knows that the roles he takes and gets in Hollywood are different because of his skin color. And then there's Simon. So Simon, by all means, would be an example of someone who's made it. He's a CFO at a tech company in San Francisco, he has a degree from MIT and he's worked at some of the hottest tech companies in the world.

But when I asked Simon if he had achieved the American dream, it took him a while to respond. While acknowledging that he had a really comfortable life, he admitted that under different circumstances, he might have chosen a different path. Simon really loves

photography, but that was never a real option for him. "My parents weren't able to subsidize me through that sort of thing," Simon said. "Maybe that's something my children could do." So it's these kinds of stories -- the quieter, more subtle ones -- that reveal the often unique and untold stories of black millennials that show how even dreaming may differ between communities.

So we really need to listen and hear the stories of this generation, now more than ever, as the baby boomers age and millennials come to prominence. We can talk all we want to about pickling businesses in Brooklyn or avocado toast, but leaving out the stories and the voices of black millennials, large swaths of the population -- it will only increase divisions. So stories of black millennials, brown millennials and all millennials of color really need to be told, and they also need to be listened to. We'd be a far better-off country and world.

Thank you.

Reniqua Allen is a journalist who produces and writes for various outlets on issues of race, opportunity, politics and popular culture. She is the author of *It Was All a Dream: A New Generation Confronts the Broken Promise to Black America.* This essay is a transcript of her TED Talk.

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3: How the New “Aladdin” Stacks Up Against a Century of Hollywood Stereotyping (Alsultany)

By Evelyn Alsultany



"Aladdin & the Genie of the Lamp" by Brian Neudorff is licensed under CC BY 4.0

Though critically acclaimed and widely beloved, the 1992 animated feature “Aladdin” had some serious issues with stereotyping.

Disney wanted to avoid repeating these same problems in the live action version of “Aladdin,” which came out on May 24. So they sought advice from a Community Advisory Council comprised of Middle Eastern, South Asian and Muslim scholars, activists and creatives. I was asked to be a part of the group because of my expertise on representations of Arabs and Muslims in the U.S. media.

The fact that a major studio wants to hear from the community reflects Hollywood’s growing commitment to diversity.

But while the live action “Aladdin” does succeed in rectifying some aspects of Hollywood’s long history of stereotyping and whitewashing Middle Easterners, it still leaves much to be desired.

Magical genies and lecherous sheikhs

In his seminal 1978 book “Orientalism,” literature professor Edward Said argued that Western cultures historically stereotyped the Middle East to justify exerting control over it.



A movie poster for the 1921 film ‘The Sheik.’ Public Domain; Library of Congress

Orientalism in Hollywood has a long history. Early Hollywood films such as “The Sheik” and “Arabian Nights” portrayed the Middle East as a monolithic fantasy land – a magical desert filled with genies, flying carpets and rich men living in opulent palaces with their harem girls.

While these depictions were arguably silly and harmless, they flattened the differences among Middle Eastern cultures, while portraying the region as backwards and in need of civilizing by the West.

Then came a series of Middle Eastern conflicts and wars: the Arab-Israeli war of 1967, the Arab Oil Embargo of 1973, the Iran Hostage Crisis and the Gulf War. In American media, the exotic Middle East faded; replacing it were depictions of violence and ominous terrorists.

As media scholar Jack G. Shaheen observed, hundreds of Hollywood films over the last 50 years have linked Islam with holy war and terrorism, while depicting Muslims as either "hostile alien intruders" or "lecherous, oily sheikhs intent on using nuclear weapons."

Cringeworthy moments in the original 'Aladdin'

Against this backdrop, the Orientalism of Disney's 1992 animated "Aladdin" wasn't all that surprising.

The opening song lyrics described a land "Where they cut off your ear if they don't like your face" and declared, "It's barbaric, but hey, it's home!"

When the American Arab Anti-Discrimination Committee protested the lyrics, Disney removed the reference to cutting off ears in the home video version but left in the descriptor "barbaric."

Then there were the ways the characters were depicted. As many have noted, the bad Arabs are ugly and have foreign accents while the good Arabs – Aladdin and Jasmine – possess European features and white American accents.



In the animated 'Aladdin,' the good Arabs are drawn with Caucasian features, while the bad guys speak with foreign accents. "El malo maloso de Aladdin" by MissRagamuffyn is licensed under CC BY 4.0

The film also continued the tradition of erasing distinctions between Middle Eastern cultures. For example, Jasmine, who is supposed to be from Agrabah – originally Baghdad but fictionalized because of the Gulf War in 1991 – has an Indian-named tiger, Rajah.

Questionable progress

After 9/11, a spate of films emerged that rehashed many of the old terrorist tropes. But surprisingly, some positive representations of Middle Eastern and Muslim characters emerged.

In 2012, I published my book "Arabs and Muslims in the Media: Race and Representation after 9/11." In it, I detail the strategies that writers and producers used after 9/11 to offset stereotyping.

The most common one involved including a patriotic Middle Eastern or Muslim American to counterbalance depictions as terrorists. In the TV drama, "Homeland," for example, Fara Sherazi, an Iranian American Muslim CIA analyst, is killed by a Muslim terrorist, showing that "good" Muslim Americans are willing to die for the United States.

But this didn't change the fact that Middle Easterners and Muslims were, by and large, portrayed as threats to the West. Adding a 'good' Middle Eastern character doesn't do much to upend stereotypes when the vast majority are still appearing in stories about terrorism.

Another strategy also emerged: reverting to old Orientalist tropes of the exotic, romantic Middle East. Maybe writers and producers assumed that depicting the Middle East as exotic would be an improvement over associating it with terrorism.

The 2004 film "Hidalgo," for example, tells the story of an American cowboy who travels to the Arabian desert in 1891 to participate in a horse race. In classic Orientalist fashion, he saves the rich sheik's daughter from the sheik's evil, power-hungry nephew.

The 2017 movie "Victoria and Abdul" depicts an unlikely friendship between Queen Victoria and her Indian-Muslim servant, Abdul Karim. While the film does critique the racism and Islamophobia of 19th-century England, it also infantilizes and exoticizes Abdul.

Nonetheless, some glaring problems persisted. Jake Gyllenhaal was cast in the lead role of "The Prince of Persia: The Sands of Time" (2010), while Christian Bale and Joel Edgerton were cast in "Exodus: Gods and Kings" (2014) as Egyptian characters.

Why were white actors assuming these roles?

When challenged, producer Ridley Scott infamously said that he can't "say that my lead actor is Mohammad so-and-so from such-and-such. I'm just not going to get it financed."

Does the new 'Aladdin' make strides?

Perhaps in a desire to avoid the mistakes of the past, Disney executives sought advice from cultural consultants like me.

There's certainly some notable progress made in the live-action "Aladdin."

Egyptian Canadian actor Mena Massoud plays Aladdin. Given the dearth of people of Middle Eastern descent in lead roles, the significance of casting Massoud cannot be overstated. And despite the fact that some white extras had their skin darkened during filming, Disney did cast actors of Middle Eastern descent in most of the main roles.

Casting Indian British actress Naomi Scott as Jasmine was controversial; many hoped to see an Arab or Middle Eastern actress in this role and wondered whether casting someone of Indian descent would simply reinforce notions of "Oriental" interchangeability. Nonetheless, the film does note that Jasmine's mother is from another land.

The biggest problem with the 2019 "Aladdin" is that it perpetuates the trend of reverting to magical Orientalism – as if that's a noteworthy improvement over terrorist portrayals. In truth, it's not exactly a courageous move to trade explicit racism for clichéd exoticism.

To be fair, "Aladdin" distinguishes itself from "Hidalgo" and other Orientalist films of this trend by not revolving around the experiences of a white protagonist.

However, once again, characters with American accents are the "good guys" while those with non-American accents are mostly, but not entirely, "bad." And audiences today will be as hard pressed as those in 1992 – or 1922, for that matter – to identify any distinct Middle Eastern cultures beyond that of an overgeneralized "East." Belly dancing and Bollywood dancing, turbans and keffiyehs, Iranian and Arab accents all appear in the film interchangeably.

Just as making positive tweaks within a story about terrorism doesn't accomplish much, so does making positive tweaks within a story about the exotic East. Diversifying representations requires moving beyond these tired tropes and expanding the kinds of stories that are told.

"Aladdin," of course, is a fantastical tale, so questions about representational accuracy might seem overblown. It is also a really fun movie in which Mena Massoud, Naomi Scott and Will Smith all shine in their roles. But over the last century, Hollywood has produced over 900 films that stereotype Arabs and Muslims – a relentless drumbeat of stereotypes that influences public opinion and policies.

If there were 900 films that didn't portray Arabs, Iranians and Muslims as terrorists or revert to old Orientalist tropes, then films like "Aladdin" could be "just entertainment."

Until then, we'll just have to wait for the genie to let more nuanced and diverse portrayals out of the lamp.

Evelyn Alsultany is an Associate Professor of American Studies and Ethnicity, University of Southern California – Dornsife College of Letters, Arts and Sciences and a leading expert on the history of representations of Arabs and Muslims in the U.S. media and on forms of anti-Arab and anti-Muslim racism. Her essay originally appeared in The Conversation.



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4: Mushrooms: “Nature’s Greatest Decomposers” (Anderson)

By Deonna Anderson



In a process called mycoremediation, mushrooms have the ability to remove chemicals from soil. "DSC_0385" by k'allampero is licensed under CC BY-NC-SA 2.0

At the Española Healing Foods Oasis in Española, New Mexico, Pueblo dryland farming techniques are on display in a downtown public park. The garden, designed and planted by the Indigenous-led organization Tewa Women United, demonstrates how food and medicine can be grown in an environment that receives just 11 inches of rain per year. And at a nearby community garden, which the organization helped operate in the past, Pueblo members and locals grow fruit and vegetables.

The garden projects are part of the organization’s efforts to grow foods and herbs for people in the Eight Northern Indian Pueblos, as well as locals in the wider Española Valley, using traditional methods. But there’s a problem: The soils at these gardens are being exposed to contaminants. Tewa Women United hopes oyster mushrooms will clean them up.

At the community garden, a 2015 study found levels of contaminants high enough to threaten human health. Similarly toxic levels of these or other contaminants were not found at the Foods Oasis, though petroleum from a nearby parking lot percolates into the soil there when it rains. So far, tests of petroleum at that site have shown levels within state standards, but Beata Tsosie-Peña of the Santa Clara Pueblo and program coordinator at Tewa Women United said that the organization’s standards are stricter than the state’s. People from local Pueblos consume food and herbs from the Oasis, she said.

Tsosie-Peña added that community elders experience disease, illness, and miscarriage as a result of pollution in the area.

“We’re not disconnected from our lifeways and rootedness in our land base, tradition, and culture,” she said, adding that “living off the land and having that intimate relationship ... does put us at risk for more exposure to contaminants.”

The problem is bigger than soil toxins at these gardens. At nearby Los Alamos National Laboratory, hexavalent chromium, a heavy metal and known carcinogen, is seeping into the water supply.

Hexavalent chromium is a byproduct of the lab’s work to design nuclear weapons. The Department of Energy lab at Los Alamos was established in 1943 as part of the Manhattan Project. This location was selected for its isolation. Yet Pueblo people lived there at the time and still inhabit the land.

The risk of toxic exposure in their community has led Tewa Women United to explore methods to clean up the soils. They’ve begun by experimenting with mushrooms at the Healing Foods Oasis and the nearby community garden site.

Mycologist Peter McCoy explains that in a process called mycoremediation, mushrooms have the ability to remove chemicals from soil—and heavy metals from water—through their mycelium.

“They’re sort of nature’s greatest decomposers, disassemblers, by far better than and more powerful than bacteria, animals, and plants,” McCoy said. “They break all kinds of stuff down.”

Mushrooms have helped remove petroleum from soil everywhere from Orleans, California, where they cleaned up a small motor-oil-and-diesel-fuel spill at a community center, to the Ecuadorian Amazon, where they're being used to clean up the largest land-based oil spill in history.

In April 2018, Tewa Women United buried bricks inoculated with oyster mushroom mycelium at the Foods Oasis and community garden.

While the organization doesn't have funding for formal scientific testing, it is seeking out money to run pilot studies on its own. They plan to check the soil later this spring to see whether the mycelium has been spreading underneath the surface.

"It has been proven already what the mycelium can do," Tsosie-Peña says, referring to other examples around the world. "So we are moving forward with inoculating all our garden sites as a proactive measure … but recognize the need to also have scientific backing [provided by] before and after sampling to gain support for widespread implementation."

The organization has also asked Los Alamos to explore mycroremediation as a method to clean up the hexavalent chromium on its property. Communities for Clean Water, a coalition of environmental and indigenous advocacy organizations including Tewa Women United, advocated in public testimony at a hearing in November that the laboratory use mycoremediation to clean up the heavy metals. The hearing was for a groundwater cleanup permit originally issued in 2015. That permit was issued to Los Alamos by the New Mexico Environment Department without a public hearing, but after the coalition pushed back, it granted the one in November. But in March, the hearing officer's report determined the permit would continue as originally issued in 2015, as "current water treatment methods are sufficient to meet and exceed the applicable groundwater and drinking water standards."

Tsosie-Peña said the decision was disappointing because most of the recommendations—including the use of mycoremediation—that came from more than six hours of public comments were not reflected in the report.

The New Mexico Environment Department Ground Water Quality Bureau says it can't consider mycoremediation in the proceedings related to this particular discharge permit. According to Bureau Chief Michelle Hunter, the activity that Los Alamos completes with this permit is just an intermediate cleanup action in which the lab is authorized to treat and release groundwater on its property.

Hunter explained that the remediation process will start after "all these interim measures have been implemented" and that a different bureau—the Hazardous Waste Bureau—will handle that process.

At that point, Los Alamos and the Hazardous Waste Bureau will choose the remediation technology.

Los Alamos has piloted a couple of remediation strategies, she said, including one that injected molasses into the water and another that used sodium dithionite. If the coalition wants mycoremediation to be considered, they'll have to advocate for it to get evaluated in the remediation process that the Hazardous Waste Bureau will lead.

For now, Tewa Women United is doing what it can to clean up soils at the community gardens and Foods Oasis and plans to bury more mushroom-inoculated bricks in the community garden sites soon.

Tsosie-Peña said her organization is also working with the Communities for Clean Water Coalition to secure resources and collaborators to implement two pilot projects. One is on Los Alamos property, and another is in local communities downwind from the lab.

She said that while the coalition didn't get their preferred outcome with the groundwater permit, she hopes they can advocate for mycoremediation in other, separate, work they are doing with Los Alamos on stormwater permitting.

"I think the mainstream view is that these places have been lost to us because they're contaminated," Tsosie-Peña said. "But to me, it's like you wouldn't just abandon your sick grandmother in the hospital to suffer alone.

"That's how we feel about these places. They're sick. They need healing. They need our love and attention more than ever."

Deonna Anderson is a Bay Area-based reporter and serves as the Surdna Reporting Fellow for YES! Magazine, where she reports on social issues and solutions having to do with housing, food, race, and equity. Her essay originally appeared in YES!

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5: Six Short Essays (Anderson)

By Karen Anderson



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Death of a Neighbor

I am scanning the obituaries in the local paper when I see the name of a neighbor, someone who lived not far from me. I didn't know she was ill, and I feel strangely empty and sad.

We weren't friends, really, but I knew her name and a little about her work and family. This is a small town, and if you live here long enough, you run into a lot of people. She and I said hello occasionally at the grocery store or library.

But while I gaze at her picture and read her obituary, I recall that I didn't like her. Which meant I would acknowledge her when we met but didn't stop to talk. Didn't make an effort to get better acquainted.

And when I try to remember *why* I didn't like her, I cannot think of a single reason. Whatever triggered my irritation was so insignificant, it has vanished. While the irritation remained. Now my sorrow about her death expands to include my own smallness, my petty grievances. I am ashamed to admit how these unexamined opinions linger—and limit my life.

Sometimes it's too late to make amends. I close the newspaper and sip my cold coffee. She was my neighbor and I never thought much about her until now. I can remember her jogging slowly down the street, her face flushed. A pretty woman.

Gradual Clearing

Under a gray sky, we load the canoe onto the truck, choosing to believe the forecast: "becoming partly sunny." But the gloomy weather suits my mood.

"You okay?" my husband asks.

"I feel sort of depressed," I say.

The wind is sharp as we push off into the Manistee River and I wish I'd worn long underwear. On this late fall day, the water is low but the colors are high. Red and orange and yellow, the oaks and maples stand along the bluffs, shining with their own light.



"Clearing" by Mike F. is licensed under CC BY-NC-ND 2.0

“Let’s stop on that island for coffee,” Dick says, and we sit on a birch log to open the thermos. I hold the steaming cup close to my face and munch a piece of molasses cookie.

“No sun yet,” I say.

“I’m still glad we came,” he says.

Back in the canoe, I tie my bonnet under my chin. Around the next bend I see a brilliant red maple leaning far out over the river—the river that will eventually claim its life but now reflects its beauty. I want to have the courage to lean out over my death, I think. Over my life. To risk believing I am valuable and I belong. Right here, right now.

It’s mostly cloudy when we end our trip four hours later. As I look up, searching for blue, I feel a pleasant ache in my shoulders.

“How are you doing?” my husband asks.

“Gradual clearing,” I say.

_____



"Lilac Bloom" by Breelynne is licensed under CC BY 4.0

Lilacs in Bloom

When I see lilacs in bloom, I have to stop. Sometimes it’s in the country where enormous old bushes grow beside abandoned barns. Sometimes it’s in my neighborhood alleys where they grow beside garages that used to be horse stables.

These orphan bushes that nobody waters or prunes are lavish with their gifts. And I stop what I'm doing to admire the rich colors—dark purple, pale violet, purest white. I lean into the moist clusters and inhale that honey lavender smell.

Now, it's true you can buy lilac bushes at a nursery and plant them in your back yard. I have done this myself and confess the results are disappointing. The branches spindly, the blossoms spare.

Lilacs, it seems, resist cultivation and do better in forgotten places with full sun and freedom. I admire this. They speak to me of something in myself that yearns to grow wild at the edges, to flourish untended and pour out my glory for one brief moment. Maybe someone will stop, maybe not.

If you pick lilacs, they will wilt in an hour. Better to lean into the living blossoms and bury your face in fragrance.

My Grandparents' House

When I can't sleep, I go back to my grandparents' house and open the front door. There was no vestibule so you walked right into the living room. The coat closet had a stained glass window in blue and gold and violet.

I know that place by heart and can still stand in each room and picture the furnishings: the Victorian couch, the console radio, the four-poster twin beds upstairs. As a child, I often stayed overnight and it was a refuge from the confusions of my own home—my mother's sadness, my father's rage. Before I went to sleep, Nanna sat on the edge of the bed in her long nightgown and we talked awhile. "Are you warm enough?" she'd ask.

Looking back, I realize my grandparents' house was modest in size but it seemed huge to me. Huge and calm and welcoming. In the living room, I sat beside Grandpa and listened to him read Longfellow's poem, *The Song of Hiawatha*. I liked the way the words made music.

In the dining room, our family gathered for special meals, using the good dishes from the big mahogany breakfront. Nanna always told the grandchildren, "Don't eat any more than you want." Which meant you could take an extra biscuit and not finish it.

It meant you had permission to be yourself, something I didn't feel anywhere else. Permission to sit on the floor of the coat closet in the dark and feel safe—watching the light come through the colored glass.

Rental

When I left my first marriage, I moved into a small rental house with my ten-year-old daughter. The floors creaked and the windows leaked and the oven door wouldn't close—but I loved the place. It felt cozy and funky and just the right size for my downsized life.

Then, after I'd lived there about six months, my landlord stopped by to tell me he had a buyer for the house. "But I like it here," I said, "and I'm in the middle of a divorce."

Dan and I sat on the grass in the back yard and talked awhile and finally he stood up. "I went through a divorce," he said. "I won't sell the house."

I stayed for five years, and figured out how to keep the oven door closed with a hanger and a rubber band. Also how to be a single mom, a single woman. I grappled with guilt and grief and unintended consequences—losing extended family, people taking sides. A roller-coaster, a slog.

And if something went wrong with the house, I called my landlord. When he had to retrieve my pantyhose from the bathtub drain, Dan laughed and said, "Not hard enough."

When the birds in the attic turned out to be a battery in the smoke detector, he said, "Not hard enough."

When a stray cat came to our back porch and my daughter wanted to keep it, he changed the rule about "No Pets."

After we moved out, Dan sold the house. I still drive by. There's a stroller out front these days and a pot of red geraniums.

Togetherness

The way my husband fixes his breakfast toast has begun to annoy me. “You could save time if you toasted the second two pieces while you’re buttering the first two,” I tell him.

“I’m not trying to save time,” he says.

He also uses too much jam. Who needs so much jam? And who is this *shrew* inside my head? Hearing her familiar voice, I know it is definitely time. In fact, it is past time for my husband and me to enjoy a few days apart.

Marriage is the hardest relationship in the world, I think. Being a parent isn’t easy but the whole goal is to separate, for the child to grow up and leave.

The goal of a marriage is to grow up and *stay*. But sometimes the secret of staying is leaving for a little while. That’s why I’m alert to the toast factor. When I start feeling annoyed by the way my husband eats his breakfast—or breathes in and out—I know it’s time for some space.

Fortunately, he is planning a trip. And almost as soon as he is out of the driveway, I can feel myself falling in love again. A feeling I want to enjoy by myself for a few days.

Karen Anderson is a writer who lives in Traverse City, Michigan. Her 30-year writing career has included journalism and marketing. These essays, which she wrote and read on her weekly feature on Interlochen Public Radio, are published in her collection, *Gradual Clearing: Weather Reports from the Heart,* Arbutus Press, 2017.

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6: Tools and Tasks (Anonymous)

Anonymous



"Andrews clutch job" by *Bob n Renee* is licensed under *CC BY 2.0*

My town is losing a car repair shop. The gas station at the end of Main Street will continue to sell gas, but the garage attached to it is going to close. The mechanic, who has been there for twenty-five years, will have to find work elsewhere. He had a loyal following; a friend told me he once opened early on a Sunday to fix her tire.

The garage isn't closing for lack of customers. Nor is it closing because of taxes, that ritual demon of the political Right. A major reason, the owner said, is technology, and the way manufacturers are making cars so complex. To fix them requires sophisticated computers that a small shop can't afford. "There isn't a car from the '70s or '80s that we can't work on," the owner told our local weekly. "But we're not in the position to make the investment in all the electronics and computers. To make that transition would be cost prohibitive."

He's not the only one. Independent repair shops are going out of business all over the country. In California, more than half the gas stations had repair shops as recently as ten years ago. Now about 15% of them do. Part of that is because oil companies are forcing out independent owners and taking over the retail end themselves. (Have you noticed that prices are rising?) But partly too it's because the local shops can't repair the new computerized cars.

This is a trend that bears more scrutiny than it has received. It goes to two of the central narratives of our economy — the conventional version at least. One is that virtue and hard work prevail, which in this case is not the case. Hard work and virtue have succumbed to corporate contrivance. You are shocked?

The other narrative is the one that casts technology as Savior. The word itself has become practically a synonym for "future." Computers are portrayed as the ultimate instruments of democracy. They will put knowledge — and therefore power — on every desktop. They will cause hierarchies and bureaucracies to crumble. Every man and woman will be a king. "While the Industrial Revolution herded people into gigantic social institutions — big corporations, big unions, big governments," wrote Newt Gingrich in his book *To Renew America*, "the Information Revolution is breaking up these giants and leading us back to something that is — strangely enough — much more like de Tocqueville's 1830s America."

Brother Newton is a busy man, and maybe he just didn't have time to consider the complications. For one thing, there's the matter of agency. As David Noble observed in his book *Forces of Production*, technology is not an impersonal force. It does not have an inevitable evolutionary path. Technology is a projection of those who make it, including corporate interests and proprietary claims. This can lead to a lot of trouble.

Noble looks in particular at the machine tool industry, and how it evolved to enable top-down management control instead of autonomy on the shop floor. The technology could have gone either way; it was the corporate managers who made the call. Computers have followed a similar pattern. Potentially they can liberate the desktop, and sometimes do. But in practice they often do the opposite. Now the boss can monitor your every keystroke. At home corporations can plant little spies on your machine. The Feds can track your personal e-mail exchanges. You think the Department of Homeland Security might have a computer or two?

And so with the technology built into cars. It would seem possible to design it in a way that made cars simpler and less expensive to repair. I don't really know, but it does seem reasonable. The problem is, would it fit the business plans of the corporations that make the cars? Why would General Motors want to put more capacity and control into the hands of independent garages like the one in my town? Wouldn't it want to lock a customer into its own repair and dealer network, much the way computer printer manufacturers try to lock us into their expensive cartridges?

That seems to be what's happening. Car repair used to be a knowledge commons, shared in driveways, urban curbsides, and voc. ed. classes. Get yourself some tools and you were ready to go for most routine repairs. The machines were open to the eye. There was little if any secret and proprietary code. Repair manuals could help with the more technical issues, but you'd probably go to a shop for those anyway.

Today, by contrast, high-tech is turning cars into black boxes, a little like Microsoft Windows. Mechanics need fancy diagnostic tools, and the auto companies know that independent shops can't afford them, let alone back yard tinkerers. That leaves dealers. I'm sure that some are good and honorable. But if someone out there has found dealers more reliable and economical than independent repair shops, would they please let us know? Last time I checked, the dealer would charge about 30%-50% more for repairs to my car; and they usually manage to find a few extra things to fix. (I'll spare you my dealer stories, today at least.)

This is not the Every-One-Of-Us-A-King scenario of which Mr. Gingrich waxed so enthusiastic. It looks more like one of his "gigantic social institutions" using technology and intellectual property to reassert a claim. Like the common fields and forests of 18th century England, the knowledge commons of car repair is being fenced and locked. The same is happening in other realms of the Information Age, such as genetically modified seeds. (Technology that serves an urgent need such as fuel economy might get a pass, provided it is designed to be as open as possible.)

People like Newt — and there are lots of them — don't consider how proprietary interest can warp the vectors of technology, and turn it to its own ends. They ignore also the ambiguous relationship between technology and well-being. More sophisticated and complex does not always mean better. To the contrary, as technology becomes more "advanced," we who rely on it can become more helpless and dumb. My father took apart his first Model T — or maybe it was a Model A — and put it back together again. He took apart radios and toasters and fans and fixed them too. My son won't be able to do any of that, even if he is so inclined.

Is this progress or regress? Does progress reside in the thing or in the user of the thing? Which is more "advanced": the technology that enables the user to fix the car herself, or the one that renders us helpless in the face of the black box? My wife grew up in a Third World country, and her father built their bamboo house with rusty old hand tools that could have been left over from a garage sale in the U.S. He started with a stand of trees and finished with a house. By contrast, when we moved into our current residence we just unloaded a truck. Who is more advanced, us or him? Which child is more advanced: the one who can make up games with a ball on a city sidewalk or the one that needs expensive video games to be amused?

I wonder if it is entirely coincidental that as technology has "progressed" in the industrial and post industrial world, those subject to it have become more disconnected and depressed and less able to control their own impulses and moods. (Then we become yet more dependent on technology — in the form of pharmaceutical concoctions — for relief.) One evening after dinner my wife looked up from the paper and said, "What's this word I keep seeing here — *depression*?" As a child she had no electricity, no television. Is there a connection?

I am not suggesting that we all go back to bamboo huts, though a few weeks might not be the worst thing now and then. I am just questioning the techno-romantics who think technology by its very nature is enlarging and fulfilling. Sometimes it does the opposite, and hollows us out. Adam Smith actually had a glimmer of this, regarding the effect of the division of labor upon the workers involved. As each task becomes more specialized, Smith noted, it engages less of the person. Narrow work leads to human atrophy; it can make people "as stupid and ignorant as it is possible for a human creature to become." (Smith had a brooding cautionary side that is lacking among his acolytes today.)

What's happening now is bigger and more endemic. It affects people not just as employees but as "consumers" even more (and consumption is the real work of our "economy" to begin with.) This is a big topic, obviously, but a lot goes back to who is devising the technology and why. Open technologies and open systems are less inclined to the unvirtuous cycle than closed ones are. There's a built-in social dimension that engages us at more levels, as producers as well as just consumers. Open systems evolve to serve the needs of users rather than of those who seek to use the users for their own ends. Compare, for example, traditional fairy tales with the kiddy entertainment today that has embedded products such as candy bars and colas.

When someone finally writes the sequel to *The Wealth of Nations*, open systems and decentralized technologies will be, I think, a central theme. Perhaps a working title could be *From the Wealth of Nations to the Well-Being of the People Involved*.

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7: Jamaica Leads in Richard Branson-Backed Plan for a Caribbean Climate Revolution (Ashtine & Rogers)

By Masaō Ashtine & Tom Rogers

#science #environment #nature #politics #business #global #descriptive #currentevents #sharedvalues #reportinginformation #ethos #kairos #



Photo Credits: Adrian Creary_Studiocraft

Branson at a Climate-Smart Accelerator event. Adrian Creary/Studiocraft, CC BY

After hurricanes Irma and Maria tore through the Caribbean in 2017, devastating dozens of islands – including billionaire Richard Branson's private isle, Necker Island – Branson called for a "Caribbean Marshall Plan."

He wanted world powers and global financial institutions to unite to protect the Caribbean against the effects of climate change.

That hasn't happened. So Branson and his government partners from 27 Caribbean countries hope that his celebrity, connections and billions will prod local politicians and the financial community to act.

In August 2018, at a star-studded event at the University of the West Indies in Mona, Jamaica, Branson helped to launch the Caribbean Climate-Smart Accelerator, a US$1 billion effort to kickstart a green energy revolution in the region.

Its aims include convincing global financial institutions to fund ambitious climate mitigation efforts in the Caribbean, upgrading critical infrastructure across this vulnerable region.

Well before Branson's arrival, however, some Caribbean countries were already working to break their dependence on fossil fuels.

Jamaica's modern energy grid

Even prior to the debilitating 2017 hurricane season, polling showed that a strong majority of people in the Caribbean see climate change as a very serious threat.

The region – where we study renewable energy and climate change – is home to 16 of the world's most climate-vulnerable countries.

That's because the stronger and more frequent storms, extreme droughts and coastal flooding that result from rising global temperatures hit rural island nations hard.

Before Branson took up the cause, several Caribbean nations were upgrading their electric grids to improve energy independence and better prepare islands for the impacts of storms that knock out power.

Jamaica opened the largest wind farm in the English-speaking Caribbean in 2004. The Wigton Wind Farm now helps power over 55,000 surrounding homes, households that would formerly have used some 60,000 barrels of oil annually.

As part of its national goal to generate 50 percent of all its power using renewable sources, Jamaica now hopes to build offshore wind farms.

It has also enhanced the stability of its grid with a hybrid energy storage system that uses a flywheel and a battery to store solar and wind energy for use as needed, including after storms.

From 0 to 100

Dominica is another Caribbean pioneer in climate mitigation.

This tiny island already generates 28 percent of its electricity from wind, hydropower and other renewable sources. In contrast, 0.3 percent of electricity in Trinidad and Tobago, the Caribbean's main oil exporter, is renewable.

In an effort to diversify its energy sources away from diesel, Dominica's government has secured $30 million from the international Climate Investment Fund and $90 million from the United Kingdom to invest in geothermal energy.

The country is on track to reach 100 percent renewable energy by the end of this year. If it succeeds, it will join Iceland in entirely forgoing dirty oil, coal and gas energy.

Dominica may soon have some more local competition.

Barbados, in the eastern Caribbean, hopes to use 100 percent renewable energy sources by 2030 using a mix of wind, solar and biofuels derived from food waste and grass, which could benefit the island's ailing agricultural sector.



Dominica was nearly flattened by Hurricane Maria in September 2017. "Hurricane Maria destruction on Dominica" by Tanya Holden, DFID is licensed under CC BY 2.0

Caribbean academics take the lead

Such policies are what Branson and others call "climate-smart." While preparing countries for extreme weather, they create jobs and boost key industries. The result is an economy custom-built for the future.

This is already happening, albeit slowly, in many countries worldwide.

In the U.S., wind and solar are already financially competitive with traditional coal power in many places, particularly for new power generators. So, over time, as older facilities age out across the globe, these technologies are being replaced with modern energy systems.

As in other places, the process of moving more Caribbean countries off fossil fuels requires mustering the political will and financial means needed to transform a nation's entire grid.

For over a century, governments have created regulatory systems and policies designed around imported fossil fuels. Replacing the archaic tax incentives and regulations that discourage renewable energy development takes time, effort and money.

Doing so requires a detailed analysis of a country's relationship with energy. How are homes, businesses, tourism, farms and transportation networks powered? Which energy alternative is best suited for each use? What resources are available?

In our observation, local academics played a strong role in getting policymakers in Jamaica, Barbados and Dominica to undertake these kinds of assessments.

University of the West Indies professor Michael Taylor founded the Climate Studies Group to help the region adapt to life with climate change.

Failure to prepare for future storms would mean “the destruction of ‘island life’ as we know it,” Taylor said.

It was an academic, too, who in 2014 first pushed Barbados to commit to shifting entirely over to clean energy.

Professor Olav Hohmeyer of Germany’s Flensburg University – who was then teaching at the University of the West Indies – told the recently formed Barbados Renewable Energy Association that the island had the natural resources necessary to become 100 percent renewable within 10 years.

The university and the energy association worked to convince Barbados’ electric utility, central bank, farmers and local policymakers that an island-wide energy transition was feasible – and strategic.

They also engaged the International Development Bank, which in 2016 published a detailed and generally positive assessment on renewable energy development in Barbados.

Barbados’ clean revolution

Politicians in Barbados were slower to come around, weighing the cost of green energy against other national development priorities.

Then came the 2017 hurricane season.

In May 2018, Mia Mottley of the leftist Labour Party was elected prime minister of Barbados with a bold sustainability pledge.

At the United Nations General Assembly later that year, Mottley declared that her country would be 100 percent renewable by 2030. And she insisted that the world must help Barbados and other island nations in their climate change fight.

Her Labour Party even envisages electrifying Barbados’ busy Bridgetown port, allowing the 500 cruise ships that dock each year to plug into battery-run power sources rather than operating on-board generators.

Three Caribbean countries are well on their way to becoming “climate smart.” With international support, the other 23 may get there, too.

Masaō Ashtine is a Lecturer in Alternative Energy, University of the West Indies, Mona Campus. Tom Rogers is a Senior Lecturer in Renewable Energy & Energy Management, Coventry University. Their article was originally published in The Conversation.

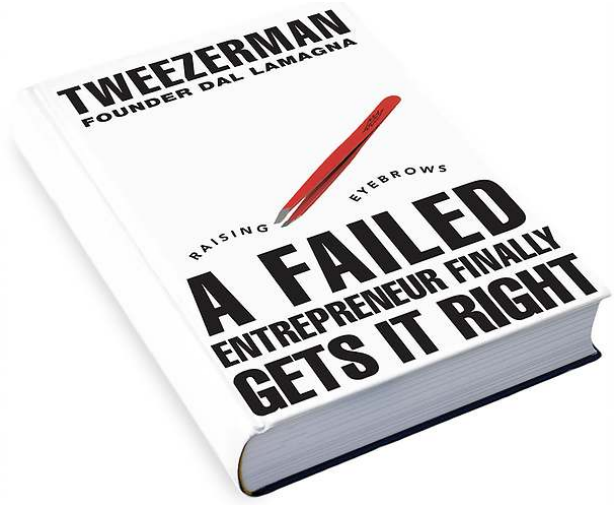


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8: In Review: Raising Eyebrows (Bamburg)

By Jill Bamburg



Before I read this book, I knew that Dal LaMagna ("rhymes with lasagna"), the founder of Tweezerman, was a smart, successful, passionate entrepreneur with a huge heart, real integrity, and an uncommon willingness to put his money where his mouth is—the Italian version of a genuine *mensch*. After reading this book, I learned that he is a fabulous storyteller, a self-deprecating humorist, and a lifelong "compulsive capitalist."

Full disclosure: I know Dal LaMagna through our shared time on the board of YES! Magazine and his generous support of the Bainbridge Graduate Institute (BGI), where I serve as dean. I had even heard a handful of these stories before I read the book. I am aware of the risk I took in agreeing to review the book before I had read it—OMG, what if I didn't like it?

Fortunately, that was not the case. Dal had me from the epigrams with which he opens each of his chapters. (Example: "Tell the truth. It's easier to remember."—My mother. "Tell the truth—and then run!"—My cousin Danny.) Throughout the book, he highlights in boldface type the lessons he wants to impart to would-be entrepreneurs. Samples of this good advice:

- Instead of spending your time raising money, why don't you go find something you can do with the money you already have?
- A small company is not going to thrive if the founder tries to do everything. For me the art of delegating work was very simple. I did the job first, and when I understood the job from the inside, I then found someone else to do it.
- In business, as in life, we are a bit too quick to come up with explanations for things that we really have no explanation for at all.

The epigrams and aphorisms are wonderful attempts to extract lessons from life and thereby cheat the School of Hard Knocks a few of its pupils. But what makes the book sing is the life itself. Who but Dal would invest his entire Harvard Business School scholarship by buying stock on margin in a gold mine in Alaska? And who but Dal would have decided that the most effective way to oppose the war in Iraq was to run for president—and then actually gone ahead and done it? (The presidency was a scaled back ambition from the aspiration of his childhood: to be the first [Italian] American pope.)

My main disappointment with this book is that it doesn't offer enough detail on Dal's ultimate success: Tweezerman, the beauty products business he started in 1980 with $500 in cash and a splinter in his backside and built into a multinational business he sold 24 years later. In comparison to his amusing and sometimes spectacular failures, his success is a more prosaic combination of humility, hard work, patience, cost control, smart decisions, lucky breaks, and the occasional brilliant promotion.

And "Life After Tweezerman," recounted in the last 20 pages of the book, seems a bit empty after all that went before—a rather surprising statement considering that those six years included a run for the presidency, a multi-year effort to bring the war in Iraq to an end through a unique brand of citizen diplomacy, the creation of a film company, and the production of four feature-length films. I came away from the book with the sense that having fulfilled the business and movie making ambitions of his youth, Dal is trying to figure out what to do next.

I wouldn't count him out of a run for pope.

Jill Bamburg is one of the co-founders of Bainbridge Graduate Institute/Pinchot University and the author of *Getting to Scale: Growing Your Business without Selling Out* (Berrett-Koehler, 2006) and a long-time board member of YES! Magazine in which this review originally appeared.

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9: Is Burning Trash a Good Way to Handle It? Waste Incineration in 5 Charts (Baptista)

Ana Baptista

#science #environment #health #civilrights #politics #systemanalysis #nature #argument #logos #ethos #kairos #cognitivebias #advice #global



"Wheelabrator Technologies' Waste-to-Energy plant in Saugus, Massachusetts." by Fletcher6 is licensed under CC BY 3.0

Burning trash has a long history in the United States, and municipal solid waste incinerators have sparked resistance in many places. As an environmental justice scholar who works directly with low-income and communities of color, I see incineration as a poor waste management option.

Although these plants generate electricity from the heat created by burning trash, their primary purpose is waste disposal. Emissions from burning waste worsen environmental inequalities, create financial risks for host communities and reduce incentives to adopt more sustainable waste practices.

I recently co-authored a report that describes signs of decline in the U.S. waste incineration industry due to many factors. They include a volatile revenue model, aging plants, high operation and maintenance costs, and growing public interest in reducing waste, promoting environmental justice and combating climate change.

Nonetheless, 72 incinerators are still operating today in the U.S. Most of them – 58, or 80% – are sited in environmental justice communities, which we defined as areas where more than 25% of residents are low-income, people of color or both. Incinerators worsen cumulative impacts from multiple pollution sources on these overburdened neighborhoods.

Environmental justice flashpoints

Waste incinerators are heavily concentrated in northeast states and Florida – areas with high population densities and limited landfill space. Some of these states also provide favorable economic incentives, such as allowing incinerators to earn renewable energy credits for generating electricity.

In the past year environmental justice advocates have successfully shut down incinerators in Detroit, Michigan, and Commerce, California. The Detroit incinerator was built in the 1980s and received more than US$1 billion in public investment borne by local taxpayers. Groups such as Breathe Free Detroit and Zero Waste Detroit rallied residents to oppose the public financing and health burdens that the facility imposed on surrounding environmental justice communities. The plant closed in March 2019.

The California plant closed in June 2018 after a yearlong campaign by two community-based organizations, East Yard Communities for Environmental Justice and Valley Improvement Projects, to prevent incineration from qualifying for state

renewable energy subsidies. The facility ultimately closed when a 30-year power purchase agreement with the local utility expired, leaving it without a sufficient revenue stream.

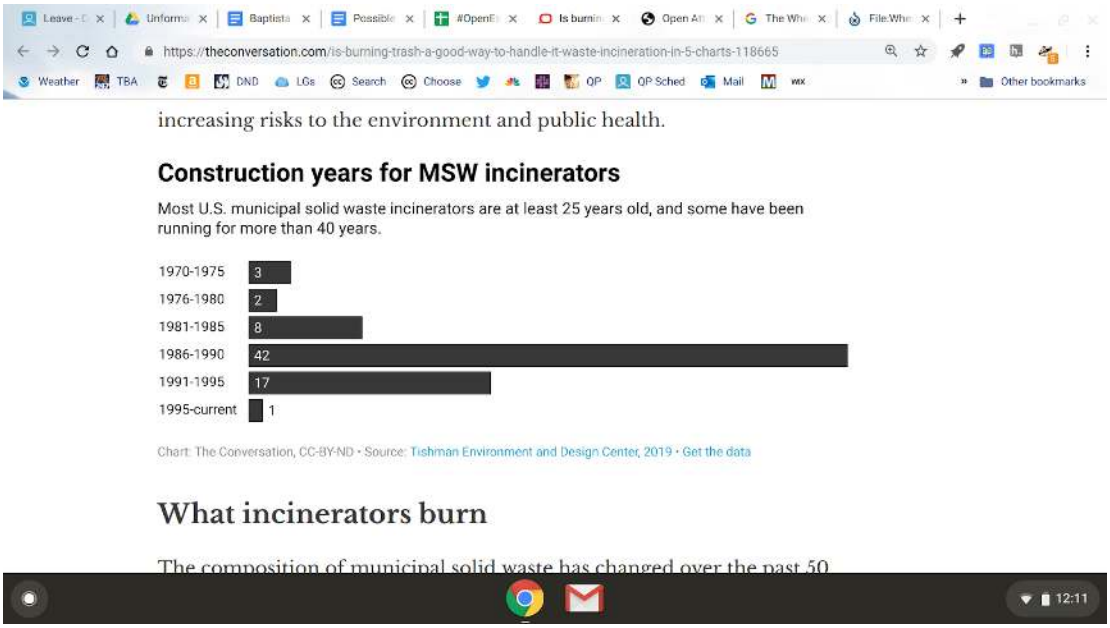
Aging facilities

Incineration plants' average life expectancy is 30 years. Three-quarters of operating waste incinerators in the United States are at least 25 years old.

These facilities' revenues come primarily from tipping fees that waste haulers pay to dump trash, and secondarily from generating electricity. These revenue streams are volatile and can undermine the industry's financial stability. At least 31 incinerators have closed since 2000 due to issues such as insufficient revenue or inability to afford required upgrades.

Operations and maintenance costs typically increase as plants age and their performance decreases. Upgrades, such as installing new pollution control equipment, can cost tens of millions of dollars, and sometimes more than US$100 million.

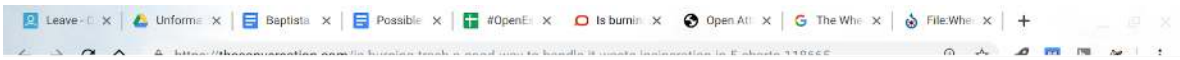
These large capital expenditures represent risks for host communities, which often provide public financing through bonds or tax increases. Such measures are risky because the waste service and energy contracts that generate revenue are increasingly shorter term and vulnerable to fluctuating market and regulatory conditions. As plants age, their environmental performance may also degrade over time, posing increasing risks to the environment and public health.



What incinerators burn

The composition of municipal solid waste has changed over the past 50 years. Synthetic materials such as plastics have increased, while biogenic, compostable materials such as paper and yard trimmings have decreased.

Plastics are particularly problematic for waste handling because they are petroleum-based, nonbiogenic materials. They are difficult to decompose and release harmful pollutants such as dioxins and heavy metals when they are incinerated.



Waste management trends

Today, thanks to the evolution of waste handling options, a majority of the materials in municipal solid waste can be composted or recycled. This reduces impacts on the environment, including air, soil and water contamination and greenhouse gas emissions. As cities like New York and San Francisco adopt zero-waste policies that create incentives for diverting waste from landfills or incinerators, burning trash will increasingly become obsolete.

Many U.S. cities and states are adopting aggressive climate change and sustainability goals. Waste reduction and diversion will play a critical part in meeting these targets. The public is increasingly demanding more upstream solutions in the form of extended producer responsibility bills, plastic bans and less-toxic product redesign. There is also a growing movement for less-consumptive lifestyles that favors zero-waste goals.

Heavy polluters

Incinerators release many air pollutants, including nitrogen oxides, sulfur dioxides, particulate matter, lead, mercury, dioxins and furans. These substances are known to have serious public health effects, from increased cancer risk to respiratory illness, cardiac disease and reproductive, developmental and neurological problems. According to recent figures from the waste industry, incinerator plants emit more sulfur dioxide, nitrogen oxides and carbon dioxide per unit of electricity generated than power plants burning natural gas.

Research on direct health impacts of waste incineration in the United States is limited, but a handful of studies from Asia and Europe, where waste incinerators are prevalent, offer some insights. For example, a 2013 study in Italy analyzed the occurrence of miscarriages in women aged 15-49 years residing near seven incinerators in northern Italy's Emilia-Romagna region, and found that increased particulate emissions from the incinerators was associated with an increased risk of miscarriage.

A single incinerator may burn anywhere from a few hundred tons to several thousand tons of waste per day. Smaller incinerators typically have lower absolute emissions but can emit more hazardous pollutants for each ton of waste they burn. Plant emissions also can vary widely based on the heterogeneous composition of municipal waste, the age and type of emissions control equipment, and how well the plant is operated and maintained over time.

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10: How to Save the Middle Class When Jobs Don't Pay (Barnes)

By Peter Barnes

#argument, #sharedvalues, #reportinginformation, #logos, #ethos, #pathos, #kairos, #currentevents, #causalargument, #proposal, #finances #advice



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There's long been a notion that, because money is a prerequisite for survival and security, everyone should be assured some income just for being alive. The notion has been advanced by liberals such as James Tobin, John Kenneth Galbraith, and George McGovern, and by conservatives like Friedrich Hayek, Milton Friedman, and Richard Nixon. It's embedded in the board game Monopoly, in which all players get equal payments when they pass Go.

And yet, with one exception, Americans have been unable to agree on any plan that guarantees some income to everyone. The reasons lie mostly in the stories that surround such income. Is it welfare? Is it redistribution? Does it require higher taxes and bigger government? Americans think dimly of all these things.

But then, there's the exception. Jay Hammond, the Republican governor of Alaska from 1974 to 1982, was an independent thinker who conceived of, and then persuaded Alaska's legislators to adopt, the world's first system for paying equal dividends to everyone. In Hammond's model, the money comes not from taxes but from a common resource: North Slope oil. Using proceeds from that gift of nature, the Alaska Permanent Fund has paid equal yearly dividends to every resident, including children, ranging from about $1,000 to over $3,000. (Bear in mind that a family of four collects four same-sized dividends.) While this isn't enough to live on, it nicely supplements Alaskans' other earnings. And paying such dividends regularly for more than thirty years has bolstered the state's economy, reduced poverty, and made Alaska one of the least unequal states in America.

The question Americans in the lower 48 should now ask is: Did Alaska find the right formula? If it can convert part of its common wealth into equal dividends for everyone, can the rest of America do the same?

There are many good reasons to ask this question. One is that America's middle class is in steady decline. In the heyday of our middle class, jobs at IBM and General Motors were often jobs for life. Employers offered decent wages, health insurance, paid vacations and defined pensions. Nowadays, such jobs are rare.

It's also unlikely that the jobs of the future will pay more (adjusted for inflation) than today's. In unionized industries like autos and airlines, two-tier contracts are now the norm, with younger workers paid substantially less than older ones for doing the same work. Nor is the picture brighter in other industries. In the Labor Department's latest list of occupations with the greatest projected job growth, only one out of six pays more than $60,000 a year. The implication is clear: without some form of supplementary non-labor income, we can kiss our middle class goodbye.

The second reason to ponder Alaska's dividends is climate change. It might seem odd that dividends based on oil could presage a remedy for climate change, but such is the case. Imagine if we charged companies for using another common resource—our air—and distributed the revenue equally to all. If we did this, two things would follow. First, higher air pollution costs would lead to less fossil fuel burning and more investment in renewables. And second, households that used less dirty energy would gain (their

dividends would exceed their higher costs) while households that used a lot of dirty energy would pay. This would spur both companies and households to do the right thing.

A third reason for considering Alaska's model is our long-lasting economic stagnation. Not counting asset bubbles, our economy hasn't sparkled for decades, and neither fiscal nor monetary policies have helped much. Tax cuts for the rich have benefited no one but the rich, and as Mark Blyth and Eric Lonergan recently wrote in Foreign Affairs, pumping trillions of dollars into banks hasn't stimulated our economy either. What's needed is a system that continually refreshes consumer demand from the middle out—something like periodic dividends to everyone that can be spent immediately.

One further reason for looking north to Alaska is the current stalemate in American politics. Solutions to all major problems are trapped in a tug-of-war between advocates of smaller and larger government. But dividends from common wealth bypass that bitter war. They require no new taxes or government programs; once set up, they're purely market based. And because they send legitimate property income to everyone, they can't be derided as welfare.

In this regard, it's worth noting that Alaska's dividends are immensely popular. Politicians in both parties sing their praises, as do the state's voters. One attempt in 1999 to transfer money from the Permanent Fund to the state treasury was trounced in a referendum by 83 percent. Nationally, Alaska's model has been lauded by Fox News commentators Bill O'Reilly and Lou Dobbs as well as liberals like Robert Reich.

The reasons for this popularity are pretty clear. Alaskans don't see their dividends as welfare or redistribution. According to several surveys, most Alaskans consider their dividends to be their rightful share of their state's natural wealth. There's no stigma attached to them, and any attempt by politicians to reduce them is seen as an encroachment on legitimate property income.

Moreover, because the dividends are universal rather than means-tested, they unite, rather than divide, Alaskans. If only "losers" got them, "winners" would be resentful. Universality puts everyone in the same boat. No one is demonized and a broad constituency protects the dividends from political attack.

How Would It Work Nationally?

How might a common wealth dividend system work at the national level? The easy part is distributing the dividends. As in Alaska, enrollment could be done online and payments could wired electronically at a cost of pennies per transaction. The Social Security Administration could set that up in a jiffy.

The harder part is collecting the revenue. In my latest book, With Liberty and Dividends For All, I show how, over time, we could generate enough revenue to pay dividends of up to $5,000 per person per year. Initially, a sizable chunk would come from selling a declining number of permits to dump carbon into our air. Later, more revenue could flow from our monetary infrastructure, our patent and copyright systems, and our electromagnetic airwaves.

Consider what $5,000 per person per year would mean. If a child's dividends were saved and invested starting from birth, they'd yield enough to pay for a debt-free college education at a public university. In midlife, $5,000 per person would add 25 percent to the income of a family of four earning $80,000 a year. In late life, it would boost the average retiree's Social Security benefit by about 30 percent. Thus, dividends from common wealth would provide a badly-needed boost for poor and middle class families during what promises to be a lasting shortage of good-paying jobs.

Surprisingly, the core idea behind Alaska's dividends is over two centuries old. In his 1796 essay "Agrarian Justice," American patriot Thomas Paine distinguished between two kinds of property: "natural property, or that which comes to us from the Creator of the universe—such as the earth, air, water … [and] artificial or acquired property, the invention of men." The second kind of property, Paine argued, must necessarily be distributed unequally, but the first kind belongs to everyone equally. It is the "legitimate birthright" of every man and woman, "not charity but a right."

And Paine went further. He proposed a practical way to implement that right: create a "National Fund" to pay every man and woman a lump sum (roughly $17,000 in today's money) at age twenty-one, and a stipend of about $1,000 a month after age fifty-five. Revenue would come from what Paine called "ground rent" paid by landowners. He even showed mathematically how this could work. Presciently, Paine recognized that land, air, and water could be monetized not just for the benefit of a few but for the good of all. Further, he saw that this could be done at a national level. This was a remarkable feat of analysis and imagination, and it's time to apply it broadly.

Today, Paine's core idea—that everyone has a right to equal income from common wealth—can be applied not just to natural resources but also to the creations of society. Consider, for example, the immense value created by our legal, intellectual, and financial infrastructures, the Internet, and our economy as a whole. This value isn't created by single individuals or corporations; it's created collectively and hence belongs equally to all. In a fairer economy some of it would actually be distributed to all. The ideal mechanism for doing this would be common wealth dividends—simple, transparent, direct (not trickle down), built on co-ownership rather than redistribution, and politically appealing.

And here's the best part. If Paine's idea and Alaska's model were applied at sufficient scale, the implications would be vast. The current tendencies of capitalism to widen inequality and devour nature would be self-corrected. Instead of plutocracy and climate change, our market economy would generate widely-shared, earth-friendly prosperity. And it would achieve these goals automatically, without much need for government intervention.

Is this wild-eyed dreaming? Possibly, but no more so than universal suffrage or Social Security once were. Common wealth dividends could be the next step in America's long march toward equal rights—and the game-changer that leads to a new version of capitalism. But first, we have to see the opportunity and demand it.

Peter Barnes, co-founder of *On the Commons*, has written numerous books and articles and co-founded several socially responsible businesses (including Working Assets/Credo). This article includes material adapted and excerpted by the author from his new book *With Liberty and Dividends For All*, and other writing by the author.

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11: The Emotional Lives of Animals (Bekoff)

Marc Bekoff

#pathos #reportinginformation #nature #ethos #research #descriptive #cognitivebias #sharedvalues



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Scientific research shows that many animals are very intelligent and have sensory and motor abilities that dwarf ours. Dogs are able to detect diseases such as cancer and diabetes and warn humans of impending heart attacks and strokes. Elephants, whales, hippopotamuses, giraffes, and alligators use low-frequency sounds to communicate over long distances, often miles. And bats, dolphins, whales, frogs, and various rodents use high-frequency sounds to find food, communicate with others, and navigate.

Many animals also display wide-ranging emotions, including joy, happiness, empathy, compassion, grief, and even resentment and embarrassment. It's not surprising that animals—especially, but not only, mammals—share many emotions with us because we also share brain structures, located in the limbic system, that are the seat of our emotions. In many ways, human emotions are the gifts of our animal ancestors.

Grief in magpies and red foxes: saying goodbye to a friend

Many animals display profound grief at the loss or absence of a relative or companion. Sea lion mothers wail when watching their babies being eaten by killer whales. People have reported dolphins struggling to save a dead calf by pushing its body to the surface of the water. Chimpanzees and elephants grieve the loss of family and friends, and gorillas hold wakes for the dead. Donna Fernandes, president of the Buffalo Zoo, witnessed a wake for a female gorilla, Babs, who had died of cancer at Boston's Franklin Park Zoo. She says the gorilla's longtime mate howled and banged his chest, picked up a piece of celery, Babs' favorite food, put it in her hand, and tried to get her to wake up.

I once happened upon what seemed to be a magpie funeral service. A magpie had been hit by a car. Four of his flock mates stood around him silently and pecked gently at his body. One, then another, flew off and brought back pine needles and twigs and laid them by his body. They all stood vigil for a time, nodded their heads, and flew off.

I also watched a red fox bury her mate after a cougar had killed him. She gently laid dirt and twigs over his body, stopped, looked to make sure he was all covered, patted down the dirt and twigs with her forepaws, stood silently for a moment, then trotted off, tail down and ears laid back against her head. After publishing my stories I got emails from people all over the world who had seen similar behavior in various birds and mammals.

Empathy among elephants

A few years ago while I was watching elephants in the Samburu National Reserve in Northern Kenya with elephant researcher Iain Douglas-Hamilton, I noticed a teenaged female, Babyl, who walked very slowly and had difficulty taking each step. I learned she'd been crippled for years, but the other members of her herd never left her behind. They'd walk a while, then stop and look around to see where she was. If Babyl lagged, some would wait for her. If she'd been left alone, she would have fallen prey to a lion or other

predator. Sometimes the matriarch would even feed Babyl. Babyl's friends had nothing to gain by helping her, as she could do nothing for them. Nonetheless, they adjusted their behavior to allow Babyl to remain with the group.

Waterfall dances: Do animals have spiritual experiences?

Do animals marvel at their surroundings, have a sense of awe when they see a rainbow, or wonder where lightning comes from? Sometimes a chimpanzee, usually an adult male, will dance at a waterfall with total abandon. Jane Goodall describes a chimpanzee approaching a waterfall with slightly bristled hair, a sign of heightened arousal:

"As he gets closer, and the roar of the falling water gets louder, his pace quickens, his hair becomes fully erect, and upon reaching the stream he may perform a magnificent display close to the foot of the falls. Standing upright, he sways rhythmically from foot to foot, stamping in the shallow, rushing water, picking up and hurling great rocks. Sometimes he climbs up the slender vines that hang down from the trees high above and swings out into the spray of the falling water. This 'waterfall dance' may last 10 or 15 minutes." After a waterfall display the performer may sit on a rock, his eyes following the falling water. Chimpanzees also dance at the onset of heavy rains and during violent gusts of wind.

In June 2006, Jane and I visited a chimpanzee sanctuary near Girona, Spain. We were told that Marco, one of the rescued chimpanzees, does a dance during thunderstorms during which he looks like he's in a trance.

Shirley and Jenny: remembering friends

Elephants have strong feelings. They also have great memory. They live in matriarchal societies in which strong social bonds among individuals endure for decades. Shirley and Jenny, two female elephants, were reunited after living apart for 22 years. They were brought separately to the Elephant Sanctuary in Hohenwald, Tenn., to live out their lives in peace, absent the abuse they had suffered in the entertainment industry. When Shirley was introduced to Jenny, there was an urgency in Jenny's behavior. She wanted to get into the same stall with Shirley. They roared at each other, the traditional elephant greeting among friends when they reunite. Rather than being cautious and uncertain about one another, they touched through the bars separating them and remained in close contact. Their keepers were intrigued by how outgoing the elephants were. A search of records showed that Shirley and Jenny had lived together in a circus 22 years before, when Jenny was a calf and Shirley was in her 20s. They still remembered one another when they were inadvertently reunited.

A grateful whale

In December 2005, a 50-foot, 50-ton, female humpback whale got tangled in crab lines and was in danger of drowning. After a team of divers freed her, she nuzzled each of her rescuers in turn and flapped around in what one whale expert said was "a rare and remarkable encounter." James Moskito, one of the rescuers, recalled, "It felt to me like it was thanking us, knowing it was free and that we had helped it." He said the whale "stopped about a foot away from me, pushed me around a little bit and had some fun." Mike Menigoz, another of the divers, was also deeply touched by the encounter: "The whale was doing little dives, and the guys were rubbing shoulders with it … I don't know for sure what it was thinking, but it's something I will always remember."

Busy bees as mathematicians

We now know that bees are able to solve complex mathematical problems more rapidly than computers—specifically, what's called "the traveling salesman problem"—despite having a brain about the size of a grass seed. They save time and energy by finding the most efficient route between flowers. They do this daily, while it can take a computer days to solve the same problem.

Dogs sniffing out disease

As we know, dogs have a keen sense of smell. They sniff here and there trying to figure who's been around and also are notorious for sticking their noses in places they shouldn't. Compared to humans, dogs have about 25 times the area of nasal olfactory epithelium (which carries receptor cells) and many thousands more cells in the olfactory region of their brain. Dogs can differentiate dilutions of 1 part per billion, follow faint odor trails, and are 10,000 times more sensitive than humans to certain odors.

Dogs appear to be able to detect different cancers—ovarian, lung, bladder, prostate, and breast—and diabetes, perhaps by assessing a person's breath. Consider a collie named Tinker and his human companion, Paul Jackson, who has Type 2 diabetes. Paul's family

noticed that whenever he was about to have an attack, Tinker would get agitated. Paul says, “He would lick my face, or cry gently, or bark even. And then we noticed that this behavior was happening while I was having a hypoglycemic attack so we just put two and two together.” More research is needed, but initial studies by the Pine Street Foundation and others on using dogs for diagnosis are promising.

It’s OK to be a birdbrain

Crows from the remote Pacific island of New Caledonia show incredibly high-level skills when they make and use tools. They get much of their food using tools, and they do this better than chimpanzees. With no prior training they can make hooks from straight pieces of wire to obtain out-of-reach food. They can add features to improve a tool, a skill supposedly unique to humans. For example, they make three different types of tools from the long, barbed leaves of the screw pine tree. They also modify tools for the situation at hand, a type of invention not seen in other animals. These birds can learn to pull a string to retrieve a short stick, use the stick to pull out a longer one, then use the long stick to draw out a piece of meat. One crow, named Sam, spent less than two minutes inspecting the task and solved it without error.

Caledonian crows live in small family groups and youngsters learn to fashion and use tools by watching adults. Researchers from the University of Auckland discovered that parents actually take their young to specific sites called “tool schools” where they can practice these skills.

Love dogs

As we all know, dogs are “man’s best friend.” They can also be best friends to one another. Tika and her longtime mate, Kobuk, had raised eight litters of puppies together and were enjoying their retirement years in the home of my friend, Anne. Even as longtime mates, Kobuk often bossed Tika around, taking her favorite sleeping spot or toy.

Late in life, Tika developed a malignant tumor and had to have her leg amputated. She had trouble getting around and, as she was recovering from the surgery, Kobuk wouldn’t leave Tika’s side. Kobuk stopped shoving her aside or minding if she was allowed to get on the bed without him. About two weeks after Tika’s surgery, Kobuk woke Anne in the middle of the night. He ran over to Tika. Anne got Tika up and took both dogs outside, but they just lay down on the grass. Tika was whining softly, and Anne saw that Tika’s belly was badly swollen. Anne rushed her to the emergency animal clinic in Boulder, where she had life-saving surgery.

If Kobuk hadn’t fetched Anne, Tika almost certainly would have died. Tika recovered, and as her health improved after the amputation and operation, Kobuk became the bossy dog he’d always been, even as Tika walked around on three legs. But Anne had witnessed their true relationship. Kobuk and Tika, like a true old married couple, would always be there for each other, even if their personalities would never change.

Jethro and the bunny

After I picked Jethro from the Boulder Humane Society and brought him to my mountain home, I knew he was a very special dog. He never chased the rabbits, squirrels, chipmunks, or deer who regularly visited. He often tried to approach them as if they were friends.

One day Jethro came to my front door, stared into my eyes, belched, and dropped a small, furry, saliva-covered ball out of his mouth. I wondered what in the world he’d brought back and discovered the wet ball of fur was a very young bunny.

Jethro continued to make direct eye contact with me as if he were saying, “Do something.” I picked up the bunny, placed her in a box, gave her water and celery, and figured she wouldn’t survive the night, despite our efforts to keep her alive.

I was wrong. Jethro remained by her side and refused walks and meals until I pulled him away so he could heed nature’s call. When I eventually released the bunny, Jethro followed her trail and continued to do so for months.

Over the years Jethro approached rabbits as if they should be his friends, but they usually fled. He also rescued birds who flew into our windows and, on one occasion, a bird who’d been caught and dropped in front of my office by a local red fox.

Dog and fish: improbable friends

Fish are often difficult to identify with or feel for. They don’t have expressive faces and don't seem to tell us much behaviorally. Nonetheless, Chino, a golden retriever who lived with Mary and Dan Heath in Medford, Oregon, and Falstaff, a 15-inch koi, had

regular meetings for six years at the edge of the pond where Falstaff lived. Each day when Chino arrived, Falstaff swam to the surface, greeted him, and nibbled on Chino's paws. Falstaff did this repeatedly as Chino stared down with a curious and puzzled look on her face. Their close friendship was extraordinary and charming. When the Heaths moved, they went as far as to build a new fishpond so that Falstaff could join them.

An embarrassed chimpanzee: I didn't do that!

Embarrassment is difficult to observe. By definition, it's a feeling that one tries to hide. But world famous primatologist Jane Goodall believes she has observed what could be called embarrassment in chimpanzees.

Fifi was a female chimpanzee whom Jane knew for more than 40 years. When Fifi's oldest child, Freud, was 5 1/2 years old, his uncle, Fifi's brother Figan, was the alpha male of their chimpanzee community. Freud always followed Figan as if he worshiped the big male.

Once, as Fifi groomed Figan, Freud climbed up the thin stem of a wild plantain. When he reached the leafy crown, he began swaying wildly back and forth. Had he been a human child, we would have said he was showing off. Suddenly the stem broke and Freud tumbled into the long grass. He was not hurt. He landed close to Jane, and as his head emerged from the grass she saw him look over at Figan. Had he noticed? If he had, he paid no attention but went on being groomed. Freud very quietly climbed another tree and began to feed.

Harvard University psychologist Marc Hauser observed what could be called embarrassment in a male rhesus monkey. After mating with a female, the male strutted away and accidentally fell into a ditch. He stood up and quickly looked around. After sensing that no other monkeys saw him tumble, he marched off, back high, head and tail up, as if nothing had happened.

Animal rescues: feeling compassion for those in need

Stories about animals rescuing members of their own and other species, including humans, abound. They show how individuals of different species display compassion and empathy for those in need.

In Torquay, Australia, after a mother kangaroo was struck by a car, a dog discovered a baby joey in her pouch and took it to his owner who cared for the youngster. The 10-year-old dog and 4-month-old joey eventually became best friends.

On a beach in New Zealand, a dolphin came to the rescue of two pygmy sperm whales stranded behind a sand bar. After people tried in vain to get the whales into deeper water, the dolphin appeared and the two whales followed it back into the ocean.

Dogs are also known for helping those in need. A lost pit bull mutt broke up an attempted mugging of a woman leaving a playground with her son in Port Charlotte, Florida. An animal control officer said it was clear the dog was trying to defend the woman, whom he didn't know. And outside of Buenos Aires, Argentina, a dog rescued an abandoned baby by placing him safely among her own newborn puppies. Amazingly, the dog carried the baby about 150 feet to where her puppies lay after discovering the baby covered by a rag in a field.

Raven justice?

In his book *Mind of the Raven*, biologist and raven expert Bernd Heinrich observed that ravens remember an individual who consistently raids their caches if they catch them in the act. Sometimes a raven will join in an attack on an intruder even if he didn't see the cache being raided.

Is this moral? Heinrich seems to think it is. He says of this behavior, "It was a moral raven seeking the human equivalent of justice, because it defended the group's interest at a potential cost to itself."

In subsequent experiments, Heinrich confirmed that group interests could drive what an individual raven decides to do. Ravens and many other animals live by social norms that favor fairness and justice.

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12: Must the President Be a Moral Leader? (Blake)

By Michael Blake

#sharedvalues #analysis #currentevents #proposalargument #systemanalysis #argument #logos #ethos #kairos #cognitivebias #heroes #politics



"August 28, 2013" by Chuck Kennedy, The Obama White House Archives is in the Public Domain

The best presidents – including figures such as Abraham Lincoln and George Washington – are celebrated not only as good leaders, but as good men. They embody not simply political skill, but personal virtue.

Why, though, should anyone expect a president to demonstrate that sort of virtue? If someone is good at the difficult job of political leadership, must they demonstrate exceptional moral character as well?

Character and democracy

Voters disagree about the extent to which the president must demonstrate moral leadership. Scholars who study political ethics disagree as well.

Those who insist that the president must be virtuous often begin with the thought that a person in that office will face new and unanticipated problems during his or her term. A president whose decision-making is informed by a consistent character, will, in the face of new challenges, rely upon the lessons that have built that character.

As scholar James David Barber wrote, the best way to understand a president's likely responses to a crisis is to understand what that president values most highly.

Abraham Lincoln, for instance, consistently and publicly referred to the same set of moral values throughout his life – values centered on a deep, while imperfect, belief in the moral equality of people. These principles provided him with guidance throughout the horrors of the Civil War.

A president whose decisions are not grounded in the right sort of ethical values may be less well-equipped to respond well – and, more importantly, might be frighteningly unpredictable in his or her responses.

Other political ethicists have emphasized the ways in which democracies can fall apart in the absence of personal virtue. Conservative thinkers, in particular, have argued that political institutions can only function when all those who participate within them are capable of compromise and of self-government. Rules, to put it simply, don't work unless people governed by those rules care about them and voluntarily choose to abide by them.

If this is true of citizens, it is even more true of the president, whose opportunities to damage the system through unprincipled actions are so much greater.

Vice and efficiency

Niccolò Machiavelli believed that political life demands certain characters that could be understood as vices. Italy in US/Flickr.com, CC BY-ND

These arguments have been met with powerful objections. Political philosophers – including, most prominently, Niccolò Machiavelli – have argued that the nature of political life requires a willingness to demonstrate habits of character that would ordinarily be understood as vices. The good leader, insisted Machiavelli, is morally right to do what is usually taken as wrong. He or she must be cruel, deceptive and often violent.

The philosopher Arthur Applbaum refers to this as role morality. What a person is right to do, argues Applbaum, often depends upon the job that person is doing. The good lawyer, for instance, may have to bully, browbeat or humiliate hostile witnesses. That is what a zealous defense might require. Machiavelli notes simply that, in a hostile and brutal world, political leaders might have similar reasons to do what is usually forbidden.

Modern philosophers such as Michael Walzer have continued this line of reasoning. If the world is imperfect, and requires a politician to lie, cheat or otherwise do wrong in the name of doing good, then there is sometimes a moral reason for the politician to do that wrong.

George Washington, for example, was quite happy to engage in deception, if that deception would help protect the United States. He consistently sought to deceive his adversaries about his intentions and his resources – and, importantly, sought to deceive his own subordinates, reasoning that a lie must be believed at home for it to be useful abroad.

A president who refused to engage in this sort of deception, argues Walzer, would be choosing to keep his or her conscience clear, instead of providing some genuine and concrete help to others. Walzer's conclusion is that a good political agent must often refuse to be a good person. It is only by sometimes doing what is ordinarily wrong, that the politician can make the world better for all.

Virtue, vice and the presidency

These ideas have, of course, been a part of many long-standing debates about presidential morality. Henry Kissinger, for instance, defended the Nixon administration's decision to seek the firing of the special prosecutor, based upon the need for that administration to present itself to the Soviet Union as both powerful and unified.

It was not necessary, Kissinger wrote later, that the American leadership displayed personal virtue. It was enough that their decisions enabled a society in which the American people were capable of demonstrating that virtue.

More recently, many evangelical supporters of President Trump have used the Biblical story of Cyrus the Great, an ancient Persian king, to explain their continued support for the president. Although Cyrus was not himself Jewish, he chose to free the Jews held as slaves in Babylon. Evangelical leader Mike Evans noted that Cyrus, like Donald Trump, was an "imperfect vessel," whose decisions nevertheless made it possible for others to live as God wished them to.

Some evangelicals have used the Biblical story of Cyrus the Great, to explain their continued support for the President Trump. AP Photo/ Evan Vucci

So, too, some evangelicals argue that President Trump's own seeming lapses of virtue might not disqualify him from the presidency – so long as his decisions enable others to lead lives exemplifying the virtues he does not always show himself.

Effective vice

These debates – between those who seek a president who models ethical virtue, and those who would regard that desire as misguided at best – are likely to continue.

One thing that must be acknowledged, however, is that even the best defenses of presidential vice cannot be taken to excuse all forms of moral failure.

Machiavelli, and those who follow him, can at most be used to defend a president whose vices are effectively able to create a more ethical world for others. Not all sorts of wrongdoing, though, can plausibly be thought to have these effects.

Some vices, such as an outsized confidence, or the will to use violence in the name of justice, may be defended with reference to the ideas of Machiavelli or Walzer.

Other ethical failings, however – such as a vindictive desire to punish perceived enemies – often seem less likely to lead to good results. This sort of failure, however, appears to be common among those who have sought the presidency. It is a failure, moreover, that does not depend upon party affiliation.

In recent years, for example, both Lyndon Baines Johnson and Richard Nixon took particular delight in humiliating and degrading their political adversaries. Both, perhaps, might have been better leaders, had they been more reflective about when and how to wrong.

In presidential politics, all parties might at least agree on this much: If there is sometimes a reason to seek an ethically flawed president, it does not follow that all ethical flaws are equally worth defending.

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13: The Plot to Privatize Common Knowledge (Bollier)

By David Bollier

#reportinginformation #descriptive #sharedvalues #currentevents #research #pathos #logos #kairos #cognitivebias #artsandculture #intellectualproperty



"adler barbie articulated" by deborah is lola is licensed under CC BY-NC-SA 2.0

Over the past three decades, modern culture has become infatuated with the idea that knowledge should be owned like real estate or stock shares. The original idea, of course, is that copyrights, trademarks and patents reward people for their creative labors and thereby boosts the common good.

But this line of thinking has come to resemble a kind of Market Fundamentalism: copyrights, trademarks and patents are the only morally legitimate and practical method for managing creations of the mind. There is no middle ground. You either believe in intellectual property rights, or you support “theft” and “piracy.

This fundamentalist approach shuts down a broader discussion about how knowledge ought to circulate in our culture. To avoid any confusion, let me just say straight-up that I believe in copyrights and patents. In some cases, they provide significant and necessary incentives to invest in new works. But today, copyrights and patents are going far beyond their intended goals—such as the U.S. Constitution provision to “promote progress in science and the useful arts”-- to become ends in themselves. Instead of carefully balancing private interests and public needs, copyrights and patents are becoming crude, anti-social instruments of control and avarice.

This is the conclusion that I came to in my book Brand Name Bullies, which is filled with dozens of stories of copyright and trademark owners bullying citizens, artists, scholars and others with ridiculous legal threats.

Silent Campfires

One of my favorite stories about the alarming expansion of copyright law involves ASCAP, the American Society of Composers, Authors and Publishers, the organization that collects performance licensing fees from public establishments where recorded music is played.

ASCAP decided that their domain should be extended to summer camps. Why shouldn’t boys and girls singing around the campfire be considered a “public performance” that should pay royalties? A while back ASCAP approached the American Camping Association and said it wanted blanket performance licenses from hundreds of summer camps – something on the order of $300 to $1,400 per season per camp.

This caused quite a ruckus. When it was discovered that ASCAP wanted money for the Girl Scouts to sing “This Land Is Your Land” and “Puff, the Magic Dragon”, the press went nuts. There were stories about camps resorting to non-copyrighted songs like “The Bow-Legged Chicken.” An ASCAP official heartlessly told a reporter: “They [camps] buy paper, twine and glue for their

crafts – they can pay for the music too." Eventually, after a huge public outcry, ASCAP backed down. But its claim to legal authority in charging summer camps for their "public performances" of copyrighted songs remains intact.

Lawsuit Barbie

The issue in so many of these battles is: Who shall control the "public meaning" of familiar images? Mattel is legendary in trying to protect the cultural "meaning" of Barbie. It has gone after any unauthorized uses of Barbie. It went after a series of photographs by Mark Napier called Distorted Barbie, which dared to depict Barbie as fat or as having Down's Syndrome. Even highly distorted images of Barbie that were essentially unrecognizable were deemed unacceptable by Mattel.

Mattel went after a magazine that caters to adult collectors of Barbie dolls. Mattel even pressured the Seattle publisher of a book, Adios, Barbie: Young Women Write About Body Image and Identity, to change the title. The book was reprinted as Body Outlaws. This extreme clampdown on free expression spurred culture-jammers, such as the self-styled Barbie Liberation Organization, which substituted voice boxes of GI Joe with those in Barbie, so that GI Joe would say, "Let's plan our dream wedding," and Barbie would yell, "Vengeance is mine!"

I am happy to report, a federal circuit court in the United States put a damper on Mattel's bullying litigation. The case involved Utah photographer Tom Forsythe, who made a series of 78 photos of Barbie for his Food Chain Barbie exhibit. It featured Barbie in enchiladas, stuffed into a blender and in other kitchen poses. Only a few of Forsythe's photos sold. He spent about $5,000 to mount the exhibit, and lost money.No matter; Mattel wanted to send a message that you can't mess with Barbie. It spent years litigating the case, requiring Forsythe to find pro bono legal counsel, which spent nearly $2 million defending him. Forsythe prevailed in the circuit court, which delivered a stinging rebuke to Mattel for bringing a "groundless and unreasonable" trademark dilution claim.

Watch Your Words

The privatization of words—language is one of the most basic form of commons— is another disturbing trend. The Japanese corporation that owns the "Godzilla" trademark has a habit of threatening all sorts of people who use the phoneme "zilla," including a website called "Davezilla" that featured a lizard-like cartoon character.

The corporate obsession with owning words is really quite extensive. McDonald's claims to own 131 words and phrases. The San Diego-based McDonald's actually claims to own the Irish prefix "Mc." It has successfully prevented restaurant from naming their businesses McVegan, McSushi and McMunchies.

Ralph Lauren, the clothing line, went after Polo magazine, run by an equestrian organization, claiming it was a trademark infringement for the U.S. Polo Association to use the word "polo" on its line of clothing! MasterCard went after Ralph Nader for using "priceless" in his campaign ads when running for President in 2000. (Nader's free speech rights ultimately prevailed.) But the gay athletes who wanted to host a series of athletic competitions in San Francisco could not use the phrase "Gay Olympics" because that phrase is owned by the U.S. Olympic Committee, who gets to decide who can use it. "Special Olympics" for disabled kids is OK, but not "Gay Olympics."

The TV demagogue Bill O'Reilly reportedly went ballistic when he learned that the comedian (and now senator) Al Franken was using the words "fair and balanced" as a subtitle in his book that mocked various right-wing pundit, including him. The federal court laughed Fox News' case out of court, and Franken won. But pity the people who can't afford to hire Floyd Abrams, a prominent First Amendment attorney, to represent them. A woman from Los Angeles dared to name her neighborhood newspaper the Beechwood Voice. She was threatened with legal action by the Village Voice, which claimed that use of the word "voice" as a newspaper name diluted its trademark.

These stories illustrate just how far Market Fundamentalism is willing to go in order to enforce its vision of the world. It wants to commodify all of culture as private property, and require people to obtain permission (and to make royalties) before embarking on any modestly derivative new creativity. This approach, not coincidentally, favors the Disneys, Time Warners and Rupert Murdochs because it protects the market value of large inventories of copyrighted and trademarked works. It directly stifles expression that is local, amateur, small-scale or non-commercial in nature— the kind of expression that almost anyone outside a powerful corporation would engage in. This amounts to a wholesale privatization of our cultural commons.

Patents Privatize Taxpayer-Funded Research

The Market Fundamentalist worldview is even more infuriating, if that is possible, when applied to patents arising out of publicly funded research. Until 35 years ago, there had been a broad consensus that the intellectual property rights of federal research should stay in the public domain, or at least be licensed on a nonexclusive basis. That way, taxpayers could reap the full measure of value from their collective investments. In the late 1970s, however, large pharmaceutical, electronics and chemical companies mounted a bold lobbying campaign to reverse the public ownership of federal research. Since enactment of Bayh-Dole Act of 1980, authorizing universities to patent the fruits of federally funded research, we have seen a land rush to sell academic research that was once freely available to all.

Between 1980 and 2000, the number of patents secured by universities grew ten-fold, bringing in more than $1 billion in royalties and licensing fees – a windfall enjoyed mostly by a dozen top research universities. This, in reality, is a privatization of the public's investments. Even though the public pays for the lion's share of risky basic research for new drugs, the long-term equity returns tend to go to drug companies and a handful of top research universities. In the United States, we have seen this with the cancer drug Taxol; the antidepressant Prozac; the hypertension drug Capoten; and a number of HIV and AIDS therapies.

The upshot is that citizens often have to pay twice for pharmaceuticals and other medical treatments – first, as taxpayers who finance the research, and second, as consumers who pay monopoly prices for drugs. This is a pure giveaway because it's not even clear that companies need exclusive patent rights as an incentive to commercialize new drug research.

Corporations Loot Indigenous People's Knowledge

Multinational corporations are no longer content to simply claim ownership of commons knowledge at home. Now they scour the developing world-- in a practice known as biopiracy-- to claim patents on the botanical and ecological knowledge acquired by indigenous people through the centuries. They move into Madagascar, Brazil, Guatemala and other poor countries to find plants and microorganisms that might be used in making new medicines and genetically engineered crops. But as Seth Shulman writes in his book Owning the Future, "Who, if anyone, should be able to claim ownership rights to the globe's genetic and cultural inheritance?"

Sir John Sulston answers this question eloquently in his book, *The Common Thread*, which chronicles the race to decode the human genome. A private startup company, Celera, was aggressively trying to put genomic sequences in one big privatized database. That way, it would have a monopoly over future use of the genomic data by licensing access to its database. Fortunately, a coalition of public-sector scientists published the data first, which is why the human genome is now in the public domain. Sulston answers, quite rightly, that the human genome must be treated as the "common heritage of humankind."

Life Itself Can Now Be Owned

We dodged a bullet there when the publicly funded scientists won the race to decode human genome. Yet the threat of private ownership of essential knowledge for the sake of profits is not by any means over. Further attempts will by the logical culmination of a path first opened by the U.S. Supreme Court's Diamond v. Chakrabarty ruling in 1980, which authorized the patenting of live, genetically altered microorganisms. The patenting of living organisms opened the way for an ecologically and ethically dubious future in which the life forms that are part of the sacred web of life can be owned and treated as commodities. Knowledge is treated as private property, not as a public good.

One inevitable result of all these new ownership claims is the rise of new barriers to open sharing, collaboration and discovery among researchers and scholars. Patents are increasingly being granted for "upstream" research, which means that basic knowledge that everyone else must use for the field to advance, is becoming proprietary. Harvard, MIT and the Whitehead Institute, for example, have a patent on all drugs that inhibit something known as NF-kB cell signaling. Since this physiological process is believed to have something to do with many diseases such as cancer and osteoporosis, the patent deters anyone else from pursuing their own scientific investigations in this area.

Things were not always this way concerning valuable knowledge. Contrast these stories with Jonas Salk, the inventor of the polio vaccine. When journalist Edward R. Murrow asked him, "Who owns the patent on this vaccine?" Salk replied, "Well, the people, I would say. There is no patent. Could you patent the sun?" This story helps us remember that current notions about ownership of

knowledge are not inevitable and universal; they are the result of mounting market pressures to make our scientific and cultural commons into private property.

The privatization of knowledge has only intensified as the courts – in the United States, at least – have lowered the standards for obtaining patents while broadening the scope of what is patentable. It is now possible to own mathematical algorithms embedded in software programs. The very tools needed to conduct scientific research are now private property, available only for a steep fee.

Imagine what might have happened to biotechnology and computer science if contemporary patent rules had been in place in the 1950s and 1960s. Neither the biotech nor the computer revolution would have occurred in the first place. Too much fundamental knowledge would have been off limits due to patents.

Problem of the Anti-Commons

The over-patenting of knowledge sometimes results in what is called an "anti-commons" problem, in which property rights for a given field of research are so numerous and fragmented that it becomes very difficult to conduct research. The transaction costs for obtaining rights are simply too numerous and costly. For example, there are thirty-four "patent families" for a single malarial antigen, and those rights, applying to different pieces of the research agenda, are owned by different parties in many different countries. One reason that a malaria vaccine has been so elusive is because the patent rights are so complicated and expensive to secure.

It is worth noting that openness, sharing and the public domain do not harm the market. Quite the contrary. They invigorate it. In 2005, I co-hosted a conference called Ready to Share: Fashion and the Ownership of Creativity. It explored the power of openness in apparel design. Precisely because no one can own the creative design of clothes – they can only own the company name and logo, as trademarks – everyone can participate in the design commons. The result is a more robust, innovative and competitive marketplace. This is exactly the effect that Linux, the open-source computer operating system, had on the software sector. It has opened up new opportunities for value-added innovation and competition in a marketplace until then dominated by the Microsoft monopoly.

Yale Professor Yochai Benkler argues in his magisterial book, *The Wealth of Networks*, that a great deal of knowledge production is more effectively pursued through a commons than through markets. Questions of ethics aside, why doesn't money succeed at simply "buying" the knowledge it needs? Because money tends to subvert the social dynamics that make the knowledge commons work. It can sabotage self-directed inquiry. It undermines the social trust, candor and ethics that are essential to creativity and good research.

David Bollier is an author, activist, blogger and consultant. He is the founding editor of *On the Commons* in which this essay first appeared. His 2014 book, *Think Like a Commoner: A Short Introduction to the Commons* describes his thinking about the commons.

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14: Shadows of the Bat: Constructions of Good and Evil in the Batman Movies of Tim Burton and Christopher Nolan (Born)

By Simon Philipp Born



Fig. 1: Lives primarily in a world of darkness and shadows: Batman, Gotham City's iconic superhero. Film still, BATMAN (Tim Burton, US 1989), 01:57:21.

Joker [to Batman]: *I think you and I are destined to do this forever.*[1]

Abstract

The superhero narrative is typically premised on the conflict between the hero and the villain, the mythical struggle between good and evil. It therefore promotes Manichaean worldview where good and evil are clearly distinguishable quantities . This bipolar model is questioned in the Batman movies of Tim Burton and Christopher Nolan. Since his creation in 1939, Batman has blurred the line between black and white unlike any other classic comic book superhero . As a "floating signifier", he symbolizes the permeability of boundaries, for his liminal character inhabits a world between light and darkness, order and anarchy, hero and villain. Drawing on the complex ambiguity of the character, Tim Burton and Christopher Nolan deconstruct the traditional dichotomy of good and evil in the superhero narrative by reversing its polarity and emphasizing the fictionality of it all. Although they differ in style and method , both filmmakers invite us to overcome the Manichaean belief in favor of a more ambivalent and sophisticated viewpoint.

Keywords

Batman, good and evil, Manichaeism, duality, superhero, mythology theatricality

The 21st century is proving to be the Golden Age of superhero movies. Comic book stories about superhuman beings fighting evil, which have circulated in popular culture since the 1930s, are now being recognized and consumed by an even broader audience. the omnipresence of the superhero transforms him from pop-cultural icon into modern-day myth. Drawing on Joseph Campbell's works, David Reynolds remarks that modern myths like the superhero narratives are not confined to religious ideologies, but rather "develop from ethical perspectives as they relate to a political and economic world".2 Indeed, their stories about heroism, justice, virtue and villainy not only entertain us, but also function as a moral educator, reinforcing Western values and mediating norms of social behavior: "Superhero stories bill themselves as tales of courage and friendship, representing American ideals at their best while attempting to pass on a strong moral code to the impressionable children who read comic books, play superhero video games, and watch superhero films."3 In order to explain these stories' widespread popularity, scholars like Richard J. Gray and Betty Kaklamanidou have argued that superhero narratives respond to the general longing for "true heroism" and a clear distinction between right and wrong in an uncertain and morally ambiguous globalized world: "Superhero films promote the ideas of peace, safety and freedom and seek to restore the planet to a nostalgic harmony."4

To promote these ideals, the superhero narrative is typically premised on the conflict between hero and villain, the mythical struggle between good and evil. In the superhero genre, good and evil mainly fulfill narrative functions. The struggle between hero and villain produces suspense and drives the plot, where, ironically, the roles of protagonist and antagonist are switched: the villain,

and not the hero, plays the active part, as his evil actions initiate the story and call upon the hero to act. According to Richard Reynolds, “The common outcome, as far as the structure of the plot is concerned, is that the villains are concerned with change and the heroes with the maintenance of the status quo.”5 The evil antagonist is a necessary counterforce who challenges the protagonist and allows him to be good. the rise and fall of the villain is a socially required evaluation that crime does not pay, while the certain triumph of the hero reminds the audience of the superiority of the values he represents. As far as the narrative structure of the superhero story and the ideology it conveys are concerned, good and evil are mutually dependent, one cannot exist without the other. The threat from the villain forces the hero to act, his malignity enabling the hero to show off his goodness. Superhero mythologies therefore seem to promote a Manichaean worldview. Recalling the dualistic cosmology of the late-antique prophet Mani, life is conceived as a constant struggle between two external forces – the spiritual realm of light and the material realm of darkness. In a yin-and-yang balance of opposites, the existence of one is defined through the existence of the other.

This bipolar explanation of the world is questioned by the more ambivalent take of contemporary superhero films, as Johannes Schlegel and Frank Habermann remark. Postmodern films like *Unbreakable* (M. Night Shyamalan, US 2000) or *Hellboy* (Guillermo del Toro, US 2004) display in their “metanarrative”6 deep distrust of the absolute distinction between good and evil, which they expose as constructions rather than natural quantities: “The dichotomy of good and evil in contemporary superhero films is first and foremost negotiated, performatively generated and constantly debated, rendering it an unstable phenomenon of produced and ascribed meaning that has to be reaffirmed perpetually”.7 This essay argues that good and evil are socially constructed categories that regulate the world and explain human behavior. Their order-obtaining duality is culturally mediated in narratives and visual texts such as superhero stories. Ultimately, some of these texts not only reflect but also disclose and willingly subvert the clear-cut dichotomy in favor of a more complex and sophisticated viewpoint, as is the case with the Batman movies of Tim Burton and Christopher Nolan. Their visions of the Caped Crusader are unique, yet not completely out of line with the character. Instead, they ingeniously condense Batman’s conflicting history into a multi-layered psychologization. In his many incarnations, Batman blurs the line between black and white, and unlike any other classic comic book superhero he constructs a world of multitudinous grey. Long before the postmodern hero deconstructions found in graphic novels like Alan Moore’s *Watchmen* (U.S. 1986–87), he had already been conceived in his original draft as an alteration and revision to the superhero myth. The Dark Knight is driven by his dual nature. in order to defend the light, he utilizes his darkness to fight evil (see fig. 1). Additionally, his fragmented textual existence self-consciously reflects his symbolic nature, unveiling the fictionality and theatricality of his character.

The floating signifier

Since his debut in Issue 27 of *Detective Comics*, from May 1939, Batman has become one of the most popular and most iconic comic book superheroes of all time, spawning a gigantic media franchise that includes major blockbuster films, TV shows, video games, direct-to-video animations, comic books, novels and a massive range of licensed merchandise. All these simultaneously existing Batmen challenge our traditional notion of a fictional character as coherent, semantic figure. Who is the “real” Batman? The original comic book vigilante from the 1940s, Adam West’s colorful “Camped Crusader” from the infamous *Batman* TV show

(ABC, US 1966–1968), the dark and gritty incarnation of the 1980s, Christian Bale's post–9/11 Dark Knight or even the Lego Batman? The answer is that he is all of them. Batman is the sum of all his iterations, a hypertext that connects conflicting identities, media texts and storyworlds in an interacting matrix. According to Roberta Pearson and William Uricchio, Batman is a "floating signifier", not defined by any sort of author, medium, time period or primary text, but held together by a small number of essential character traits such as his iconographically specific costume, his secret identity as billionaire Bruce Wayne, the murder of his parents, his setting (Gotham City) and a recurring cast of friends and foes.8 For Will Brooker, even these core components can be reduced to one essential element as the minimal marker for a Batman story – the Bat logo, Batman's symbol of his crime-fighting idea, which also functions as his unique brand both inside and outside the narrative (see fig. 2).9

Similarly to Brooker, Paul Levitz ponders the idea that Batman's protean nature is "built on a purely visual icon, which has proved to be remarkably reinterpretable".10 He refers to the fact that Batman's character originated as loose sketch of a bat-man figure inspired by Leonardo da Vinci's drawings of a flying machine. When comic artist Bob Kane and author Bill Finger introduced the Caped Crusader in 1939, he was conceived as a quick-fire response that would capture the huge success of Superman, who had debuted just a year before. His character was not yet fully drawn, as demonstrated by the fact that his defining origin story was only told six months later. Kane and Finger combined various tropes and figures of popular culture of the 1930s present in movies, pulp fiction, comic strips and newspaper headlines and formed them into one,11 but Batman is primarily influenced by the detective stories of his time, like most of the comic book superheroes. Drawing on their roots in crime and mystery fiction, detective stories also contain a Manichaean philosophy. According to Marcel Danesi, they transfer the medieval struggle between angels and demons into the secular contexts of investigators and perpetrators: "The detective story is, in a sense, a modern-day morality play. Evil must be exposed and conquered. In the medieval period the evil monster or demon was vanquished by spiritual forces, such as Goodness; today, he is vanquished by a detective or a superhero crime fighter."12 Batman varies the tradition of the detective story, as he is both angel and demon in one person. In terms of mythology, he combines two major mythical archetypes, namely the Hero and the Shadow.13

Batman is a superhero, but a very human one. He has no special powers; he was not born on an alien planet and bitten by a radioactive insect. He relies purely on his limitless resources: a multi-billion dollar heritage, outstanding combat skills, an inventive mind and, of course, his qualities as "world's greatest detective", which relate him to other famous crime-solving characters from literature like Sherlock Holmes or pulp hero Doc Savage. Batman accords perfectly with Joseph Campbell's famous definition of the hero as "someone who has given his or her life to something bigger than oneself".14 Batman is not driven, however, by a noble impulse to altruism like Superman, but rather by the experience of loss and a need for vengeance.15 Having been unable to prevent the murder of his parents, he finds the only way to halt injustice is through his second life, as masked vigilante. But even when as new and empowered Caped Crusader he becomes painfully aware of the limits of his might, he cannot prevent either himself or those entrusted to him from getting hurt. In his masquerade, Batman does not overcome his trauma, but instead relives it anew night by night. There is an inherent darkness to the character and his setting. Newer comic books like Frank Miller's *The Dark Knight Returns* (1986) psychologize Batman as broken justice fanatic, a dark reflection of the bright Superman, the American Dream degenerated into a nightmare. He shares similarities with the Jungian archetype of the shadow, the presentation of the psyche's dark, hidden side, which is not necessarily evil, but rather everything the self wants to conceal and keep out of the light.16 Batman is not a savior, but an avenger. A creature of the night, a mystery figure dressed in black who employs his darkness to mercilessly fight crime like his pulp predecessor the Shadow. His blackness condenses in the image of a bat, a central symbol in the American Gothic tradition of the late 19th and early 20th centuries that conjured up "images of darkness, terror, animal savagery, and soul-sapping vampirism, all of which were often linked to notions of ethnic infiltration".17 Like the infamous title character of Bram Stoker's *Dracula* (1897), Batman operates in the shadows, flies through the night and radiates an intriguing aura of awe and terror. Bela Lugosi's iconic portrayal of the prince of darkness in Tod Browning's *Dracula* (US 1931) may even have inspired Batman's cape – just as the mystery film *The Bat Whispers* (Roland West, US 1930), where a masked murderer named "the Bat" terrorizes America's upper class, features a prototype of the Bat logo.

In conclusion, Batman's character has origins not only in heroic figures like Sherlock Holmes, but also in famous incarnations of evil like Dracula. This vital duality is also evident in Batman's relationship with his enemies, who function as his doppelgangers: "Understanding Batman requires us to look hardest at him and his foes. The villains mirror and warp his darkness, his fears, his needs for puzzles to solve and criminals to hurt, and his hopes too."18 Batman's antagonists play a part for the narrative that is as important as the part played by the protagonist himself. Just as the Dark Knight is not solely good, his opponents are not solely evil. Batman's rogues' gallery unfolds as a panorama of tragic existences that were shattered by reality. In a dystopian hell like

Gotham City, “All it takes is one bad day to reduce the sanest man alive to lunacy”, as the Joker explains in Alan Moore’s graphic novel *The Killing Joke* (1988).19 The comic also raises the question whether Gotham’s villains created Batman as their own nemesis, or if the self-appointed avenger attracted these troubled spirits by his presence, thus being himself responsible for their making. “I made you, you made me first”, Batman growls at his eternal adversary, the Joker, at the end of Batman (1989).20 “You complete me” is the clown’s answer 19 years later in *The Dark Knight* (Christopher Nolan, US 2008).21 Batman and his villains are “locked into a ritualized dance” with each other (see fig. 3), justifying each other’s existence.22 Both sides adopt costumed identities in attempts to make sense of life.23 The carnivalesque world of Batman is a stage where the Manichean struggle between good and evil is nothing but a role-play acted out by the Dark Knight and his foes.

This celebration of theatricality where the mask is of the utmost importance can be seen most notably in the movie adaptations of Tim Burton and Christopher Nolan. With the examples of *Batman Returns* (1992) and *The Dark Knight* (2008), I shall demonstrate that Burton and Nolan can be seen as opposing poles on the same scale. Both are heavily influenced by film noir, but while Burton experiments with the fantastic-melodramatic component of the epochal film style on the edge to expressive gothic horror, Nolan courts a contemporary update in the tradition of the neo noir. Above all, *Batman Returns* (1992) and *The Dark Knight* (2008) deconstruct the dichotomy of good and evil in the superhero narrative by reversing its polarity and emphasizing the artificiality of it all.

Batman Returns or the insurrection of signs

Christmas in Gotham City – a never-ending nightmare. Flanked by two absurdly large muscular statues, a gigantic Christmas tree lights the overcrowded Gotham Plaza. An allegory of power. The Christmas tree sits between the sign codes of fascist architecture as a central image of mass slavery, the tyranny of department stores and advertised dreams. The city is run by tycoon Max Shreck (Christopher Walken), whose very name hints at his bloodsucking nature – actor Max Schreck played the title character of the silent horror film *Nosferatu, Eine Symphonie des Grauens* (*Nosferatu – A Symphony of Horror*, Friedrich Wilhelm Murnau, De 1922). The ubiquitous symbol of Shreck’s store empire is the face of a grinning cartoon cat reminiscent of Felix the Cat. Through the image of a powerful corporation hiding behind the friendly face of a cartoon animal, Burton processes his time as a subordinate at the Walt Disney Company, which has always dominated the American popular culture with its many images, conservative ideologies and merchandise products. Suddenly, a big present box arrives at the Plaza and unleashes a cascade of maniac circus clowns with machine guns. The scenery descends into chaos as bikers with enormous skulls trash hot-dog stands, a devilish fire breather incinerates teddy bears and a maniac ringleader shoots the Christmas tree to pieces with his barrel-organ Gatling gun. An insurrection of signs, released by the bizarre Penguin (Danny DeVito) who lives in Gotham’s sewers. Flushed away as a deformed baby of rich parents on Christmas Eve twenty years ago, Penguin takes revenge on the affluent consumer society that rejected him as a monster (see fig. 4–5). He kidnaps Shreck and blackmails him into assisting his ascent into the world above, recycling Shreck’s dirty secrets that have washed up in his underground kingdom and using them against him. from toxic waste to body parts – the by-products of a ruthless capitalism.

Society creates its own demons. Even the whip-wielding Catwoman is a product of a sexist macho society that keeps its women small as tamed pussycats. And, if an unruly female does not obey the male order, she is pushed out of the window, as happens to secretary Selina Kyle (Michelle Pfeiffer), who is killed by her boss, Max Shreck, for her curiosity (see fig. 6). Down in the gutter, however, Selina is resurrected with the help of wild stray cats. The tables are turned: from being a helpless mouse that had to be

rescued by Batman from bad guys in an earlier scene, Selina transforms into a black beast and now has claws of her own: “I am Catwoman. hear me roar!”24 For her empowerment against a chauvinistic busiuness world she adapts the symbol of her oppression – the cat – and reframes it (see fig. 7). The grinning cat turns into a furious panther that lives out its sexual autonomy in its animalistic ferocity in the spirit of Jacques Tourneur’s *Cat People* (US 1942).25 Selina destroys her stuffy apartment, which is filled with the slavish insignia of her old life, and tailors the skin of her new identity – a skintight, black-leather outfit whose seams remain all too visible. The emphasis on the fragmented self refers to the construction and performance of gender roles; as a pop-cultural condensation of post-feminist theories, Catwoman reveals the correlation between sexuality, power and identity. Her rebellion against masculine rule is doomed to failure, however, as Catwoman is killed again and again throughout the movie by every male protagonist. Even though she exposes on the screen the uneven power relationship between men and women, she cannot change it. Located between the poles of fetishized male fantasy and a feminist avenger model, Selina’s self-search reaches an impasse. Objectified by the male’s gaze, her riot is smashed by Hollywood’s patriarchal semiotic system.26

While the Penguin and Catwoman reign over Gotham's streets with terror, another beast man is fielded to restore the order: Batman (Michael Keaton). Batman, too, has been maimed by the outside world and left with emotional scars, but his revenge is directed not at the causes of his pain, but at its symptoms – the criminals. He fights the freaks and monsters of the town, with whom he has more in common than with the sane citizens he swore to protect. Burton draws the disrupted psyche of the Dark Knight as a hopeless case of a traumatized individual who has lost his own identity within the whole superhero masquerade. Batman is no longer the mask of Bruce Wayne; Bruce Wayne is the mask of Batman. Burton's Batman is a deeply introverted character, trapped within his inner trauma. He puts on the mask of the monstrous in order to shield himself from the outside world. He does not even flinch from killing, but takes lives with a casualness and malice that make you shudder. First he scorches the fire breather with his Batmobile, then he slips a strong thug a bomb and sends him to hell with a diabolical smile. Is Batman a gruesome sadist? There is a revealing shot in Burton's first Batman movie where the protagonist looks down from the roof of the Axis Chemicals factory, with "Axis" in big letters shining above his dark figure (see fig. 8). While Batman fought bravely against the Axis powers in a propagandistic movie serial from 1943, he now



seems to adapt their relentless methods to control Gotham City as in a fascist

surveillance state.27 This sinister interpretation does not move far from Frank Miller's version of the Dark Knight.

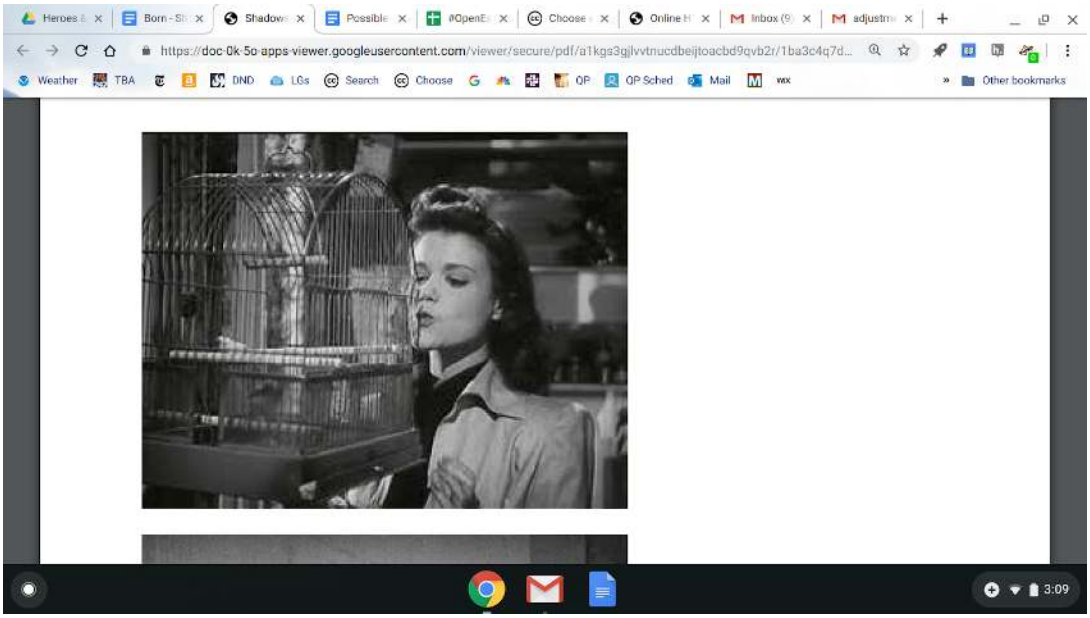
"I guess I am tired of wearing masks."28 In *Batman Returns* (1992), good and evil appear not as fixed, moral quantities, but as narrative constructs whose compositions are freely variable. They are attributions, masks, in which one appears before others and which others attach to one. They mean protection (Batman), but also freedom (Catwoman). The perpetual role-play goes on until the mask becomes the skin and the skin a mask. After a short liaison, Bruce Wayne and Selina Kyle meet again at a

masquerade ball, no disguises needed. In a dance of mask and identity, they recognize each other's second face by means of a line of dialogue they had shared as their alter egos (see fig. 9–10). They see the mask behind the face and ask, "Does this mean we have to start fighting?"29 The advanced schizophrenia of their dual identities prevents

the reconciliation of their personalities both with themselves and with the other. The masquerade theme in *Batman Returns* (1992) becomes a game of signs. As in his other movies, Burton reinterprets established sign codes: black becomes white, and ugly is beautiful. Christmas, a leitmotif of the movie, is unmasked as commercial mass deception.30 The perversion of Christmas suggests the protagonist's lost innocence: too often the violence is aimed at tokens of infantility and cuteness or stems directly from

them – as in the case of Batman's gadget toys and Penguin's obscure weaponry. The destruction of anything "that appears benign, cute or cuddly" even led bewildered Batman-chronicler Mark S. Reinhart to the conclusion that Burton hatches a distaste for "just about anything that society at large would perceive as 'good.'"31

In the end, the concepts of good and evil or normal and abnormal are just a matter of perception. Arguably the only purely evil character in the movie is the human Max Shreck, who behind a façade of normalcy manipulates, corrupts and kills. As for the other freaks and monsters, Burton sees them not as villains, but as victimized individuals.32 He breaks through the common association of disability with evil in fiction,33


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As his variation on the Obsessive Avenger–stereotype, a character who relentlessly pursues those he holds responsible for his disablement, is rendered as a misunderstood monster and applied to villains and heroes alike. As in most of Burton's work, in a Burton movie you fear not the Other but the "ordinary". In the end, *Batman Returns* (1992) is sheer gothic, modeled after the cinematic re-imaginings of classic gothic tales. Burton eagerly draws on the vast symbolic-image stock of the horror movie, influenced by German expressionism (see fig. 11–16). In the tradition of films like *Das Cabinet des Dr. Caligari* (*The Cabinet of Dr. Caligari*, Robert Wiene, DE 1920), he uses stylized settings to illustrate the dark and twisted world of his film. Burton externalizes the protagonist's ambivalent psychic states in an opulent pictorial design. the repressed subconscious of the characters turns outward in the bizarre exaggerations and expressive color contrasts of the set design, the gloomy lighting, the costumes, the make-up and the sinister score by composer Danny Elfman. The characters' environments are framed as psychological dioramas that strung together would evoke the image of a multi-faceted theme park. Burton's Gotham is a world of décors in which no neutral space exists, no outside, no escape. A postmodern no man's land in which the signs of light and darkness, reason and madness, reality and fiction are perverted into their eerie opposites.

Burton's Batman vision is dark, fatalistic, oppressive. the Dark Knight loves his shadowy existence so much that he refuses to stand in the light of attention. the proactive villains take over and marginalize the hero in his own movie. By contrast, in *Batman Begins* (2005) Christopher Nolan resets the Caped Crusader as the main protagonist of the story and explores the beginnings of the character. After Joel Schumacher's gaudy and flamboyant take in *Batman Forever* (US 1995) and *Batman & Robin* (US 1997), which did not resonate well with fans and critics, Nolan seeks to wipe the slate clean with his elaborate reboot of the character. Basically he brings the superhero "down to earth" and connects him with the contemporary American zeitgeist (see fig. 17). For that, he stepped outside the studio and shot on-location in major cities like Chicago and London (*Batman Begins*, 2005; *The Dark Knight*, 2008) and Los Angeles, New York and Pittsburgh (*The Dark Knight Rises*, US 2012) in order to compose a hyper-real cityscape of Gotham City. Following the films' courted authenticity and realism, Batman's world is purged of any supernatural, fantastic and whimsical elements that could expose its comic book source material. Instead, Nolan focuses in his first Batman movie on the Dark Knight's character development as he struggles to adopt a moral position in a corrupted society. The battle between good and evil is portrayed as a dispute between opposing principles, ideas and philosophies. Batman's ethical code, which requires him to work outside the law but never to kill, stems from the dialectic juxtaposition of his father figures: from the thesis of empathetic understanding embodied by his murdered father Thomas Wayne (Linus Roache) and carried further by his butler Alfred (Michael Caine) and the antithesis of absolute and revengeful justice claimed by his fundamentalist mentor Ducard/Ra's al Ghul (Liam Neeson) comes the synthesis of the principled avenger Batman (Christian Bale).

After 135 minutes of soul-searching in *Batman Begins* (2005), the masked vigilante is finally ready to face his equal – the Joker (Heath Ledger). At the end of the film, Lieutenant Gordon (Gary Oldman) has already established a connection between the two on the basis of their staged appearance. Gordon talks about escalation and how Batman's advent might encourage a new type of criminal. He hands the Dark Knight a joker card with the words, "You're wearing a mask, jumping off rooftops. Now, take this guy. Armed robbery, double homicide. Has a taste for the theatrical, like you."34 Consequently, *The Dark Knight* (2008) opens with the introduction of the Joker. the prologue of the film shows a group of clown-masked gangsters robbing a mob bank while talking about their anonymous boss, the Joker. their heist successful, they start to kill each other off in order to increase the share each will receive, until only one robber is left. Before he leaves with all the money, this last robber lifts his clown mask in an extreme close-up, revealing not his hidden identity, but another mask: the scarred and painted face of the Joker. the ambiguous masquerade of the prologue confirms Gordon's fears – the Joker is established as a direct consequence of Batman's theatricality. The Joker's "mask" dissolves the analogy between face and identity, for his "makeup does not hide his true identity, but instead attests to the absence of one",35 making him a being of pure theatricality, a displayed sign of a sign (see fig. 18).36

In keeping with the film's main preoccupation with duality, the Joker is depicted not only as Batman's criminal equivalent but also as the ultimate counterforce who answers Batman's desire for order with chaos.37 Their combat represents the constant struggle Batman has to face as outlaw vigilante: "Batman emerges as a hero positioned in the darkness between extremes, mediating between the oppressive power of modern systems and the chaos of postmodern anarchy".38 In view of the increasing number of victims and the experience of powerlessness in his staged no-win scenarios, the battle against the Joker becomes a crucial test for the good. How can such boundless evil be countered? Nolan's Dark Knight trilogy is heavily influenced by the terror attacks of 9/11 and their aftermath. His Gotham City becomes a stage for America's current anxieties, with the audience compelled to connect their own experiences of 11 September with the experiences of the film,39 above all in the confrontation with a faceless evil with which there can be no negotiation and which cannot be dealt with: "You have nothing, nothing to threaten me with. Nothing to do with all your strength", the Joker replies to the hard and desperate blows of the Dark Knight.40 The interrogation scene between the two in Gordon's Police Department is a key scene of the film: under the eye of the law, Batman temporarily oversteps his limits and tortures the Joker in order to get information about the whereabouts of his two hostages in a literal ticking-bomb scenario (see fig. 19). In order to beat the Joker, Batman creates an emergency situation, mirroring the extreme measures taken by the Bush administration in the War on terror, with his pure intentions for justice and freedom irrevocably compromised and perverted. By crossing "a line beyond heroic exceptionality",41 Batman blurs the line between good and evil.

"Why so serious?"42 While Burton and Nicholson contrive the Joker in *Batman* (1989)

as a postmodern homicidal artist celebrating insanity as freedom, Nolan retraces the archetype of the clown to his anarchistic roots. With twisted bodies, grotesque faces and nonsensical tirades, jesters in the Middle Ages offered criticism of the social status quo from the perspective of an outsider, inverting courtly and ecclesiastical norms with their devilish antics and exposing in their

masquerades the duplicity of society. The jester was the ambassador of a netherworld from which humans could find their way back to the chaotic origins of life. Heath Ledger's Joker joins this tradition. As an agent of chaos he creates disorder and rocks the "schemers" to demonstrate the fragility of ideologically shaped worldviews. He inverts everything there is into its opposite. In his last encounter with Batman, the Joker dangles upside down on the Dark Knight's rope. While he explains his twisted worldview, the camera slowly rotates 180 degrees, until he is upright again and Gotham's night sky upside down. The Joker is a master of deception – with or without make-up, as corpse or as nurse. the fact that he has no secret identity, that his entire appearance functions as a whole-body mask links him directly to medieval fools who, according to Mikhail Bakhtin, "were not actors playing parts on stage ... but remained fools and clowns always and wherever they made their appearance".43 With his disconcerting speech patterns, gestures and way of walking, the Joker does not seem to be of this world, but rather has stepped out of the liminal world of carnival. He repeatedly calls attention to his mouth, highlighting his scars with red lipstick, smacking his lips, grinning and holding it directly into the camera (see fig. 20). In the subversive theatricality of the carnival, the concept of the grotesque body concentrates in the gaping mouth, for Bakhtin the symbol of a "wide-open bodily abyss".44 The Joker's mouth gapes like a large wound in his face; by conjuring a smile onto his victim's face with a knife, he lets that victim share his own limitless blackness.

The face is the leitmotif of the film. Recalling Béla Balázs' early film theory of the visualization of man through his physiognomy on screen,45 the faces in *The Dark Knight* (2008) become an important carrier of meaning (see fig. 21). Looking into the painted visage of the Joker, one gets caught up in the maelstrom of his infinite malignity. In contrast, Batman's masked face becomes a symbol of resistance and hope, an immortal ideal that inspires people to follow his lead in the fight against crime. Unfortunately, his freely interpretable face also allows people to misconceive his ideal, as militant copycats take up arms and act against his intentions. Finally, there is the face of district attorney Harvey Dent (Aaron Eckhart), whose all-American look becomes a surface for projected hopes and optimism: "Look at this face. This is the face of Gotham's bright future", Bruce Wayne declares at his fundraising party.46 Dent is Gotham's shining white knight, a hero with a face that eventually could suspend the need for a masked Dark Knight. Behind this façade, however, lies a second face – two-face. Dent's flaw is his moral intransigency. In his monochrome worldview, good and evil are so widely separated that the self-righteous attorney cannot connect to his darker side, which erupts in occasional outbursts and acts of desperation. Dent's case alludes to the Strange Case of Dr Jekyll and Mr Hyde (1886), Robert Louis Stevenson's famous examination of human nature's duality. Like Jekyll, Dent tries at all costs to hide his evil other, because he does not recognize it as part of his own self. Therefore, all it takes is a "little push" from the Joker and Harvey's world is turned upside down. Deprived of the love of his life and left with serious physical and mental injuries, his moral bigotry is gruesomely written in his face in the figure of the Janus-like Two-Face. After his departure from good, the only consistent option left to him is to join with evil: "Either you die a hero or you live long enough to see yourself become the villain."47 The motif of the face turns into the image of a coin where everything has a reverse side (see fig. 22–27). Two-Face lost his faith in the right decision and his decision-making ability. instead of being the master of his own destiny, he despairs of the cruel arbitrariness of human existence. This shift is symbolized by his lucky coin. At the beginning, the coin had two identical sides, thus negating the possibility of loss and highlighting his full control over life: "I make my own luck."48 In the explosion that

kills his fiancée, Rachel (Maggie Gyllenhaal), the coin, like he himself is burned on one side. incapable of accepting the tension of duality and of being at one with himself, he now leaves all life and death

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decisions to chance, his new god of justice: “The only morality in a cruel world is chance. Unbiased. Unprejudiced. Fair.”49 Harvey’s lapse provides the backbone of the film’s narrative. Evil has won. The Joker brought down the best and turned him into an insane cop killer. But the good must not lose, heroic stories are supposed to have a happy ending. So the result is marked: Batman takes on responsibility for two-face’s crimes and is hunted by the police, while Harvey Dent died a hero’s death and becomes the legend that Batman always wanted to be. Gotham’s peace is restored, but on the basis of a lie: “Sometimes the truth is not good enough. Sometimes people deserve more.”50 This outcome is a clear reference to John Ford’s late Western *The Man Who Shot Liberty Valance* (US 1962), in which the forged legend of a town’s hero becomes a constitutive social truth. For Vincent M. Gaine, this compromise “problematizes the ‘natural, unquestionable justice’ favored by superhero narratives”.51 The ending of *The Dark Knight* (2008) evidently demonstrates that good and evil have no individual ontological status but are reciprocally constructed and conceptualized via storytelling. Thus Batman really is a floating signifier, for he can take on any role the city needs him to fulfill, enabled by the public: “Batman can convincingly play the dark knight only because his role was perceived as (potentially) evil from the outset – at least by a few. While Batman is the one who theatrically produces signs, those few represent the constitutive counterpart.”52

Shadows of the bat

The dual cosmology of Manichaeism, which underlines the superhero narrative of the hero’s fight against the villain, eventually serves as an explanation for the origin and essence of evil itself. Mani’s belief system is based on the fundamental question, “Why does evil exist?”53 In his view, evil does not exist as a lack of good, but as a real, powerful force that actively intervenes with the world. Evil opposes and negates everything that is good and pure; it seduces man to commit sin. Although corresponding with the notion of Satan in Christianity, Mani’s binary belief contradicts the Christian dictates of monotheism, as the existence of an equally powerful counterforce denies the omnipotence of God. Nevertheless, the ideas of Manichaeism have influenced Western thinking until today. The image of a metaphysical evil as the ultimate adversary, as the devil who has to be fought with all means, can be found, for example, in the rhetoric

of enemy stereotypes. Invoked bogeymen whose very existence threatens the Western value system, like the Germans during the World Wars, the Soviets in the Cold War or the Islamist terrorist of present day, carry a clear political function. Exploiting the fears, insecurities and prejudices of a community, enemy images help to simplify things in a complicated, globalized world by pinpointing a scapegoat. They strengthen a weakened group identity via exclusion and serve as a means of justification for a political agenda.54 The United States, in particular, has a long tradition of enemy images. In times of war and conflict, American politicians constantly evoke the Manichaean rhetoric of good versus evil, posing God’s chosen people against foreign enemies of freedom and democracy. Considering the terrorist attacks of 11 September 2001, George W. Bush declared that the United States were “at war” and famously labeled enemy states like North Korea, Iran and Iraq, which seek weapons of mass destruction and

allegedly support terrorism, an “axis of evil”.55 Throughout his presidency, he constituted a bipolar world of “freedom” and “fear”, “us” and “them”.56

In their Batman movies, Tim Burton and Christopher Nolan visualize the dynamics of enemy images; they deconstruct the Manichaean worldview by illustrating its flipside and highlighting its fragility. In place of the dualistic belief system, their movies propose an alternative discourse about the nature and origin of evil. In the case of *Batman Returns* (1992), Burton tells a modern fairytale about good and evil from the perspective of the rejected other. He lets us partake in the “personal catharsis” he gains from identification with “characters who are both mentally and physically different”:57 He renders Batman, Penguin and Catwoman non-conformists who use their alleged otherness to express their independency and are therefore sanctioned by a hostile collective. For that, Burton utilizes the gothic imagery of horror movies he grew up with, but reverses it. Originally, the monster in classic U.S. horror films was depicted as an inhuman, external force of evil that invades the idyllic harmony of everyday American life. Thereby it has often functioned as a coded sign for contemporary images of the enemy58 and a social panic that the traditional order within the sexes, races and classes could collapse.59 In *Batman Returns* (1992), monstrosity is a sign not of evil, but of isolating individuality, while the so-called normalcy conceals true viciousness. Like the pitiable creature (Boris Karloff) in James Whale’s *Frankenstein* (US 1931), Burton’s monsters are inherently innocent; it is the confrontation with a xenophobic society that makes them evil.

In *The Dark Knight* (2008), Nolan demonstrates his deep passion for fictionality and storytelling as he exposes the duality of good and evil as a key rhetoric in the narrative of a society that uses these terms to justify its actions. On the surface, the Joker incarnates the enemy image of a terrorist, as he is represented as a resourceful force of destruction that cannot be negotiated with, a mad man determined to watch the world burn. His real intentions, however, are to face Gotham’s inhabitants with their own viciousness, which primarily resides in their utilitarian ethics of “scheming”. For him, cops and criminals behave the same, for they are enslaved to the selfish object of their plan. In his sadistic games of life and death, he confronts the people of Gotham with the “logic of their scheming taken to its end point”, but also “provides an opportunity for them to break out of calculation”.60 So the Joker’s evil is actually the basis for the hero’s ethics. Ultimately, The Dark Knight (2008) is not about the nature of evil, but about the way it is fought by the good. Does Batman make the right decision? Are his means just? Reflecting America’s ongoing War on Terror, the movie refuses to give an unequivocal answer. Instead, the movie implies a shifting, fluid moral universe where the characters embody contradictory, unstable positions.61 Because of this complexity, some interpreted the movie as praise for Bush’s conservative policies, where the boundaries of civil rights were pushed in order to “deal with an emergency”.62 Others, however, saw Batman’s use of torture and a problematic surveillance technology as critique of the Bush regime.63 from reactionary to subversive, the movie’s political message above all lies in “the blurring of boundaries” and “instability of oppositions”,64 favoring ambiguity over simplistic duality. Tim Burton and Christopher Nolan persuasively question the clear separation of good and evil as well as their ontological statuses. They unmask them as ideological attributions often misused for propaganda, as makeshift explanatory patterns for complex human behavior. Consequently, their Batman movies exhibit that the struggle between good and evil is fought not externally, but internally. Moving from the subject of morality to a broader scale, the dispute between contrary principles articulates the antagonistic tendencies in the individual, which are constantly fighting.65 There the fictional representations of good and evil function as interchangeable metaphors for the many dichotomies that define human nature, whether in the conflict

between individuality and conformity, inside and outside, normal and abnormal (*Batman Returns*, 1992) or the fight between order and chaos, justice and vengeance, rule and exception (The Dark Knight, 2008). What image could be more suitable, then, to illustrate these antagonisms than the shadowy figure of Batman, the very representation of duality itself? His whole nature as Batman, as semi-entity, symbolizes the permeability of boundaries as he unites hero and villain, light and darkness, man and beast, idea and matter (see fig. 28). Among his clownish foes and circus counterparts, Batman is the true embodiment of the trickster archetype. He shifts between worlds, defies clear categories and signifies ambivalence. His multiplicity attracts artists like Burton and Nolan, who can express their individual vision through the versatility of his image.

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Notes

1 The Dark Knight (2008), 02:08:31–02:08:35.

2 Reynolds 2011.

3 DiPaolo 2011, 5.

4 Gray ii/Kaklamanidou 2011, 3.

5 Reynolds 1992, 51.

6 Lyotard 1997, xxiv–xxv.

7 Schlegel/Habermann 2011, 31.

8 Uricchio/Pearson 1991, 186.

9 Brooker 2012, 79–83.

10 Levitz 2015, 15.

11 Boichel 1991, 6.

12 Danesi 2016, 19.

13 see Vogler 2007, 23–80.

14 Campbell/Moyers 1988, 151.

15 Regalado 2015, 120.

16 Langley 2012, 170–171.

17 Regalado 2015, 122.

18 Langley 2012, 268.

19 Moore 2008, 42.

20 Batman (1989), 01:50:50–01:50:52.

21 The Dark Knight (2008), 01:24:32–01:24:34.

22 Brooker 2012, 138.

23 Coogan 2006, 105.

24 Batman Returns (1992), 00:42:13–00:42:17. The line is an obvious reference to Helen Reddy's hymn of the women's right movement from 1972: "I am woman. hear me roar!" See Heger 2010, 200.

25 See Dotyingham 2004.

26 See Mulvey 1999.

27 Heger 2010, 174.

28 Batman Returns (1992), 01:32:21–01:32:23.

29 Batman Returns (1992), 01:34:01–01:34:03.

30 Merschmann 2000, 64–65.

31 Reinhart 2005, 175–176.

32 Salisbury 2006, 103.

33 See Norden 2007.

34 *Batman Begins* (2005), 02:04:50–02:05:04.

35 McGowan 2012, 135.

36 Fischer-Lichte 1995, 88.

37 DiPaolo 2011, 59.

38 regalado 2015, 227.

39 Muller 2011, 58.

40 *The Dark Knight* (2008), 01:26:32–01:26:39.

41 McGowan 2012, 130.

42 *The Dark Knight* (2008), 00:29:27–00:29:30.

43 Bakhtin 1984, 8.

44 Bakhtin 1984, 317.

45 See Balázs 2011.

46 *The Dark Knight* (2008), 00:43:27–00:43:31.

47 *The Dark Knight* (2008), 00:20:01–00:20:05.

48 *The Dark Knight* (2008), 00:13:50–00:13:51.

49 *The Dark Knight* (2008), 02:12:30–02:12:40.

50 *The Dark Knight* (2008), 02:17:03–02:17:09.

51 Gaine 2011, 128.

52 Schlegel/Habermann 2011, 35.

53 See Coyle 2009, xiv.

54 See Fiebig-Von Hase 1997, 1–40.

55 Bush 2002.

56 See Wagner 2009, 31.

57 Hanke 2007, 95.

58 See Worland 1997.

59 Seeßlen/Jung 2006, 127.

60 McGowan 2012, 141.

61 Brooker 2012, 204–207.

62 Klavan 2008.

63 ip 2011, 229.

64 Brooker 2012, 207.

65 See Hickethier 2008, 238.

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15: Public Beats Private: Six Reasons Why (Buchheit)

Paul Buchheit

#reportinginformation #research #systemanalysis #sharedvalues #argument #cognitivebias #factbasedargument #finances #logos #ethos



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Private systems are focused on making profits for a few well-positioned people. Public systems, when sufficiently supported by taxes, work for everyone in a generally equitable manner.

The following are six specific reasons why privatization simply doesn't work.

1. The Profit Motive Moves Most of the Money to the Top

The federal Medicare Administrator made $170,000 in 2010. The president of MD Anderson Cancer Center in Texas made over ten times as much in 2012. Stephen J. Hemsley, the CEO of United Health Group, made almost 300 times as much in one year, $48 million, most of it from company stock.

In part because of such inequities in compensation, our private health care system is the most expensive system in the developed world. The price of common surgeries is anywhere from three to ten times higher in the U.S. than in Great Britain, Canada, France, or Germany. Two of the documented examples: an $8,000 special stress test for which Medicare would have paid $554; and a $60,000 gall bladder operation, for which a private insurance company was willing to pay $2,000.

Medicare, on the other hand, which is largely without the profit motive and the competing sources of billing, is efficiently run, for all eligible Americans. According to the Council for Affordable Health Insurance and other sources, medical administrative costs are much higher for private insurance than for Medicare.

But the privatizers keep encroaching on the public sector. Our government reimburses the CEOs of private contractors at a rate approximately double what we pay the President. Overall, we pay the corporate bosses over $7 billion a year.

Many Americans don't realize that the privatization of Social Security and Medicare would transfer much of our money to yet another group of CEOs.

2. Privatization Serves People with Money, the Public Sector Serves Everyone

A good example is the U.S. Postal Service (USPS), which is legally required to serve every home in the country. Fedex and United Parcel Service (UPS) can't serve unprofitable locations. Yet the USPS is much cheaper for small packages. An online comparison revealed the following for the two-day shipment of a similarly-sized envelope to another state:

-- USPS 2-Day $5.68 (46 cents without the 2-day restriction)

-- FedEx 2-Day $19.28

-- UPS, 2 Day $24.09

USPS is so inexpensive, in fact, that Fedex actually uses the U.S. Post Office for about 30 percent of its ground shipments.

Another example is education. A recent ProPublica report found that in the past twenty years four-year state colleges have been serving a diminishing portion of the country's lowest-income students. At the K-12 level, cost-saving business strategies apply to the privatization of our children's education. Charter schools are less likely to accept students with disabilities. Charter teachers have fewer years of experience and a higher turnover rate. Non-teacher positions have insufficient retirement plans and health insurance, and much lower pay.

Finally, with regard to health care, 43 percent of sick Americans skipped doctor's visits and/or medication purchases in 2011 because of excessive costs. It's estimated that over 40,000 Americans die every year because they can't afford health insurance.

3. Privatization Turns Essential Human Needs into Products

Big business would like to privatize our water. A Citigroup economist exulted, "Water as an asset class will, in my view, become eventually the single most important physical-commodity based asset class, dwarfing oil, copper, agricultural commodities and precious metals."

They want our federal land. Attempts at privatization were made by the Reagan administration in the 1980s and the Republican-controlled Congress in the 1990s. In 2006, President Bush proposed auctioning off 300,000 acres of national forest in 41 states. Paul Ryan's Path to Prosperity was based in part on Republican Jason Chaffetz' "Disposal of Excess Federal Lands Act of 2011," which would unload millions of acres of land in America's west.

They want our cities. A privatization expert told the Detroit Free Press that the real money is in urban assets with a "revenue stream." So Detroit's most valuable resource, its Water & Sewerage Department (DWSD), is the collateral for a loan of $350 million to pay off the banks handling the litigation. Bloomberg estimates a cost of almost half a billion dollars, in a city where homeowners can barely afford the water services.

And they want our bodies. One-fifth of the human genome is privately owned through patents. Strains of influenza and hepatitis have been claimed by corporate and university labs, and because of this researchers can't use the patented life forms to perform cancer research.

4. Public Systems Promote a Strong Middle Class

Part of free-market mythology is that public employees and union workers are greedy takers, enjoying benefits that average private sector workers are denied. But the facts show that government and union workers are not overpaid. According to the Census Bureau, state and local government employees make up 14.5% of the U.S. workforce and receive 14.3% of the total compensation. Union members make up about 12% of the workforce, but their total pay amounts to just 10% of adjusted gross income as reported to the IRS.

The average private sector worker makes about the same salary as a state or local government worker. But the median salary for U.S. workers, 83% of whom are in the private sector, was $18,000 less in 2009, at $26,261. Inequality is much more pervasive in the private sector.

5. The Private Sector Has Incentive To Fail, or No Incentive At All

The most obvious incentive to fail is in the private prison industry. One would think it a worthy goal to rehabilitate prisoners and gradually empty the jails. But business is too good. With each prisoner generating up to $40,000 a year in revenue, the number of prisoners in private facilities has increased from 1990 to 2009 by more than 1600%, from about 7,000 to over 125,000 inmates. Corrections Corporation of America recently offered to run the prison system in any state willing to guarantee that jails stay 90% full.

Nor do privatizers have incentive to maintain infrastructure. David Cay Johnston describes the deteriorating state of America's structural foundation, with grids and pipelines neglected by monopolistic industries that cut costs rather than provide maintenance. Meanwhile, they achieve profit margins of over 50%, eight times the corporate average.

As for public safety, warning signs about unregulated privatization are becoming clearer and more deadly. The Texas fertilizer plant, where 14 people were killed in an explosion and fire, was last inspected by the Occupational Safety and Health Administration (OSHA) over 25 years ago. The U.S. Forest Service, stunned by the Prescott, Arizona fire that killed 19, was forced by the sequester to cut 500 firefighters. The rail disaster in Lac-Megantic, Quebec followed deregulation of Canadian railways. At

the other extreme is the public sector, and the Federal Emergency Management Agency (FEMA), which rescued hundreds of people after Hurricane Sandy while serving millions more with meals and water.

The lack of private incentive for human betterment is evident throughout the world. The World Hunger Education Service states that "Harmful economic systems are the principal cause of poverty and hunger." And according to Nicholas Stern, the chief economist for the World Bank, climate change is "the greatest market failure the world has seen."

6. With Public Systems, We Don't Have to Listen To "Individual Initiative" Rantings

Back in the Reagan years, a stunning claim was made by Margaret Thatcher: "There is no such thing as society. There are individual men and women, and there are families." More recently, Paul Ryan complained that government support "drains individual initiative and personal responsibility."

That's easy to say for people with good jobs.

Individual initiative? Our publicly supported communications infrastructure allows the richest 10% of Americans to manipulate their 80% share of the stock market. CEOs rely on roads and seaports and airports to ship their products, the FAA and TSA and Coast Guard and Department of Transportation to safeguard them, a nationwide energy grid to power their factories, and communications towers and satellites to conduct online business. Perhaps most important to business, even as it focuses on short-term profits, is the long-term basic research that is largely conducted with government money. As of 2009 universities were still receiving ten times more science & engineering funding from government than from industry.

Public beats private in almost every way. Only the hype of the free-market media keeps much of America believing that "winner-take-all" is preferable to working together as a community.

Paul Buchheit is an advocate for social and economic justice, and the author of numerous papers on economic inequality and cognitive science. He is the author of *Disposable Americans: Extreme Capitalism and the Case for a Guaranteed Income* (2017).



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16: Misinformation and Biases Infect Social Media, Both Intentionally and Accidentally (Ciampaglia and Filippo Menczer)

Giovanni Luca Ciampaglia and Filippo Menczer

#argument, #causalargument, #cognitivebias, #ethos, #logos, #sharedvalues, #reportinginformation



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Social media are among the primary sources of news in the U.S. and across the world. Yet users are exposed to content of questionable accuracy, including conspiracy theories, clickbait, hyperpartisan content, pseudo science and even fabricated "fake news" reports.

It's not surprising that there's so much disinformation published: Spam and online fraud are lucrative for criminals, and government and political propaganda yield both partisan and financial benefits. But the fact that low-credibility content spreads so quickly and easily suggests that people and the algorithms behind social media platforms are vulnerable to manipulation.

Explaining the tools developed at the Observatory on Social Media.

Our research has identified three types of bias that make the social media ecosystem vulnerable to both intentional and accidental misinformation. That is why our Observatory on Social Media at Indiana University is building tools to help people become aware of these biases and protect themselves from outside influences designed to exploit them.

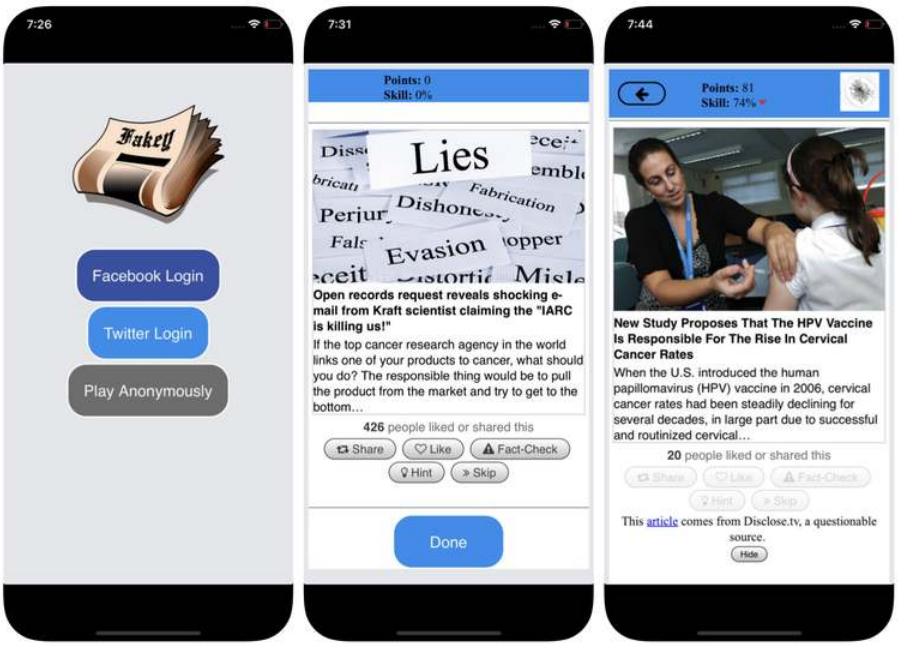
Bias in the brain

Cognitive biases originate in the way the brain processes the information that every person encounters every day. The brain can deal with only a finite amount of information, and too many incoming stimuli can cause information overload. That in itself has serious implications for the quality of information on social media. We have found that steep competition for users' limited attention means that some ideas go viral despite their low quality – even when people prefer to share high-quality content.

To avoid getting overwhelmed, the brain uses a number of tricks. These methods are usually effective, but may also become biases when applied in the wrong contexts.

One cognitive shortcut happens when a person is deciding whether to share a story that appears on their social media feed. People are very affected by the emotional connotations of a headline, even though that's not a good indicator of an article's accuracy. Much more important is who wrote the piece.

To counter this bias, and help people pay more attention to the source of a claim before sharing it, we developed Fakey, a mobile news literacy game (free on Android and iOS) simulating a typical social media news feed, with a mix of news articles from mainstream and low-credibility sources. Players get more points for sharing news from reliable sources and flagging suspicious content for fact-checking. In the process, they learn to recognize signals of source credibility, such as hyperpartisan claims and emotionally charged headlines.



Screenshots of the Fakey game. Mihai Avram and Filippo Menczer

Bias in society

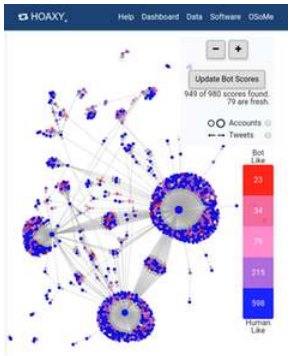
Another source of bias comes from society. When people connect directly with their peers, the social biases that guide their selection of friends come to influence the information they see.

In fact, in our research we have found that it is possible to determine the political leanings of a Twitter user by simply looking at the partisan preferences of their friends. Our analysis of the structure of these partisan communication networks found social networks are particularly efficient at disseminating information – accurate or not – when they are closely tied together and disconnected from other parts of society.

The tendency to evaluate information more favorably if it comes from within their own social circles creates "echo chambers" that are ripe for manipulation, either consciously or unintentionally. This helps explain why so many online conversations devolve into "us versus them" confrontations.

To study how the structure of online social networks makes users vulnerable to disinformation, we built Hoaxy, a system that tracks and visualizes the spread of content from low-credibility sources, and how it competes with fact-checking content. Our analysis of the data collected by Hoaxy during the 2016 U.S. presidential elections shows that Twitter accounts that shared misinformation were almost completely cut offfrom the corrections made by the fact-checkers.

When we drilled down on the misinformation-spreading accounts, we found a very dense core group of accounts retweeting each other almost exclusively – including several bots. The only times that fact-checking organizations were ever quoted or mentioned by the users in the misinformed group were when questioning their legitimacy or claiming the opposite of what they wrote.



A screenshot of a Hoaxy search shows how common bots – in red and dark pink – are spreading a false story on Twitter. Hoaxy

Bias in the machine

The third group of biases arises directly from the algorithms used to determine what people see online. Both social media platforms and search engines employ them. These personalization technologies are designed to select only the most engaging and relevant content for each individual user. But in doing so, it may end up reinforcing the cognitive and social biases of users, thus making them even more vulnerable to manipulation.

For instance, the detailed advertising tools built into many social media platforms let disinformation campaigners exploit confirmation bias by tailoring messages to people who are already inclined to believe them.

Also, if a user often clicks on Facebook links from a particular news source, Facebook will tend to show that person more of that site's content. This so-called "filter bubble" effect may isolate people from diverse perspectives, strengthening confirmation bias.

Our own research shows that social media platforms expose users to a less diverse set of sources than do non-social media sites like Wikipedia. Because this is at the level of a whole platform, not of a single user, we call this the homogeneity bias.

Another important ingredient of social media is information that is trending on the platform, according to what is getting the most clicks. We call this popularity bias, because we have found that an algorithm designed to promote popular content may negatively affect the overall quality of information on the platform. This also feeds into existing cognitive bias, reinforcing what appears to be popular irrespective of its quality.

All these algorithmic biases can be manipulated by social bots, computer programs that interact with humans through social media accounts. Most social bots, like Twitter's Big Ben, are harmless. However, some conceal their real nature and are used for malicious intents, such as boosting disinformation or falsely creating the appearance of a grassroots movement, also called "astroturfing." We found evidence of this type of manipulation in the run-up to the 2010 U.S. midterm election.



A screenshot of the Botometer website, showing one human and one bot account. Botometer

To study these manipulation strategies, we developed a tool to detect social bots called Botometer. Botometer uses machine learning to detect bot accounts, by inspecting thousands of different features of Twitter accounts, like the times of its posts, how often it tweets, and the accounts it follows and retweets. It is not perfect, but it has revealed that as many as 15 percent of Twitter accounts show signs of being bots.

Using Botometer in conjunction with Hoaxy, we analyzed the core of the misinformation network during the 2016 U.S. presidential campaign. We found many bots exploiting both the cognitive, confirmation and popularity biases of their victims and Twitter's algorithmic biases.

These bots are able to construct filter bubbles around vulnerable users, feeding them false claims and misinformation. First, they can attract the attention of human users who support a particular candidate by tweeting that candidate's hashtags or by mentioning and retweeting the person. Then the bots can amplify false claims smearing opponents by retweeting articles from low-credibility sources that match certain keywords. This activity also makes the algorithm highlight for other users false stories that are being shared widely.

Understanding complex vulnerabilities

Even as our research, and others', shows how individuals, institutions and even entire societies can be manipulated on social media, there are many questions left to answer. It's especially important to discover how these different biases interact with each other, potentially creating more complex vulnerabilities.

Tools like ours offer internet users more information about disinformation, and therefore some degree of protection from its harms. The solutions will not likely be only technological, though there will probably be some technical aspects to them. But they must take into account the cognitive and social aspects of the problem.

Editor's note: This article was updated on Jan. 10, 2019, to replace a link to a study that had been retracted. The text of the article is still accurate, and remains unchanged.

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17: Habits and Virtues: Does It Matter if a Leader Kicks a Dog? (Ciulla)

Joanne B. Ciulla

#scholarly #politics #cognitivebias #analysis #argument #research #sharedvalues #definition #ethos #heroes #currentevents



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Abstract

This paper argues that it is reasonable to make attributions about a leader's character based on minor incidents such as kicking a dog. It begins with a short review of the relevant literature from leadership studies and social psychology on how our prototypes of leaders affect the attributions we make about them. Then the paper examines the role of virtues, habits, and dispositional statements to show why an act such as kicking a dog can offer insight into a leader's moral character.

KEYWORDS: Leadership; Leadership Ethics; Virtue; Habit Attribution; Dispositional Statements

Introduction

Followers watch their leaders. They consciously or unconsciously notice how leaders act in formal, informal, public and private settings and they use this information to draw inferences about leaders' virtues, vices, habits, and future behavior. One reason they do this is because this personal know- ledge helps compensate for the real or per- ceived power imbalance between leaders and followers.1

There are times when people observe what a leader does in the blink of an eye that influence their opinion of a leader almost as much or even more than his or her entire résumé. This leads one to wonder: Is one instance or one small gesture a fair and reasonable way to make a moral assessment of a leader? We might ask this question about the behavior of anyone but it takes on a special significance in the case of leaders because of the ways they are scrutinized and perceived by followers.

Forum

In this paper, I look at why a seemingly minor act of a leader can influence our perceptions of her moral character, even in the face of other positive information about the leader. For example, would you hire a successful, well- qualified person to be a CEO or vote

for a politician who you discovered kicked a dog? What would you think of a leader who kicked a dog? Is dog kicking even relevant to leadership?

For a dog lover it would matter even if he only kicked a dog once; for others it would not matter if he kicked a dog once but it would if he did it all the time. There are also those who would consider dog kicking completely irrele- vant to a leader's moral character and ability to lead. One simple reason for condemning the behavior is that most people think leaders should be role models but does being a role model require moral perfection in every aspect of life or does it only require that that a leader serve as a model in areas relevant to his or her role as a leader?2

This hypothetical may seem like a trivial thought experiment, yet the point of the question and this paper is to tease out some philosophic insights into an important practical question. What does a small gesture or off- handed behavior tell us about the moral character of a leader?

This question lies at the heart of judgments we make when hiring people for leadership roles and deciding which candidate to vote for in an election. It touches on the relationship between a leader's public and private morality, her everyday behavior, and behavior that is part of her job. I refer to these minor gestures that people sense are morally signifi- cant as "morality in the miniature". Morality in the miniature consists of the little things people do that we perceive as indicators of the virtues that they actually possess.3

This paper begins with a short review of the relevant literature from leadership studies and social psychology on how we make attributions about a person's character and how those attributions are related to our prototypes of what a leader should be like. I will then discuss the role of virtues and habits in ethics as a means of showing why judgments about a leader's character that are based on incidents of morality in the miniature such as kicking a dog, while subject to error, can offer insights into a leader's moral character.

Leadership ethics in Leadership Studies

Most of the literature in leadership studies looks at leadership along two main axes. The first axis includes things like behaviors, traits and styles, and the second consists of the historical, organizational, and cultural context of the leader. Studies of leadership usually aim at understanding good leadership, which I have ar- gued means leadership that is both effective and ethical.4

Hence, on the one hand, if one regards ethics and effectiveness as two very separate criteria, the question of dog kicking is irrelevant if the kicker possesses the traits, knowledge, and skills to be an effective leader. On the other hand if one sees ethics as intertwined with leader effectiveness, then dog kicking may be significant. Researchers have yet to discover a universal set of traits that leaders make leaders effective in all contexts,5 nonetheless, most leadership theories have normative aspects to them.6

For instance, some leaders have traits that are effective in a business context but not in a political one. Leadership scholars and practi- tioners have long enjoyed clustering traits and behaviors into ideal types of leadership, most of which make normative assumptions about leaders. A disproportionate amount of the leadership literature consists of research on transformational leadership,7 transforming leadership,8 servant leadership,9 authentic leadership,10 and a construct with a somewhat misleading name called "ethical leadership".11

The attraction of enumerating the traits or behaviors of leaders under the umbrella of a theory is that you can measure them. Hence the most discussed theories are the ones that have questionnaires, such as transformational, authentic, and ethical leadership. All three of these theories have implicit or explicit normative assumptions. Transformational leadership assumes that the leader inspires followers.12 In James MacGregor Burn's theory of transforming leadership leaders and followers engage each other a dialogue about values and through this process leaders and followers become morally better. Bernard M. Bass begs the question of ethics by asserting that only ethical leaders are real transformational leaders, whereas he calls the unethical leaders pseudo-transformational.13

From a philosophic perspective the "ethical leadership" construct developed by Michael E. Brown, Linda K. Treviño, and David A. Harrison tests a somewhat peculiar grab bag of things. Some of the questions are about managerial behaviors, such as the leader «listens to what employees have to say», while others are personal moral assessments such as «conducts his/her personal life in an ethical manner», and others look like virtues such as «makes fair and balanced decisions».14

Respondents of survey studies such as this one have their own take on the ethical ideas in them but do not usually have the latitude to express their own implicit theory of ethics. Another limitation of these survey studies is they often filter out attributions that are uniquely part of how people construct their idea of a leader.

Agency and implicit theories of leadership

We interpret the behavior of people around us daily. In doing so we also make inferences about their intentions, motivations, traits, and values. People exercise agency when they intentionally do something. Albert Bandura says:

An intention is a representation of a future course of action to be performed. It is not simply an expectation or prediction of future actions but a proactive commitment to bring them about.15

We contrast agency with accidental acts such as tripping over a stone and knocking

someone over. In such cases there is no intent and from a moral point of view, we usually do not assign blame in the same way. The woman did not intend to knock the man over, so we would consider her blameless or perhaps negligent for not watching where she was going. Yet, between accidental behavior and intentional behavior is a third domain and this is what we sometimes call “absent minded behavior”. The leader kicks the dog out of the way and carries on with his business, apparently without thinking about it. This is the domain of morality in the miniature what I want to explore in this paper. Acts that the agent hardly appears to think about that may have moral import.16

It includes cases where a leader does not intentionally do something bad but the fact that he does it has significance to the followers, not because he had bad intentions but because he did it without thinking. Moral agency has an inhibitive form that consists of the power to refrain from acting inhumanely and a proactive form that we express in humane behavior.17 The leader who kicks a dog may raise concerns about his ability to control himself.

Leadership scholars and social psychologists have done extensive research on im- plicit theories of leadership and the role of attribution in leadership. Attributions are ways of inferring the reasons and causes of actions. According to social identity theory, people base their attributions of leaders on their personal prototype of what a leader ought to be like.18 Meindl et al. argue that the attributions concerning leaders are so strong that they call them “the romance of leadership” because people tend to assume that leaders have more power and control over things than they actually do.19

According to Meindl et al. the romance and mystery of leadership may be what sustains followers and moves them to work with leaders toward a common goal but it also creates prototypes of leaders that are unrealistic. If this is true, then all kinds of seemingly trivial behavior may have relevance concerning the behavior of leaders that they may not have for others.

The romance of leadership research illustrates an ethically distinctive aspect of being a leader. Unlike people who are not in leadership roles, we hold leaders responsible for things that they did not know about, did not do, and are unable to control. This is not because people really believe that leaders have agency over everything that goes on. Yet we still give leaders credit for all of the good things that happen under their watch and blame them for the bad, regardless of whether they had anything to do with it. Moral concepts such as responsibility are embedded in many or perhaps most prototypes of leaders. Ideally leaders are the ones who give direction and take responsibility for what happens in a group, organization, or society.

To take responsibility means to accept the role of someone who gets praised, blamed, and has a duty to clean up problems. Taking responsibility is different from being responsible in the sense that an agent may not be personally responsible for doing something or even ordering that something be done. This does not mean that leaders always take responsibility, but this expectation is clear to anyone who has noticed how bad leaders look when they fail to do so. For example, when Americans tried to sign up for health insurance and the government computers crashed, President Obama told the public that he was responsible for the failure. It would have been ridiculous for the President to say, “It’s not my fault. I did not program the computers”.

Attribution errors

As mentioned earlier, we also watch leaders to gain insights into how they will behave in the future. People look for invariances or regularities in human behavior because this helps give order to their world. As Fritz Heider points out, one problem with doing so is that we tend to «overestimate the unity of personality» and look at people in the context of the role that they play.20 Another related problem is one of faulty inductive logic. Sometimes people make the unwarranted generalizations about a person from only

one or a few observations. The fact that a man kicked a dog once does not logically warrant the conclusion that he will always kick dogs or always kicks dogs.

When we do not possess knowledge about why the man kicked the dog, we may also discount the behavior because we do not feel we have enough information to make a harsh judgment about the man's character and in- tent. Hence, we dismiss the act because maybe the man was distracted, under stress, or did not mean to do so. This is called the discounting principle in which the «role of a given cause in producing a given effect is discounted if other possible causes are present».21 While we sometimes make mistakes when we discount bad behavior, we also make mistakes when we fail to consider a person's background knowledge.

Terry Price argues that leaders make two types of cognitive moral mistakes.22 The first is about the content of morality, meaning that he cannot see why it is wrong to kick a dog. The second kind is about the scope of morality, meaning that he does not place dogs in the category of things that are morally considerable. Understanding that the leader in effect "does not know any better" may be helpful yet it still does not make some behaviors morally excusable.

This leads us to another type of attribution error. Sometimes people do not take into account the context of the behavior and the actor.23 The leader may have kicked the dog because there were rabid dogs in the area. We also have to consider the cultural context of the agent. Sociologists Marcel Mauss and Pierre Bourdieu both use the term *habitus* to discuss how environment interacts with and shapes behavior. As Mauss notes, people's habits and the meaning of behavior «vary between societies, educations, proprieties and fashions, and prestige».24 Bourdieu says that individual behavior is a «structural variant of all other group or class habitus».25 Maybe the leader is from a place where dogs are considered ver- min and dog kicking is so normal that no one even notices it.

While people err in failing to take into account the cultural context that affects a per- son's behavior, they may also make the mistake of assuming that other people react the way that they do or act on the same interests or values that they have.26 This may influence both positive and negative attributions. Hence, the dog lover may think that everyone should have the same respect and concern for dogs that she does. For her, the act of dog kicking as extremely immoral. Whereas a cat lover who hates dogs may approve of the leader's behavior – if given the chance, she would have kicked the dog too.

Other factors may also influence attributions such as proximity to the event.27 The person who sees the man kick the dog up close may react differently from the person who simply hears about it or watches it on the news. An empathetic witness to the event may feel distress because he hears the dog's cries and sees its discomfort. This may elicit a feeling of physical disgust, which has been shown to increase the severity of a person's moral judgment.28 These are just a few factors related to how we misinterpret the behavior of others and make false attributions about their character. Because people tend to carry strong assumptions about what leaders should be like and how they should behave, they tend to be hypersensitive to what leaders do. Now we will examine whether making moral judgments about leaders incidents of morality in the miniature are warranted.

Virtue and virtuosi

The most obvious place to start looking at the moral significance of kicking a dog is in virtue ethics. Aristotle says that moral goodness is the result of habit or hexis. He does not regard hexis as mechanical activity in the way that a behaviorist like B.F. Skinner might think of it.29 Consider the opening of Aristotle's *Nicomachean Ethics*:

Excellence of character results from habituation [*ethos*] – which is in fact the source of the name that it acquired [*êthikê*], the word for character-trait [*êthos*] being a slight variation of that for habituation [*ethos*].30

However, in Aristotle's and Plato's ethics, you cannot become virtuous through habit alone. In the *Republic*, Plato tells us that a person who becomes good «through habit and not by philosophy» is destined to make bad decisions.31 Virtue is not the result of conditioning nor does it include the repetition of a particular behavior – e.g., a courageous person is not always courageous in the same way. It takes knowledge and one might argue, imagination. Thornton C. Lockwood argues that:

Aristotle's idea of ethical character (ethos) or virtue (aretê) captures the notion of a virtuoso who is responsive in an excellent fashion to what reason perceives in parti- cular and changing circumstances.32

The idea of a virtuous person as a moral virtuoso has some provocative implications for our discussion of morality in the miniature. The definition of the word "virtuoso" consists of the key elements that mirror Aristotle's idea of virtue. First, it means a learned person who has a special technical skill. Second, is often related to someone with good taste and third, such a person is sometimes a

dabbler in a variety of arts.33 A virtuoso has technical skill and knowledge found in (*phronesis*). The attraction to fine things or taste reminds us of what Aristotle says about being motivated by the love of "the fine", which are activities that give us pleasure because they are good.34

Aristotle's ethics assumes that virtues should be practiced regularly. A virtuoso violi- nist should be able to play any piece of music well. If she played a simple piece of music badly, we might wonder if she was really a virtuoso. If a virtuous person is a virtuoso, what do we say about her when she behaves badly in a minor incident?

Aristotle also says that there is a unity of virtues. You cannot practice and have some virtues without having others. Based on Aristotle's account in the Nicomachean Ethics, such a person should know "the right rule" for practicing a virtue and virtues in a variety of situations.35 For example, courage is facing danger for the right reason. We cannot know what the right reason and hence practice cou- rage without knowing about justice, fairness, and the good life in general.36 Aristotle's virtue ethics show us why it is reasonable to question the moral character of the leader who kicks a dog. If virtues are supposed to be habits and intertwined with each other, then it makes sense. Here we see a tension between a unified concept of morality and the potential attribu- tion error of overestimating the unity of personality that was mentioned earlier.

Habits

We tend to look assume regularities in human behavior. While this can be problema- tic, it is not always wrong to do so. Habits have always been a difficult part of ethics because they complicate the meaning of an action. Immanuel Kant thought habits undercut the idea of good will, which he saw as the foundation of morality. For Kant, the very idea of ethics rests on following moral laws, especially in cases where we choose respect for the law overcomes our inclinations. Friedrich Nietzsche thought that short-term habits were okay, but disliked "enduring habits" because they prevented humanity from improving itself through "self-overcoming".37 The negative interpretations of habits are based on their connotation as mechanistic and repetitive behavior. The positive views on habit tend to follow Aristotle's lead and incorporate free will, reason and intentionality into them.

William James recognized the tension between determinism and voluntary behavior but regarded habit as central to the pragmatist framework. He said that habit serves as "happy harmonizer" of different elements of human experience.38 In a similar light, John Dewey argued that habits are a way for people to link past, present, and future events. He said, «The view that habits are formed by sheer repetition puts the cart before the horse».39 Repetition is the result of a habit, not its cause. Habits are formed by knowledge, socialization, and reason, which we then streamline into behavior. Kicking dogs may be a bad habit, but since habits are not mindless, the agent is still accountable for what happened before he began to repeatedly exercise the behavior.

In some ways, David Hume's account of habit captures the concern people feel when they witness acts of morality in the miniature. Hume says that moral judgments are about custom or habit and they vary across time and culture. On Hume's view, it is reasonable to assume that if a person kicks a dog once, he will do it again or perhaps do other similarly bad things. Hume writes:

The supposition, that the future resembles the past, is not founded on arguments of any kind, but is deriv'd entirely from habit, by which we are determined to expect for the future the same train of objects, to which we have become accustom'd.40

While people may read situations incor- rectly when they make snap judgments about a leader based on some small act, Hume tells us they may do so because they have seen causal connections between things like dog kicking and other bad behaviors.40

According to Hume it makes sense to be concerned about a leader who kicks a dog; however, in the same light Hume admits that this opinion can be changed by evidence to the contrary. As Hume famously said:

Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them.41

When we witness any small unsavory gesture of a leader, it may elicit a feeling of discomfort in part, Hume argues, because it is associated with something else we have seen or some other causal connection between such behaviors in the past. Hume notes that the passion or feeling we might have is not unreasonable unless we discover that it is "accompanied by a false judgment".42 In that case it is the judgment not the feeling we have about the act that is unreasonable.

Integrity of morality

One bone of contention about virtue ethics is based on the attribution errors of assuming that virtues are unwavering character traits and assuming that behavior depends more on a leader's character than the context of it.43 Critics argue that people cannot rely on

virtues to resist behaving badly when others around them are. Even Machiavelli offers this “nice guys finish last” argument about leaders:

If a ruler who wants always to act honorably is surrounded by many unscrupulous men his downfall is inevitable.44

Robert C. Solomon uses emotions to explain the relationship between virtue as a personal quality and a behavior that is influenced by context. He says emotions are part of virtues and since emotions are reactive to other people and situations, it is foolish to deny that virtues depend on the environment and yet that does not mean they are totally determined by it.45

In contrast to Solomon, Gilbert Harman argues that moral philosophers sometimes commit the fundamental attribution error of assuming that certain behaviors are indicative of moral character traits. He calls this “misguided folk morality” and his argument privi-eges the empirical research of psychologists over the moral theories of philosophers.46

Assuming that human beings are more consistent than they are is a psychological question. Experience and numerous experiments have demonstrated that character is not necessarily a stable part of human behavior. Yet, I do not think that these experiments imply that to avoid attribution errors people should change the moral ideals inherent in their prototypes of leaders. One reason why the philosophers we have discussed are interested in habits is because the idea of consis- tency is fundamental to the idea of what it means to be ethical. Also, consistency is especially important in leadership for building trust giving people a sense of security. So, when we see a man leader kick a dog, it is not unreasonable to wonder if that behavior is consistent with or indicative of other behaviors, just as we wonder about the virtuoso who cannot play a simple piece of music.

People often talk about a leader’s integrity, sometimes as if it is a psychological quality and sometimes as if it is a moral quality. The description of moral integrity has as many definitions as there are writers in the leadership literature. Leadership scholars often define integrity as a cluster of moral concepts that usually include honesty and sometime they use integrity to refer to all aspects of a leader’s ethics. The descriptive meaning of the word “integrity” is wholeness and that wholeness is the umbrella over all aspects of morality or as Aristotle says, “the rule”. When a person has a virtue it is a *hexis* because we do not expect moral qualities to be selectively exercised or exercised in isolation from other virtues. As David Baum notes, integrity refers to a personal completeness that describes a person’s unbroken or uncorrupted character.47 While integrity is central to how we think of a person’s moral character, it is also central to how we think about their immoral character. So our other intuition about the leader kicking a dog is that the incident may represent a tear in the fabric of the leader’s morality. The alternative to this view of integrity is the assumption that people easily compartmentalize their moral behavior. On this view unsavory behavior in a leader’s private life or outside of the leader’s actual work irrelevant to his or her job as a leader. While this may be true in some cases, we also see cases where followers stop discounting this kind of bad behavior because they have enough evidence to see how a leader’s bad private behavior or dog kicking affects how they lead.

Dispositional properties

We have been discussing how we might make sense of the dog kicking incident form the perspective of leadership studies, psychology, and moral philosophy. Philosophy provides other insights into the problem based on how we formulate our ideas in language. In *The Concept of Mind*, Gilbert Ryle offers a way to think about attribution based on the statements we make about the “dispositional properties” of people and things. He says dispositional statements:

Apply to, or are satisfied by, the actions, reactions and state of the object; they are inference-tickets, which license us to pre- dict, retrodict, explain and modify these actions reactions and states.48

Following the work of Ludwig Wittgen- stein, Ryle believes that language has an ela- sticity of significance.49 When we make the dispositional statement that someone is a dog kicker, we are not saying that the person is currently kicking a dog, has repeatedly kicked dogs in the past, or will kick dogs in the future; nor are we reporting on observed or unobserved behavior. Dispositional statements do not narrate incidents but «if they are true, they are satisfied by narrated incidents».50

So an observer may see a leader kick a dog and make the statement “the leader is a dog kicker”. This statement is not true or false but rather a provisional statement about the lea- der. The meaning of the statement depends on whether it fits with other narratives of events in which we are able to see a family resemblance to dog kicking. For instance, dog kicking might at some point become meaningful in the narrative of other behaviors such as humiliating low-level subordinates. Ryle’s analysis of statements about dispositional properties gives us a way of understanding how a person might think about the act of dog

kicking. She may infer from the leader kicking the dog a tentative set of dispositional properties ranging from cruelty, to disdain for subordinates, to impatience, etc., and then watch to see if these qualities manifest themselves in his behavior as a leader. This is analogous to Hume's point about judgments. We may make a wrong judgment based on the facts, but our thinking about how we feel at the time is sound. It is neither illogical nor false to say that someone who kicks a dog once is a dog kicker. Dispositional statements have the po- tential to refer to acts of morality in the miniature that may or may not at some point be either relevant to or even constitutive of a person's morality as a whole.

No more dogs! A real case

At this point the reader is probably weary of hearing about a leader kicking a dog, so let us look at a real example that illustrates the way people use an observation of morality in the miniature to gain insight into a person's morality. Several years ago, the manager of a large Wall Street bank told me a story of the time that they tried to hire a "superstar" broker away from a competitor to lead a new division of his company. The management team had met with the broker many times over a period of months to convince him to join their firm. After a number of interviews, long lunches, and conversations with the broker, he agreed to join the bank. On the way out of the office after the final interview, the broker turned to the receptionist and said "honey, get me a taxi and move it, I'm in a hurry". 51

The receptionist blushed and looked surprised at being addressed in such a rude fashion. The interviewers witnessed his behavior and were quite surprised by it. The man had not behaved that way before and they assumed that he should know better. After the incident, they started to feel uneasy about him. Despite his stellar track record as a broker, his academic credentials, and the fact that they thought he would make a lot of money for the bank, something about him did not seem right. The question on their minds was a question about his virtue: "Is he in the habit of behaving this way?"

They not only wondered about how he treated women and subordinates but they started to wonder how he did other things. Was this a tear in the fabric of his character? The incident compelled them to take a closer look into the broker's background. After further investigation they discovered that the- re were indeed problems that were unrelated to how he treated women or subordinates, but about how the broker did business. The managers decided not to hire him because they worried that he had "risky habits".

This case illustrates how morality in the miniature can offer potential clues into a per- son's character. While being rude to a woman is more serious than being rude to a dog, the behavior indicated an inconsistency from their previous observations about his behavior and fit in their organization. One might object that perhaps lapses like the broker's are a one- off and it would be unfair to judge him by it.

Yet, the case illustrates is that by viewing actions as morality in the miniature they did not condemn the man based on one act or how they felt about his behavior. Rather, the broker's behavior led them to question his character. Some organizations take the idea characterized by morality in the miniature seriously. They look for insights into job candidates' character by taking them out to lunch and observing how they treat the server. The assumption being that if they are rude to the waitress then they might be rude to subordinates.

Conclusion: Why the little things matter

The case about the broker is exemplified by the saying, "where there is smoke, there is fire". I am not willing to make such a strong claim about the leader who kicks a dog. Instead what I have attempted to show in this paper is that where there is smoke, it makes sense to keep an eye out for fire. Leadership scholars have shown us that people have prototypes of leaders that influence their attributions of them. Psychologists have demonstrated how people make attribution errors about the character of leaders, such as ignoring the context of the behavior or overestimating the unity of personality.

We also know that prototypes of leaders usually entail moral theories or moral norms. As we have seen, the anchor of many moral theories is that a person's moral character requires some sort of consistency and coherency such as in Aristotle's idea of a unified and intertwined set of virtues. The fact that people have free will and behave inconsistently does not mean that we should remove the expectation of moral coherence from our assumptions about morality or from the moral ideals inhe- rent in our prototypes of leaders. 52

By viewing a virtue as something that a person practices all the time and is related to other virtues, we set a high standard, especially for leaders who have the power to do great good or harm to others. So while such assumptions about virtue may be wrong from a psychological point of view, they are not necessarily wrong from a philosophical one.

By assuming that the character of a leader is on display in a variety of behaviors from the small gesture to intentional act, we are able to hold leaders to a high standard of morality. We should pay attention to acts of morality in the miniature because such acts serve as red flags that alert us to potential problems. Like the rest of us, leaders are morally imperfect.

Yet unlike the rest of us, the consequences of their moral imperfections can potentially do immediate or long-term harm to many people. This is why leaders should be watched (especially by citizens in a democracy) and why the off-handed things leaders do may matter. I am not arguing that we should obsess over everything that a leader does, but rather that it is reasonable to pay attention to the acts that seem inconsistent with what you know about the leader, or behavior that could be indicative of other problems.

Lastly, we live in an era when we know more about our leaders than ever before. The 24-hour news organizations watch and dissect everything that high-level leaders say and do. Some find it difficult to sort through what is relevant and what is not relevant to a leader's moral character, especially in politics. When faced with too much information it becomes all too easy to say that the little things do not mat- ter as long as the economy is good or the company makes a profit. Nonetheless, history has shown us that this is always true. While kicking a dog may not bear any relationship to a person's moral character, in the case of leaders the stakes are sometimes too high to simply ignore it.

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Notes

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18: Seed Libraries Fight for the Right to Share (Cook)

Christopher D. Cook

#reportinginformation, #sharedvalues, #kairos, #ethos, #logos, #pathos, #descriptive, #currentevents, #seeds #intellectualproperty



Tessah Wickus (left), director of Northern Wisconsin's Seed Savers Alliance, says seed libraries help more young people become farmers (Photo courtesy of Cable Community Farm.)

It's easy to take seeds for granted. Tiny dry pods hidden in packets and sacks, they make a brief appearance as gardeners and farmers collect them for future planting then later drop them into soil. They are not "what's for dinner," yet without them there would be no dinner. Seeds are the forgotten heroes of food—and of life itself.

Sharing these wellsprings of sustenance may sound innocuous enough, yet this increasingly popular exchange—and wider seed access—is up against a host of legal and economic obstacles. The players in this surreal saga, wherein the mere sharing of seeds is under attack, range from agriculture officials interpreting seed laws, to powerful corporations expanding their proprietary and market control.

Seed libraries—a type of agricultural commons where gardeners and farmers can borrow and share seed varieties, enriching their biodiversity and nutrition—have sprouted up across the U.S. in recent years, as more Americans seek connection to food and the land. This new variety of seed sharing has blossomed from just a dozen libraries in 2010 to more than 300 today. The sharing of seeds "represents embedded knowledge that we've collected over 10,000 years," says Jamie Harvie, executive director of the Institute for a Sustainable Future, based in Duluth, Minnesota. "Healthy resilient communities are characterized not by how we control other people, and more about valuing relationships."

As Harvie suggests, seed libraries offer a profound alternative to the corporate takeover of seeds, which has reached frightful proportions: according to the non-profit ETC Group, just three firms control more than half of the worldwide seed business (more than doubling their 22% share in 1996), while the top ten corporations now occupy 76 percent of the global market. Monsanto alone has 26 percent of the world's seed market, with Du Pont and Syngenta not far behind.

A 2013 report by ETC Group shows the startling scope of the industry's market power, across the panorama of seeds, agrochemicals, and genetics: Four firms control 58.2% of seeds; 61.9% of agrochemicals; 24.3% of fertilizers; 53.4% of animal pharmaceuticals; and, in livestock genetics, 97% of poultry and two-thirds of swine and cattle research.

Kristina Hubbard, communications director for the Organic Seed Alliance, sees a direct connection between corporate control and the seed-sharing movement. "I think community-based projects like seed libraries are at least in part a direct response to concerns people have about who controls our seed," explains Hubbard. "It's a necessary response, as seed industry consolidation continues and is increasing the vulnerability of our seed and food systems. We need more decision makers in the form of seed stewards, and more resiliency in our seed and food systems."

Seed Libraries Rising

"Love the earth around you," urges Betsy Goodman, a 27-year-old farmer in Western Iowa, where "most of the landscape is covered in uniform rows of corn and soybeans." Working on an 11-acre organic farm that sprouts 140 varieties of tomatoes and 60

varieties of peppers, among other crops, Goodman has become something of a seed evangelist. In 2012, she launched the Common Soil Seed Library, just across the Missouri River in nearby Omaha, Nebraska—enabling area gardeners and farmers to borrow some 5,000 seed packets (112 different varieties) to date.

"It didn't make sense to me that no one was perpetuating the cycle of seed and life," says Goodman. "People have this idea that you put a seed in the ground, harvest your food, and let it die." Goodman says she is working to perpetuate life. "The basis of our whole food system comes from the seed," she says. "I think people are not generally conscious of how grateful we should be for our food diversity and wealth."

Goodman sees the seed library as an essential reclaiming of farming traditions and local food security. "I want farmers to go back to saving seeds. It's our responsibility to uphold our food system. It takes everybody." But, she says, many farmers remain isolated and unaware of the seed-sharing movement. "The consciousness around this is not there yet. I haven't really heard from farmers yet…The farmers buy their seed each year from Monsanto and Syngenta, this huge industrial system that's very much in control of this state and surrounding states." Farmers, she adds, "rely on these companies to buy their corn, they are very tied into these companies, and can't even feed themselves off of the food they're growing."

Motivated by similar concerns, the Wisconsin Seed Savers Alliance has helped germinate six seed libraries (with three more on the way this spring) across five counties in the state's economically isolated northeast, along the shores of Lake Superior.

"A lot of food grown here is shipped away," says Alliance director Tessah Wickus. She explains that seed libraries are about "sharing the burden of growing food and making sure we all have something nutritious…We don't have a whole lot of income sources, our schools are in the system for hot lunch programs, and we have a high poverty rate. One of the concerns here is food security and expanding local foods."

While small in scale, Wisconsin's seed library alliance has tapped a well of interest among new farmers and old, says Wickus, who is 25. "Sharing seeds is part of helping the next generation of farmers…[T]his is an integral part of how to survive and sustain yourself, how to pass along knowledge from one generation to another. People have a hunger to know where their food comes from, something we've lost."

About 200 miles westward, on the White Earth Indian Reservation in northern Minnesota, a new seed library offers varieties of sunflower, bean, corn and other seeds to residents—many of whom are poor and seeking a reconnection to indigenous food and farming. Most of the money here "goes off the reservation," says Zachary Paige, farm manager at the White Earth Land Recovery Project. "This is one way to get the economy back on the reservation, and save money for food, instead of buying seeds from catalogs," he says, while also "closing that loop in producing food."

Paige (who is not Native American) helped start the White Earth Seed Library two years ago, and is working with local college and school garden projects to cultivate traditional seed varieties. He points to an indigenous tradition of growing and sharing food, and a revival of highly nutritious pre-Columbus crops, such as Bear Island Corn. Sharing seeds fits into a larger goal on the reservation of "trying to eat healthier and relieve diabetes."

Seed-Sharing Crackdown

But all this seed-sharing love is butting up against some prodigious economic and regulatory challenges. As the libraries spread across the US, they are catching scrutiny from agriculture officials in states such as Pennsylvania, Minnesota, and Iowa, who express concerns about unlabeled seed packets, and the spreading of contaminated seeds and noxious or invasive species.

One flashpoint in this battle is a small seed library in Mechanicsburg, Pennsylvania, which ran into a regulatory dispute with the state's department of agriculture. Last June, the Pennsylvania Department of Agriculture informed an employee of the Joseph T. Simpson Public Library that its seed library ran afoul of state seed laws and would have to shut down or follow exorbitant testing and labeling rules intended for commercial seed enterprises. County Commissioner Barbara Cross raised the specter of terrorism, telling local media, "Agri-terrorism is a very, very real scenario," she said. "Protecting and maintaining the food sources of America is an overwhelming challenge...so you've got agri-tourism on one side and agri-terrorism on the other."

The library was forced to limit its sharing, holding a special seed swapping event instead. As Mechanicsburg seed librarian Rebecca Swanger explained to media at the time, "We can only have current-year seeds, which means 2014, and they have to be

store-purchased because those seeds have gone through purity and germination rate testing. People can't donate their own seeds because we can't test them as required by the Seed Act."

While the Sustainable Economies Law Center (SELC) insists that laws regulating large commercial seed companies do not apply to seed libraries, "other states are now considering adopting Pennsylvania's seed protocol," Shareable reported—potentially stopping the seed library movement in its tracks.

But Pennsylvania and some other states "have misapplied the law entirely," says Neil Thapar, staff attorney at SELC, which is spearheading a national seed library campaign called Save Seed Sharing. Pennsylvania's Seed Act, he says, "does not actually authorize the state agriculture department to regulate noncommercial seed sharing through seed libraries."

Thapar argues that applying state seed laws to the libraries is "inappropriate because it violates the original spirit and intent of these laws. Seed laws were created solely as consumer protection laws to protect farmers from unscrupulous seed companies in the marketplace." In contrast, seed sharing takes place outside of markets, as a "noncommercial activity in community."

Minnesota's budding seed library movement has encountered similar resistance. Last September, the state's department of agriculture (MDA) informed the Duluth Seed Library that it was in violation of state seed laws that prohibit transferring ownership of seeds without comprehensive testing. Harvie, who helped organize the library effort in Duluth, recalls the crackdown "really shocked people…it seemed like an egregious overreach."

Harvie says the Department of Agriculture enforcements nationally are galvanizing people to support seed libraries. "What people are asking is, who's being hurt," he says. "Nobody is being hurt. The only one anyone can imagine being hurt is the seed industry."

Was the seed industry behind the MDA's actions? Harvie does not suspect a conspiracy, but he notes, "There had to be some pressure, the [MDA] has plenty of other things to do. Perhaps the MDA knew that by purposefully enforcing the law, it would draw out support for saving."

Minnesota's Seed Program Advisory Group, which advises the MDA on state seed laws, meets three times a year and publishes no records of its meetings. Its members include major state commodity groups such as the Minnesota Corn Growers Association, Soybean Growers Association, and the Minnesota Crop Improvement Association.

When the advisory group met last December, Harvie recalls, "I think the Department of Agriculture was excited for us to be at the meeting. It provided them with some community voice," he says, "when too often it is only industry that can afford the time and expense of attending meetings. The lesson is, the community has to stand up and be present."

With nationwide challenges to seed libraries, activists worry about a chilling effect on this nascent and increasingly popular form of seed-sharing. In Omaha, Nebraska, the community "has responded really well and been very supportive" of Common Soil's initiative, says Goodman. "We're not being attacked, we are being supported," she says, by gardeners and lawmakers interested in putting the libraries on more solid legal ground. But, she adds, "I was approached by others across Nebraska who wanted to open seed libraries, but they were afraid they would put all this work in and get shut down."

It remains unclear whether the seed industry has played any role in promoting the enforcement push, but this powerful agribusiness sector is vigilant about expanding its control over seeds. As first reported by MintPress News this January, the conservative American Legislative Exchange Council (ALEC) is peddling its "Pre-Emption of Local Agricultural Laws Act"—a law providing "exclusive regulatory power over agricultural seed, flower seed and vegetable seed and products of agriculture seed, flower seed and vegetable seed to the state." Despite the conservative mantra of "local control," ALEC's measure would prohibit local governments from enacting or enforcing measures to "inhibit or prevent the production or use of agricultural seed, flower seed or vegetable seed or products."

Meanwhile, the American Seed Trade Association advocates for "Strong intellectual property protection," to keep investment dollars flowing, and to "add value to agriculture and society through new products. Any state legislation that could undermine this simple principle is vigorously opposed."

Asked for its stance on seed libraries, the US Department of Agriculture (USDA) stated, "We have not received any formal complaints of mislabeled seed being distributed in interstate commerce through these programs (seed libraries)." The Federal Seed Act (FSA) governs "truthful labeling of agricultural and vegetable seed shipped in interstate commerce," the agency said, adding, "It remains to be seen if any of the seed being obtained from these libraries will make it into interstate commerce." Unless the seeds

are shipped across state lines, or "determined to be a variety protected" under the federal Seed Act, the FSA "has no jurisdiction over this seed. Individual States will need to establish internal methods of dealing with labeling and possible mislabeling of the seed packets."

Saving the Libraries

As state agriculture agencies consider whether to curtail seed libraries, legislative efforts are underway in Nebraska, Minnesota, and other states, to protect them. The Community Gardens Act [pdf] currently moving through the Nebraska legislature would exempt seed libraries from state laws governing seed labeling and testing. In December 2014, the city council of Duluth, Minnesota passed a resolution supporting seed sharing "without legal barriers of labeling fees and germination testing."

Perhaps more significantly, the Duluth resolution advocated reforming the Minnesota Seed Law to "support the sharing of seeds by individuals and through seed libraries," by exempting these forms of sharing from the law's labeling, testing, and permitting requirements. After one reform measure was withdrawn from the Minnesota legislature, activists are gearing up for another legislative push soon.

In coming months, seed-sharing advocates can expect legislative battles across the US—some seeking to expand libraries' sharing rights, and others limiting the exchange. Meanwhile, agribusiness continues to widen its economic and legal control over the world's seed supply. "Seed sharing is an interactive and vibrant contrast to the extractive marketplace," says Harvie. The battle over seed libraries and sharing represents "a clash of worldviews that just don't reconcile."

Despite the challenges, Goodman remains buoyant about the seed library movement. "It's natural for companies to try to get power over this, but it's our responsibility to push back and establish our freedom," she says. "We are losing huge chunks of our food system, and it's our responsibility to reclaim it. We have to be the ones to do it."

Christopher D. Cook is an award-winning journalist and author of *Diet for a Dead Planet: Big Business and the Coming Food Crisis*. This essay originally appeared in *Shareable.*

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19: The Defense Department Is Worried about Climate Change – and Also a Huge Carbon Emitter (Crawford)

By Neta C. Crawford



"An F/A 18 Super Hornet, assigned to the "Blacklions" of Strike Fighter Squadron (VFA) 213, flies over the aircraft carrier USS Theodore Roosevelt (CVN 71) during flight operations." by Lt. Cmdr. Johnnie Caldwell, *U.S. Navy* is in the *Public Domain*

Scientists and security analysts have warned for more than a decade that global warming is a potential national security concern.

They project that the consequences of global warming – rising seas, powerful storms, famine and diminished access to fresh water – may make regions of the world politically unstable and prompt mass migration and refugee crises.

Some worry that wars may follow.

Yet with few exceptions, the U.S. military's significant contribution to climate change has received little attention. Although the Defense Department has significantly reduced its fossil fuel consumption since the early 2000s, it remains the world's single largest consumer of oil – and as a result, one of the world's top greenhouse gas emitters.

A broad carbon footprint

I have studied war and peace for four decades. But I only focused on the scale of U.S. military greenhouse gas emissions when I began co-teaching a course on climate change and focused on the Pentagon's response to global warming. Yet, the Department of Defense is the U.S. government's largest fossil fuel consumer, accounting for between 77% and 80% of all federal government energy consumption since 2001.

In a newly released study published by Brown University's Costs of War Project, I calculated U.S. military greenhouse gas emissions in tons of carbon dioxide equivalent from 1975 through 2017.

Today China is the world's largest greenhouse gas emitter, followed by the United States. In 2017 the Pentagon's greenhouse gas emissions totaled over 59 million metric tons of carbon dioxide equivalent. If it were a country, it would have been the world's 55th largest greenhouse gas emitter, with emissions larger than Portugal, Sweden or Denmark.

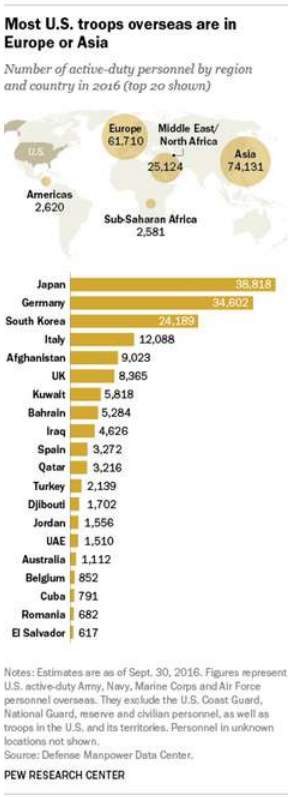


Chart: The Conversation, CC-BY-ND

The largest sources of military greenhouse gas emissions are buildings and fuel. The Defense Department maintains over 560,000 buildings at approximately 500 domestic and overseas military installations, which account for about 40% of its greenhouse gas emissions.

The rest comes from operations. In fiscal year 2016, for instance, the Defense Department consumed about 86 million barrels of fuel for operational purposes.

Why do the armed forces use so much fuel?

Military weapons and equipment use so much fuel that the relevant measure for defense planners is frequently gallons per mile.

Aircraft are particularly thirsty. For example, the B-2 stealth bomber, which holds more than 25,600 gallons of jet fuel, burns 4.28 gallons per mile and emits more than 250 metric tons of greenhouse gas over a 6,000 nautical mile range. The KC-135R aerial refueling tanker consumes about 4.9 gallons per mile.

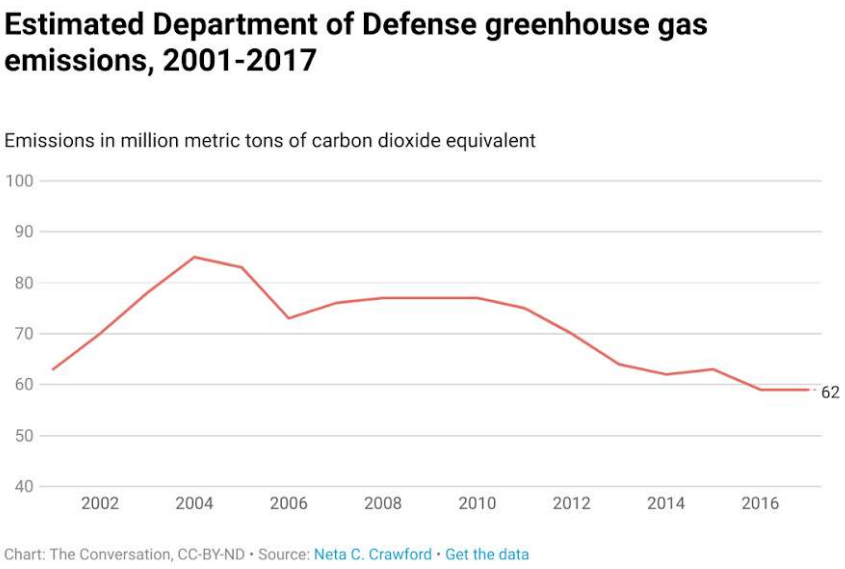
A single mission consumes enormous quantities of fuel. In January 2017, two B-2B bombers and 15 aerial refueling tankers traveled more than 12,000 miles from Whiteman Air Force Base to bomb ISIS targets in Libya, killing about 80 suspected ISIS militants. Not counting the tankers' emissions, the B-2s emitted about 1,000 metric tons of greenhouse gases.

Quantifying military emissions

Calculating the Defense Department's greenhouse gas emissions isn't easy. The Defense Logistics Agency tracks fuel purchases, but the Pentagon does not consistently report DOD fossil fuel consumption to Congress in its annual budget requests.

The Department of Energy publishes data on DOD energy production and fuel consumption, including for vehicles and equipment. Using fuel consumption data, I estimate that from 2001 through 2017, the DOD, including all service branches, emitted 1.2 billion metric tons of greenhouse gases. That is the rough equivalent of driving of 255 million passenger vehicles over a year.

Of that total, I estimated that war-related emissions between 2001 and 2017, including "overseas contingency operations" in Afghanistan, Pakistan, Iraq and Syria, generated over 400 million metric tons of CO2 equivalent — roughly equivalent to the greenhouse emissions of almost 85 million cars in one year.



Real and present dangers?

The Pentagon's core mission is to prepare for potential attacks by human adversaries. Analysts argue about the likelihood of war and the level of military preparation necessary to prevent it, but in my view, none of the United States' adversaries – Russia, Iran, China and North Korea – are certain to attack the United States.

Nor is a large standing military the only way to reduce the threats these adversaries pose. Arms control and diplomacy can often de-escalate tensions and reduce threats. Economic sanctions can diminish the capacity of states and nonstate actors to threaten the security interests of the U.S. and its allies.

In contrast, climate change is not a potential risk. It has begun, with real consequences to the United States. Failing to reduce greenhouse gas emissions will make the nightmare scenarios strategists warn against – perhaps even "climate wars" – more likely.



A case for decarbonizing the military

Over the past last decade the Defense Department has reduced its fossil fuel consumption through actions that include using renewable energy, weatherizing buildings and reducing aircraft idling time on runways.

The DOD's total annual emissions declined from a peak of 85 million metric tons of carbon dioxide equivalent in 2004 to 59 million metric tons in 2017. The goal, as then-General James Mattis put it, is to be "unleashed from the tether of fuel" by decreasing military dependence on oil and oil convoys that are vulnerable to attack in war zones.

Since 1979, the United States has placed a high priority on protecting access to the Persian Gulf. About one-fourth of military operational fuel use is for the U.S. Central Command, which covers the Persian Gulf region.

As national security scholars have argued, with dramatic growth in renewable energy and diminishing U.S. dependence on foreign oil, it is possible for Congress and the president to rethink our nation's military missions and reduce the amount of energy the armed forces use to protect access to Middle East oil.

I agree with the military and national security experts who contend that climate change should be front and center in U.S. national security debates. Cutting Pentagon greenhouse gas emissions will help save lives in the United States, and could diminish the risk of climate conflict.

Neta C. Crawford is a professor of Political Science at Boston University and the author of *Accountability for Killing: Moral Responsibility for Collateral Damage in America's Post-9/11 Wars* (Oxford University Press, 2013) and *Argument and Change in World Politics: Ethics, Decolonization, Humanitarian Intervention* (Cambridge University Press, 2002.)



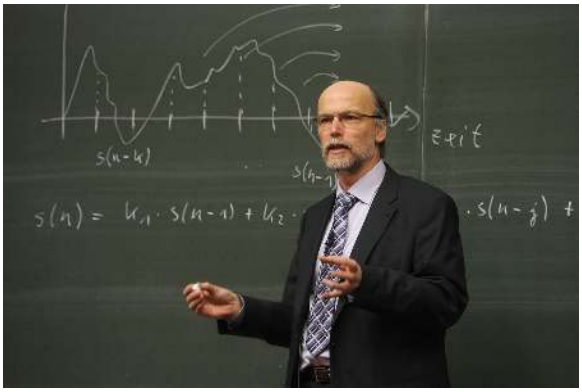
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20: Male Teachers Are Most Likely to Rate Highly in University Student Feedback (Crossley, Johnston, and Fan)

Merlin Crossley, Emma Johnston, and Yanan Fan

#reportinginformation, #systemanalysis, #proposal, #logos, #cognitivebiases, #research, #education



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University students, like many in society, demonstrate bias against women and particularly women from non-English speaking backgrounds.

That's the take home message from a new and comprehensive analysis of student experience surveys.

The study examined a large dataset consisting of more than 500,000 student responses collected over 2010 to 2016. It involved more than 3,000 teachers and 2,000 courses across five faculties at the University of New South Wales (UNSW), Sydney.

Most bias in science and business

Interestingly, the bias varies.

In parts of science and business the effects are clear. In the science and business faculties, a male teacher from an English-speaking background was more than twice as likely to get a higher score on a student evaluation than a female teacher from a non-English speaking background.

But in other areas, such as arts and social science, the effects are almost marginal. In engineering, effects were only detected for non-English speakers.

When one looks at the probability of scoring very high ratings, and dissects the categories into genders and cultural background, the results are clear. The disparities occur mostly at the very top end: this is where bias creeps in.

Previously the university had looked at just the average (mean) ratings of teachers of different genders, and found that they are more or less indistinguishable (unpublished data). But this new study goes further and provides information that is not evident in superficial analyses.

Should we abandon student feedback?

Student feedback can be a useful mechanism to understand the varied experiences of students. But student feedback is sometimes used inappropriately in staff performance evaluations, and that's where the existence of bias creates serious problems.

One can make the case for abandoning student feedback – and many have.

But it's problematic to turn a deaf ear to the student voice, and that is not what national approaches such as the Quality in Learning and Teaching processes (QILT) are doing.

This is because feedback can often be helpful. It can make things better. In addition, it is often positive. Sometimes the feedback is actually the way students say thanks.

However, sometimes it can be very hurtful and damaging, particularly if it is motivated by prejudice. We have to be aware of that and the barriers it can create.

We know that minority groups already suffer from reduced confidence and visibility, so biased teacher evaluations may exaggerate existing inequities.

What do the numbers mean?

It is very important to be cautious when looking at the raw numbers.

Firstly, let's consider what the numbers mean. Students are not evaluating teaching and learning in these surveys. They are telling us about their experiences – that's why we call them MyExperience surveys at UNSW. We resist the idea that they are student evaluations of teaching, as are used in some settings.

Peer review can make contributions to evaluating teaching while assessments can help evaluate learning – however they may not be enough to overcome bias. When considering professional performance at UNSW, we do not exclude the feedback that students provide on their experience, but we look at a basket of indicators.

Secondly, one has to be serious about the biases that emerge, acknowledge them and confront the issues. Most universities pride themselves on being diverse and inclusive, and students support this.

But this study reminds us that we have work to do. Biases exist. The message is strong. You are more likely to score top ratings if you come from the category of white male: that is, if you are from the prevailing establishment.

The influence of history

These results may be surprising given the diversity of the student and staff body at Australian universities.

But our cultural milieu has been historically saturated by white males, and continuing biases exist. The important thing is to be aware of them, and when looking at the numbers to realise that the ratings are provided in the context of a particular society at a particular moment in time.

The scores should not be blindly accepted at face value.

Most universities, including ours, are working on being more inclusive. At UNSW a new Deputy Vice-Chancellor Equity, Diversity and Inclusion – Eileen Baldry – was recently appointed, and we are working hard to combat bias and to introduce new strategies aimed at supporting diversity. For example, the university will introduce new training for members of promotion panels, explaining the biases detected in our new study. By understanding the problem, we can begin to address it.

All staff across all of our universities can benefit from becoming more aware of issues around bias – especially those in powerful positions, such as members of promotion committees.

Reducing bias will have great benefits for society as university students represent a large proportion of future leaders in government and industry.

It is clear that negative stereotypes will contribute to the partiality that exists within our student community. Encouraging more women and cultural minorities at all levels in higher education, in leadership positions and in membership of key committees will help shrink these biases.

Training in values

Training students is challenging, especially at large modern universities such as UNSW, which has a cohort of over 50,000 coming from more than 100 countries. But our study found similar levels of bias in local students, as we did in international students.

In training students we have to remember that we provide knowledge, but also communicate values via our words and our behaviours.

If we are to continue to listen to the student experience, we need to be careful with the results. Rigorous statistical analyses such as this study, can help us recognise bias and work to address it. If our students graduate with less bias than when they entered their degree, we will be contributing to creating a more equitable and inclusive society in the future.

It is not easy to uproot prejudices but the data are clear. We expect people will be on board and be pleased to contribute to moving things in the right direction.

Merlin Crossley is the Deputy Vice-Chancellor Academic and Professor of Molecular Biology, University of New South Wales. Emma Johnston is Professor and Dean of Science, UNSW. Yanan Fan is Associate Professor of Statistics, UNSW.



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21: Despite Public Pledges, Leading Scientific Journals Still Allow Statistical Misconduct and Refuse to Correct It (Doctorow)

By Cory Doctorow

#research, #logos, #ethos, #systemanalysis, #cognitivebias, #reportinginformation, #science



A leading form of statistical malpractice in scientific studies is to retroactively comb through the data for "interesting" patterns; while such patterns may provide useful leads for future investigations, simply cherry-picking data that looks significant out of a study that has otherwise failed to prove out the researcher's initial hypothesis can generate false -- but plausible-seeming -- conclusions.

To combat this practice, many journals have signed up to the Consolidated Standards of Reporting Trials (CONSORT), a set of principles requiring researchers to publicly register, in advance, what data they will collect, and how they will analyze it, and to prominently note when they change methodologies after the fact, so that readers can treat any conclusions from these changes with additional care. CONSORT-compliant journals also promise to accept, review, and expeditiously publish correction letters when the papers they publish are found to have breached CONSORT standards.

Evidence-based medicine ninja Ben Goldacre (previously) and colleagues reviewed every single paper published in five leading CONSORT-signed-up journals (New England Journal of Medicine, The Lancet, Journal of the American Medical Association, British Medical Journal, and Annals of Internal Medicine) for six weeks, and, when they detected statistical practices that violated CONSORT principles, they informed the journals in writing and recorded and published their replies, and tabulated the findings, producing a league table of the journals that do the most to live up to their commitments to good statistical practice. They also analyzed the reasons that journals (and researchers) gave for not publishing corrections, and point out the wide gaps in the journal editors' and researchers' understanding of good statistical practice.

The results are very bad. While the vast majority (76%) of papers adhered to CONSORT standards, the out-of-compliance papers were very unlikely to be corrected, and when they were, it took a very long time (median: 99 days).

Two journals -- JAMA and NEMJ -- refused outright to publish a single correction (by contrast, the Lancet published 75% of the corrections letters).

All the underlying data, correspondence and other materials have been published on an excellent website [compare-trials.org/], and Goldacre and co have presented their findings in a paper [https://trialsjournal.biomedcentral.com/articles/10.1186/s13063-019-3173-2] on Biomedcentral.

Before carrying out a clinical trial, all outcomes that will be measured (e.g. blood pressure after one year of treatment) should be pre-specified in a trial protocol, and on a clinical trial registry.

This is because if researchers measure lots of things, some of those things are likely to give a positive result by random chance (a false positive). A pre-specified outcome is much less likely to give a false-positive result.

Once the trial is complete, the trial report should then report all pre-specified outcomes. Where reported outcomes differ from those pre-specified, this must be declared in the report, along with an explanation of the timing and reason for the change. This ensures a fair picture of the trial results.

However, in reality, pre-specified outcomes are often left unreported, while outcomes that were not pre-specified are reported, without being declared as novel. This is an extremely common problem that distorts the evidence we use to make real-world clinical decisions.

COMPare: a prospective cohort study correcting and monitoring 58 misreported trials in real time [https://trialsjournal.biomedcentral.com/articles/10.1186/s13063-019-3173-2] [Ben Goldacre, Henry Drysdale, Aaron Dale, Ioan Milosevic, Eirion Slade, Philip Hartley, Cicely Marston, Anna Powell-Smith, Carl Heneghan and Kamal R. Mahtani/Biomedcentral]

Cory Doctorow is a science fiction author, activist and journalist — the co-editor of Boing Boing and the author of many books, most recently *Radicalized* and *Walkaway*, science fiction for adults, *In Real Life*, a graphic novel; *Information Doesn't Want to Be Free*, a book about earning a living in the Internet age, and *Homeland*, a YA sequel to *Little Brother*.



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22: Writing in the Age of Distraction (Doctorow)

By Cory Doctorow

#argument, #systemanalysis #cognitivebias #analysis #sharedvalues #advice #langu age #writinglife



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We know that our readers are distracted and sometimes even overwhelmed by the myriad distractions that lie one click away on the Internet, but of course writers face the same glorious problem: the delirious world of information and communication and community that lurks behind your screen, one alt-tab away from your word-processor.

The single worst piece of writing advice I ever got was to stay away from the Internet because it would only waste my time and wouldn't help my writing. This advice was wrong creatively, professionally, artistically, and personally, but I know where the writer who doled it out was coming from. Every now and again, when I see a new website, game, or service, I sense the tug of an attention black hole: a time-sink that is just waiting to fill my every discretionary moment with distraction. As a co-parenting new father who writes at least a book per year, half-a-dozen columns a month, ten or more blog posts a day, plus assorted novellas and stories and speeches, I know just how short time can be and how dangerous distraction is.

But the Internet has been very good to me. It's informed my creativity and aesthetics, it's benefited me professionally and personally, and for every moment it steals, it gives back a hundred delights. I'd no sooner give it up than I'd give up fiction or any other pleasurable vice.

I think I've managed to balance things out through a few simple techniques that I've been refining for years. I still sometimes feel frazzled and info-whelmed, but that's rare. Most of the time, I'm on top of my workload and my muse. Here's how I do it:

Short, regular work schedule

When I'm working on a story or novel, I set a modest daily goal — usually a page or two — and then I meet it every day, doing nothing else while I'm working on it. It's not plausible or desirable to try to get the world to go away for hours at a time, but it's entirely possible to make it all shut up for 20 minutes. Writing a page every day gets me more than a novel per year — do the math — and there's always 20 minutes to be found in a day, no matter what else is going on. Twenty minutes is a short enough interval that it can be claimed from a sleep or meal-break (though this shouldn't become a habit). The secret is to do it every day, weekends included, to keep the momentum going, and to allow your thoughts to wander to your next day's page between sessions. Try to find one or two vivid sensory details to work into the next page, or a bon mot, so that you've already got some material when you sit down at the keyboard.

Leave yourself a rough edge

When you hit your daily word-goal, stop. Stop even if you're in the middle of a sentence. Especially if you're in the middle of a sentence. That way, when you sit down at the keyboard the next day, your first five or ten words are already ordained, so that you get a little push before you begin your work. Knitters leave a bit of yarn sticking out of the day's knitting so they know where to pick up the next day — they call it the "hint." Potters leave a rough edge on the wet clay before they wrap it in plastic for the night — it's hard to build on a smooth edge.

Don't research

Researching isn't writing and vice-versa. When you come to a factual matter that you could google in a matter of seconds, don't. Don't give in and look up the length of the Brooklyn Bridge, the population of Rhode Island, or the distance to the Sun. That way lies distraction — an endless click-trance that will turn your 20 minutes of composing into a half-day's idyll through the web. Instead, do what journalists do: type "TK" where your fact should go, as in "The Brooklyn bridge, all TK feet of it, sailed into the air like a kite." "TK" appears in very few English words (the one I get tripped up on is "Atkins") so a quick search through your document for "TK" will tell you whether you have any fact-checking to do afterwards. And your editor and copyeditor will recognize it if you miss it and bring it to your attention.

Don't be ceremonious

Forget advice about finding the right atmosphere to coax your muse into the room. Forget candles, music, silence, a good chair, a cigarette, or putting the kids to sleep. It's nice to have all your physical needs met before you write, but if you convince yourself that you can only write in a perfect world, you compound the problem of finding 20 free minutes with the problem of finding the right environment at the same time. When the time is available, just put fingers to keyboard and write. You can put up with noise/silence/kids/discomfort/hunger for 20 minutes.

Kill your word-processor

Word, Google Office and OpenOffice all come with a bewildering array of typesetting and automation settings that you can play with forever. Forget it. All that stuff is distraction, and the last thing you want is your tool second-guessing you, "correcting" your spelling, criticizing your sentence structure, and so on. The programmers who wrote your word processor type all day long, every day, and they have the power to buy or acquire any tool they can imagine for entering text into a computer. They don't write their software with Word. They use a text-editor, like vi, Emacs, TextPad, BBEdit, Gedit, or any of a host of editors. These are some of the most venerable, reliable, powerful tools in the history of software (since they're at the core of all other software) and they have almost no distracting features — but they do have powerful search-and-replace functions. Best of all, the humble .txt file can be read by practically every application on your computer, can be pasted directly into an email, and can't transmit a virus.

Realtime communications tools are deadly

The biggest impediment to concentration is your computer's ecosystem of interruption technologies: IM, email alerts, RSS alerts, Skype rings, etc. Anything that requires you to wait for a response, even subconsciously, occupies your attention. Anything that leaps up on your screen to announce something new, occupies your attention. The more you can train your friends and family to use email, message boards, and similar technologies that allow you to save up your conversation for planned sessions instead of demanding your attention right now helps you carve out your 20 minutes. By all means, schedule a chat — voice, text, or video — when it's needed, but leaving your IM running is like sitting down to work after hanging a giant "DISTRACT ME" sign over your desk, one that shines brightly enough to be seen by the entire world.

I don't claim to have invented these techniques, but they're the ones that have made the 21st century a good one for me.

Cory Doctorow is a Canadian-British blogger, journalist, and science fiction author and the co-editor of the blog Boing Boing. His website is craphound.com. This essay originally appeared in the online magazine Locus on 7 January 2009.

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23: No Food, No Water, No Sleep: Is Brazil Torturing Student Protesters? (Paula)

By Renato Francisco dos Santos Paula



Public school students in São Paulo decrying state budget cuts and changes to syllabi. Rovena Rosa/Agência Brasil Fotografias, CC BY

Brazil's public relations disaster has gone from bad to worse. In September, congress impeached president Dilma Rousseff for dubious reasons, in what some have called a "democratic coup d'etat". Since then, street protests against the new government have been violently repressed.

Now, police are responding violently to children participating in school sit-ins.

Techniqiues 'more commonly associated with torture'

For the past two months, public school students across the country have been occupying their buildings to protest proposed educational reforms. The movement, which started in Paraná state in October, has spread to 221 universities and 1,000 secondary schools and gained the support of labour unions, civil associations and social movements.

The peaceful actions, in which students halt normal teaching activities by chanting pro-education slogans, seek to publicise the damage that would be done if proposed Provisional Measure Nº 746 eliminates subjects such as art, sociology and philosophy from the syllabus, among other possible cuts. Pupils are also reaching out to their communities to explain the issues, undertaking cultural activities and participating in city council and legislative sessions.

The students hope to pressure the government into engaging with society about the proposed reforms, which it has thus far eschewed.

Publicly, Brazilian President Michel Temer has assigned little importanceto the sit-ins, saying the kids "don't even know what the [budget freeze] is really about".

But behind the scenes, the government has prevailed on courts to block the occupations. In Paraná State, for example, a judge ordered schoolchildren to leave voluntarily on penalty of a daily fine of R$10,000 (US$2,500). That's an exorbitant amount for Brazil's largely low-income public school families.

Other courts have authorised aggressive reprisals more commonly associated with torture, says the group *Advogados pela Democracia*(Lawyers for Democracy), which is assisting the youngsters pro bono. Military police have cut off the supply of electricity, food and water to occupied schools in Paraná. In Brasilia, the police have ruled favourably on depriving students of sleep through the unceasing use of noisemakers.

Such techniques violate child protection laws. And it's significant that the last time they were deployed was during Brazil's military dictatorship(1964–1985).

Sit-ins that are both practical and symbolic

The sight of children occupying schools, which are, after all, public places, should remind Brazilians of education's central function: to help us become rational, civilised human beings who can live harmoniously in a society. That's the philosophy that Jean-Jacques Rousseau detailed in his 1762 book Emile, or Treatise on Education.

Public school students know from firsthand experience that in Brazil this value has been lost, and they are fighting to prevent further deterioration of a long-struggling but critical public asset.

Though Brazil's post-dictatorship 1988 Constitution defines education as a universal social right and a duty of the state, in practice it has long been restricted to elites. Efforts to democratise education have made some progress but left significant gaps.

From 1990 to 2013, the national dropout rate of children aged seven to 18 years decreased from 19.6% to 7%, according to the Brazilian Institute for Geography and Statistics. But the 2013 national household surveyshowed that more than 3 million boys and girls still do not attend school regularly.

Race and geography easily identifies these excluded youngsters. Most are poor, black or indigenous, and they live in either poor urban outskirts, semi-arid drylands of northeast Brazil, Amazon rainforest or remote rural areas. Many poor kids must abandon their studies to help support their families. Others have special needs that schools can't accommodate.

Given this reality, the protesting students are criticising more than budget cuts; they're questioning Brazilian values.

The many faces of Brazil's crisis

Attacks on education are in line with the general rightward shift that followed Dilma Rousseff's impeachment.

Her replacement, Michel Temer, quickly began to address what he calls a "fiscal crisis", implementing a new tax structure and reforming entitlements. New social security legislation raises the retirement age from 55 to 70 while curtailing benefits, and proposed legislation would limit workers' rights.

The Temer government's 20-year freeze on state spending promises to wreak havoc on many federal programs, including education.

Other proposed education reforms have an ideological bent. The Temer administration wants to enable high schoolers to sign up for part-time vocational training in schools, rather than on a supplementary basis (as current law stipulates). Specialists say the measure would widen inequality, as poorer pupils opt for vocational training classes and leave school to take low-skill jobs while wealthier students graduate to get better positions.

The new reforms come after years of cuts to education disguised as reform. In December 2012, São Paulo's state government introduced changes to secondary school curricula, reducing arts, philosophy, sociology and geography classes. The then-governor upheld that unpopular decision, but when, in 2015, the state proposed closing 90 schools to save money, some 200 sit-ins forced the government to backtrack.

Paraná state also responded to fiscal challenges in 2015 by eliminating 2,200 classes and laying off 33,000 educators. Teachers finally went on strike when the government proposed transferring R$8.5 billion (US$2.5 billion) from the civil servants' pension fund to government coffers after having refused to raise salaries even modestly.

Other Paraná civil servants joined the teachers' walkout, triggering one of Brazil's worst outbreaks of police violence. Around 200 teachers were injured.

Local newspapers and education reporters covered these events to a certain extent, but it has taken state-sponsored torture of children to capture nationwide attention. Now, with the whole country watching (along with, increasingly, the world), Brazil's government is under pressure to listen to its children's voices, and not use the courts and police clad in riot gear to muzzle them.

Renato Francisco dos Santos Paula is Professor of Social Work and Political Science at the Federal University of Goiás Researcher in the area of social development, social policies, States and State Institutions, Inequality and Poverty.

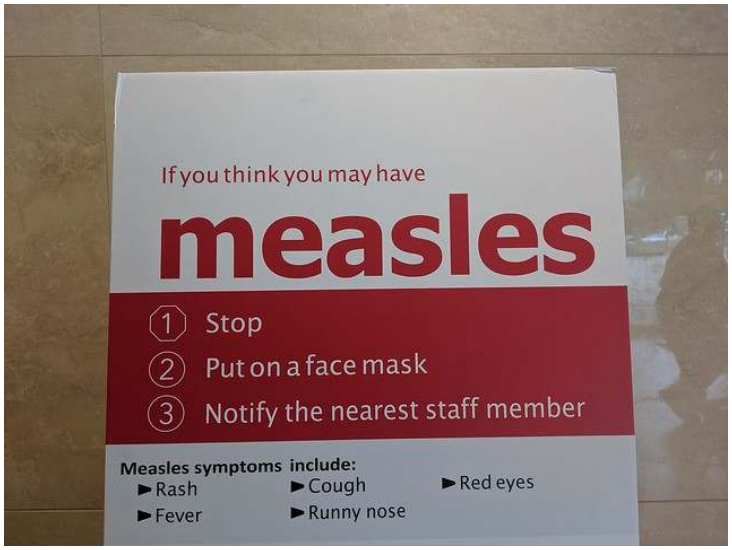
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24: Measles: Why It's So Deadly, and Why Vaccination Is So Vital (Duprex)

Paul Duprex

#argument, #currentevents, #science, #logos, #ethos, #sharedvalues, #pathos, #research, #reportinginformation, #cognitivebias, #health #global



"Measles sign, USC Keck Center, Los Angeles, California, USA" by *Cory Doctorow* is licensed under *CC BY-SA 4.0*

On the darkest day of 2018, the winter solstice, we at the Center for Vaccine Research at the University of Pittsburgh tweeted, with despair, a report in the Guardian that measles cases in Europe reached the highest number in 20 years.

Why was this a cause for concern? Europe is far away from the United States, and as some people apparently believe measles is a benign, childhood disease that causes a bit of a rash, a dribbling nose and a few spots, right? What was all the fuss about?

Well as George Santayana said, "Those who cannot remember the past are condemned to repeat it." Collective amnesia about the virulence of this disease has driven us to forget that measles virus has killed tens of millions of infants throughout history. Now, with several ongoing outbreaks across our own country, this unnecessary threat is back.

Measles is a highly contagious and sometimes deadly disease that spreads like wildfire in naive populations. The virus played its part in decimating Native American populations during the age of discovery. Since these people groups had no natural immunity to the diseases brought to the New World by Europeans, some estimates suggest up to 95 percent of the Native American population died due to smallpox, measles and other infectious diseases.

In the 1960s, measles infected about 3-4 million people in the U.S. each year. More than 48,000 people were hospitalized, and about 4,000 developed acute encephalitis, a life-threatening condition in which brain tissues become inflamed. Up to 500 people died, mainly from complications such as pneumonia and encephalitis. This was why vaccine pioneers John Enders and Thomas Peebles were motivated to isolate, weaken and develop a vaccine against measles that is truly transformative for human health. Parents who knew the reality of the disease were quick to vaccinate their children. Uptake skyrocketed and the number of cases, and associated deaths, plummeted in the developed world.

By 1985, when John Enders died, over 1 million of the world's kids were still dying because of this infection. However, now measles was a disease preventable by vaccine, and there was a huge impetus to address that tragedy by the World Health Organization.

When I started working on the virus in 1996, there were still over 500,000 children dying of measles each year worldwide. Such big numbers can be hard to digest. So to put it into perspective, if you've ever been on or seen a Boeing 747 jumbo jet, you will know it's a pretty big airplane. Think of over three of these planes full of infants crashing every day of the year with 100 percent of the people on board dying. January, February, March … the summer solstice, the autumnal equinox … November, back to the

winter solstice in December … one rhythmic year. That's the reality of measles – over half-a-million lives were lost globally every year in the nineties.

Thanks to vaccination, however, between 2000 and 2016 there was an 84 percent decrease in measles mortality, and over 20 millions deaths were prevented due to vaccination. What an achievement!

Near universal adoption of the vaccine in the developing world meant that measles infections and concomitant deaths became very rare. By 2000, the led to measles being eliminated from the United States. The last person to die of the infection here was in 2015.

The effectiveness and irony of vaccination

These successes don't mean the measles is gone or that the virus has become weak. Far from it. Seeing the virus up close and personal over all these years and knowing what happens when it runs rampant in an infected host gives me such respect for this minuscule "little bag of destruction" whose genetic material is 19,000 times smaller than ours. It's also ironic how losing sight of the disease because of the success of vaccination has brought new societal challenges.

What's important to realize is those millions of kids who died of measles each year in the nineties, for the most part were not living in the developed world. In those days here in the United States and in Europe, there was a widespread appreciation that #vaccineswork, meaning that the vast majority of people received the measles, mumps and rubella (MMR) vaccine and were well and truly protected. Two doses of the vaccine are 97 percent effective at stopping the infection.

What one of the most infectious pathogens on the planet can do to an unvaccinated person in 2019 is biologically incredible. Yes, that's right, an unvaccinated human. But why would anyone decide not to get vaccinated or refrain from protecting their children?

That's because forgetting the past has precipitated selective amnesia in our post-measles psyche. Ignoring scientific facts has tragically brought us to a place where some people fail to appreciate the values and utility of some of the most phenomenal tools we have created in our historical war on infectious disease. Unsubstantiated claims that vaccines like MMR were associated with autism, multiple sclerosis, Crohn's disease, etc., etc., and ill-informed celebrities have wreaked havoc with vaccination programs. Genuine, caring parents unaware of the realities of diseases they had never seen decided that since the viruses were gone from this part of the world shots were so last millennium. Put simply, some people have given up on vaccines.

This has created the perfect storm. Since the measles virus is so infectious and Europe, Africa, South America, and South East Asia are not really that far away by jumbo jet, a case somewhere in the world can lead to an infection anywhere in the world. Failure to vaccinate large groups of people is helping measles come back. From California, to New York from Washington state to Minnesota and Georgia, measles is back with a vengeance. Now we can only live in hope that the last death from this deadly disease in the U.S. remains from 2015. Unfortunately, that is not a given.

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25: Hope and Mourning in the Anthropocene: Understanding Ecological Grief (Ellis & Cunsolo)

By Neville Ellis & Ashlee Cunsolo



"Midwest drought" by jackoscage is licensed under CC BY 2.0

We are living in a time of extraordinary ecological loss. Not only are human actions destabilising the very conditions that sustain life, but it is also increasingly clear that we are pushing the Earth into an entirely new geological era, often described as the Anthropocene.

Research shows that people increasingly feel the effects of these planetary changes and associated ecological losses in their daily lives, and that these changes present significant direct and indirect threats to mental health and well-being. Climate change, and the associated impacts to land and environment, for example, have recently been linked to a range of negative mental health impacts, including depression, suicidal ideation, post-traumatic stress, as well as feelings of anger, hopelessness, distress, and despair.

Not well represented in the literature, however, is an emotional response we term 'ecological grief,' which we have defined in a recent Nature Climate Change article: "The grief felt in relation to experienced or anticipated ecological losses, including the loss of species, ecosystems, and meaningful landscapes due to acute or chronic environmental change."

We believe ecological grief is a natural, though overlooked, response to ecological loss, and one that is likely to affect more of us into the future.

Understanding ecological grief

Grief takes many forms and differs greatly between individuals and cultures. Although grief is well understood in relation to human losses, 'to grieve' is rarely considered something that we do in relation to losses in the natural world.

The eminent American naturalist Aldo Leopold was among the first to describe the emotional toll of ecological loss in his 1949 book, A Sand County Almanac: "One of the penalties of an ecological education," he wrote, "is to live alone in a world of wounds."

More recently, many respected ecologists and climate scientists have expressed their feelings of grief and distress in response to climate change and the environmental destruction it entails in places like: "Climate scientists feel weight of the world on their shoulders" and "Is this how you feel?"

Ecological grief is also a significant theme in our own work. In different research projects working with Inuit in Inuit Nunangat in Arctic Canada and farmers in the Western Australian Wheatbelt, both of us have spent a combined total of almost 20 years working with people living in areas experiencing significant climatic changes and environmental shifts.

Despite very different geographical and cultural contexts, our research revealed a surprising degree of commonality between Inuit and family farming communities as they struggled to cope, both emotionally and psychologically, with mounting ecological losses and the prospect of an uncertain future.

Voices of ecological grief

Our research shows that climate-related ecological losses can trigger grief experiences in several ways. Foremost, people grieve for lost landscapes, ecosystems, species, or places that carry personal or collective meaning.

For Inuit communities in the Inuit Land Claim Settlement Area of Nunatsiavut, Labrador, Canada, the land is foundational to mental health. In recent years, melting sea ice prevented travel to significant cultural sites and engagement in traditional cultural activities, such as hunting and fishing. These disruptions to an Inuit sense of place was accompanied by strong emotional reactions, including grief, anger, sadness, frustration and despair.

One male who grew up hunting and trapping on the land in the community of Rigolet, Nunatsiavut explained:

“People are not who they are. They’re not comfortable and can’t do the same things. If something is taken away from you, you don’t have it. If a way of life is taken away because of circumstances you have no control over, you lose control over your life.”

Chronic drought conditions in the Western Australian Wheatbelt elicited similar emotional reactions for some family farmers. As one long-time farmer described:

“There’s probably nothing worse than seeing your farm go in a dust storm. I reckon it’s probably one of the worst feelings […] I find that one of the most depressing things of the lot, seeing the farm blow away in a dust storm. That really gets up my nose, and a long way up too. If its blowing dust I come inside - I just come inside here. I can’t stand to watch it.”

In both cases, such experiences resonate strongly with the concept of “solastagia,” described both as a form of homesickness while still in place, and as a type of grief over the loss of a healthy place or a thriving ecosystem.

People also grieve for lost environmental knowledge and associated identities. In these cases, people mourn the part of self-identity that is lost when the land upon which it is based changes or disappears.

For Australian family farmers, the inability to maintain a healthy landscape in the context of worsening seasonal variability and chronic dryness often elicited feelings of self-blame and shame:

“Farmers just hate seeing their farm lift; it somehow says to them ‘I’m a bad farmer’. And I think all farmers are good farmers. They all try their hardest to be. They all love their land.”

For older Inuit in Nunatsiavut, changes to weather and landscape are invalidating long-standing and multi-generational ecological knowledge, and with it, a coherent sense of culture and self. As one well-respected hunter shared:

“It’s hurting in a way. It’s hurting in a lot of ways. Because I kinda thinks I’m not going to show my grandkids the way we used to do it. It’s hurting me. It’s hurting me big time. And I just keep that to myself.”

Many Inuit and family farmers also worry about their futures, and express grief in anticipation of worsening ecological losses. As one woman explained from Rigolet, Nunatsiavut:

“I think that [the changes] will have an impact maybe on mental health, because it’s a depressing feeling when you’re stuck. I mean for us to go off [on the land] is just a part of life. If you don’t have it, then that part of your life is gone, and I think that’s very depressing.”

Similarly, a farmer in Australia worried about the future shared their thoughts on the possibility of losing their family farm:

“[It] would be like a death. Yeah, there would be a grieving process because the farm embodies everything that the family farm is … And I think if we were to lose it, it would be like losing a person … but it would be sadder than losing a person … I don’t know, it would be hard definitely.”

Ecological grief in a climate-changed future

Ecological grief reminds us that climate change is not just some abstract scientific concept or a distant environmental problem. Rather, it draws our attention to the personally experienced emotional and psychological losses suffered when there are changes or deaths in the natural world. In doing so, ecological grief also illuminates the ways in which more-than-humans are integral to our mental wellness, our communities, our cultures, and for our ability to thrive in a human-dominated world.

From what we have seen in our own research, although this type of grief is already being experienced, it often lacks an appropriate avenue for expression or for healing. Indeed, not only do we lack the rituals and practices to help address feelings of ecological

grief, until recently we did not even have the language to give such feelings voice. And it is for these reasons that grief over losses in the natural world can feel, as American ecologist Phyllis Windle put it, ‘irrational, inappropriate, anthropomorphic.’

We argue that recognising ecological grief as a legitimate response to ecological loss is an important first step for humanising climate change and its related impacts, and for expanding our understanding of what it means to be human in the Anthropocene. How to grieve ecological losses well — particularly when they are ambiguous, cumulative and ongoing — is a question currently without answer. However, it is a question that we expect will become more pressing as further impacts from climate change, including loss, are experienced.

We do not see ecological grief as submitting to despair, and neither does it justify ‘switching off’ from the many environmental problems that confront humanity. Instead, we find great hope in the responses ecological grief is likely to invoke. Just as grief over the loss of a loved person puts into perspective what matters in our lives, collective experiences of ecological grief may coalesce into a strengthened sense of love and commitment to the places, ecosystems and species that inspire, nurture and sustain us. There is much grief work to be done, and much of it will be hard. However, being open to the pain of ecological loss may be what is needed to prevent such losses from occurring in the first place.

Dr. Neville Ellis is a Research Fellow at the UWA School of Agriculture and Environment at the University of Western Australia.

Dr. Ashlee Cunsolo is the Director of the Labrador Institute of Memorial University, working together with the Inuit and Innu of Labrador to re-envision research, education, and outreach by and for the North.



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26: Hydropower Dams Can Harm Coastal Areas Far Downstream (Ezcurra & Aburto)

By Paula Ezcurra & Octavio Aburto



"Atardecer en los alrededores del Río de Acaponeta" by Santoclost is licensed under CC BY-SA 4.0

Thousands of hydroelectric dams are under construction around the world, mainly in developing countries. These enormous structures are one of the world's largest sources of renewable energy, but they also cause environmental problems.

Hydropower dams degrade water quality along rivers. Water that flows downstream from the dams is depleted of oxygen, which harms many aquatic animals. The reservoirs above dams are susceptible to harmful algal blooms, and can leach toxic metals such as mercury from submerged soil.

We wanted to know whether dams also impact river systems farther away, at the coastlines where rivers flow into the sea. So we performed a natural experiment comparing four rivers along Mexico's Pacific coast – two that are dammed and two that remain free-flowing. We found that damming rivers has measurable negative ecologic and economic effects on coastal regions more than 60 miles (100 kilometers) downstream.



Shrimp fishing along the coast of Nayarit, Mexico. Tomas Castelazo/Wikimedia, CC BY-SA

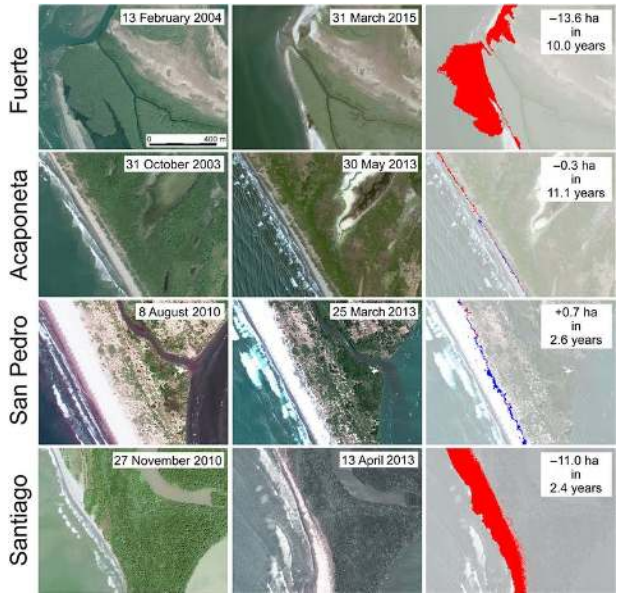
Feeding or starving coastlines

We studied four river outflows along the Pacific Coast of Mexico in the states of Sinaloa and Nayarit. Two of these were from the San Pedro and Acaponeta rivers, which are relatively unrestricted, with over 75% of their flow unobstructed.

The other two outflows came from the nearby Santiago and Fuerte rivers, which have over 95% of their flow retained in reservoirs. In addition to restricting water flow, these reservoirs trap sediments – over 1 million tons per year along the two rivers combined.

In unobstructed rivers, sediment flows downstream and is eventually deposited along the coast, helping to stabilize the shoreline and sometimes even to build it up. We found that this was happening along the free-flowing Acaponeta and San Pedro rivers.

However, because the sediment from the dammed Santiago and Fuerte rivers is no longer carried downstream, wave action takes over at the coast. At the mouths of these two rivers, we found that waves were eroding up to 33 hectares of combined land – equivalent to about 62 football fields – each year, with widespread ecologic and economic effects on the surrounding regions.



The dammed Fuerto and Santiago Rivers show greater erosion where they reach the Pacific coast than the free-flowing San Pedro and Acaponeta rivers. Images at right show coastline changes during the two periods: blue indicates land accretion, red indicates erosion. Ezcurra et al., 2019., CC BY-NC

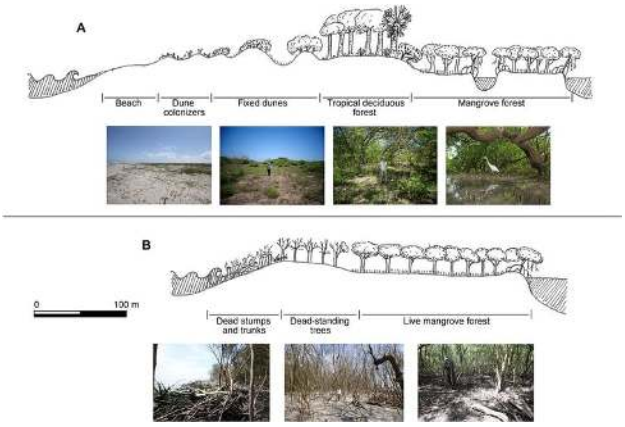
The ecology of healthy coasts

Our field research clearly showed that coastal instability resulting from sediment loss at the mouths of the dammed rivers was harming ecosystems along the shore. For example, we found that coastal regions downstream of free-flowing rivers had significantly more plant diversity. Many of these plants were found only in coastal areas, and therefore had high conservation value.

Coastal erosion due to lack of sediment input from the rivers also reduces critical nursery habitat, such as mangrove forest, where many commercially important fish species spend their juvenile stage. We found that fishing activity at the mouth of the free-flowing San Pedro River was much higher than around the mouth of the dammed Fuerte River. This loss of fishing potential comes at a cost of around US$1.3 million every year.

Reduced sediment flow also deprives coastal estuaries of nutrients. Lucrative shrimp and oyster fisheries in the region we studied rely heavily on nutrient inputs from rivers. In the San Pedro River region, these fisheries generate around $5.8 million yearly; near the dammed rivers, they have been all but abandoned.

Coastal mangrove wetlands also protect shorelines from hurricanes and tropical storms, and serve as recreational areas and conservation habitat for wildlife. Knowing this, we calculated that the loss of these ecosystem services around the dammed rivers totals $3.9 million annually.



Vegetation profile of sandbars of the free-flowing San Pedro River (A) and dammed Santiago River (B), where receding black mangrove forest is being eroded away into the advancing coastline. Ezcurra et al., 2019, CC BY-NC

Still another valuable function that mangrove wetlands perform is storing "blue carbon" in plant tissue and soils, reducing the effects of climate change. But when coastlines recede and mangroves are destroyed, this carbon is released. We calculated that mangrove loss in our study region represented a loss of around $130,000 in annual carbon trading potential for this region.

Adding up all of the ecological services that coastal ecosystems provide, we estimate that the economic consequences of shoreline loss around the Santiago and Fuerte rivers related to hydroelectric damming totaled well over $10 million yearly.

Letting more sediment flow

Because sediments are so essential to areas around river mouths, reducing sediment trapping behind dams could mitigate some harmful impacts on coastal areas. There are several ways to do this – notably, sediment bypassing, or diverting a portion of the sediments flowing from upriver around dams and allowing it to rejoin the river downstream.

This strategy can be included in new construction or incorporated into existing dams. In addition to reducing dams' environmental impacts, it also increases dams' service lives by reducing the rate at which their reservoirs fill up with silt.

To date, environmental impact assessments of large inland dams have often failed to properly analyze the impacts that these dams will have downriver on coastlines, estuaries, deltas and lagoons. Our study shows how important it is to fully account for dams' environmental and economic impacts along coasts and basins.

Critics are challenging a proposed dam on the San Pedro River at Las Cruces.

Mexico may be at a juncture in its approach to hydropower. The Mexican government recently contracted with Hydro-Quebec, the world's largest hydroelectric power producer, to revamp existing dams across the country. And a recent study by a Mexican nongovernment organization, SuMar-Voces por la Naturaleza, reported that a long-disputed proposal to build a new hydroelectric dam at Las Cruces is neither financially feasible nor needed to meet energy demand for the region, prompting national groups to call for the final cancellation of the project.

We believe that Mexico and all nations working to develop efficient, low-impact energy sources should take a holistic approach to future dam-related projects, so they can weigh their potentially harmful consequences. The coastal effects that we documented should be part of those reviews.

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27: Everything You Need to Know About the Radical Roots of Wonder Woman (Finke)

Her enigmatic creator believed women were destined to rule the world. 10 facts about the iconic heroine.

Christopher Zumski Finke

#heroes #artsandculture #reportinginformation #history



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All these things are true about Wonder Woman: She is a national treasure that the Smithsonian Institution named among its 101 Objects that Made America; she is a '70s feminist icon; she is the product of a polyamorous household that participated in a sex cult.

She comes out of the feminist movements of women's suffrage, birth control, and the fight for equality.

Harvard historian Jill Lepore claims in her new book, *The Secret History of Wonder Woman*, that Wonder Woman is the "missing link in a chain of events that begins with the women's suffrage campaigns of the 1910s and ends with the troubled place of feminism fully a century later."

The hero and her alter ego, Diana Prince, were the products of the tumultuous women's rights movements of the early 20th century. Here are 10 essential elements to understanding the history and legacy of Wonder Woman and the family from which she sprung.

Wonder Woman first appeared in *Sensation Comics #1* in December 1941.

Since that issue arrived 73 years ago, Wonder Woman has been in constant publication, making her the third longest running superhero in history, behind Superman (introduced June 1938) and Batman (introduced May 1939).

Wonder Woman's creator had a secret identity.

Superheroes always have secret identities. So too did the man behind Wonder Woman. His name upon publication was Charles Moulton, but that was a pseudonym. It was after two years of popularity and success that the author revealed his identity: then-famous psychologist William Moulton Marston, who also invented the lie detector test.

William Moulton Marston was, as Jill Lepore tells it, an "awesomely cocky" psychologist and huckster from Massachusetts. He was also committed to the feminist causes he grew up around.

By 1941, Marston's image of the iconic feminist of the future was already a throwback to his youth. He saw the celebrated British suffragist Emmeline Pankhurst speak in Harvard Square (she was banned from speaking at Harvard University) in 1911, and from then on imagined the future of civilization as one destined for female rule.

Actually, the whole Marston family had a secret identity.

The Marston family was an unconventional home, full of radical politics and feminism. Marston lived with multiple women, including his wife, Sadie Elizabeth Holloway, a highly educated psychologist, and another lifelong partner, a writer named Olive Byrne, who was the niece of birth control activist Margaret Sanger. He had four children, two by each of the women, and they all grew up oblivious to the polyamorous nature of their parents' relationships.

Marston, Holloway, and Byrne all contributed to Wonder Woman's creation, a character that Marston explicitly designed to show the necessity of equality and advancement of women's rights.

Wonder Woman was an Amazon molded from clay, but she was birthed out of feminism.

Princess Diana of Themyscira, or Diana Prince (Wonder Woman's alter ego), comes from the land of the Amazons. In Greek mythology, the Amazons are an immortal race of beauties that live apart from men. In the origin story of Wonder Woman, Diana the is daughter of the queen of the Amazons. She's from Paradise Island (Paradise is the land where no men live), where Queen Hyppolita carves her daughter out of clay. She has no father.

Wonder Woman has been in constant publication, making her the third longest running superhero.

She comes out of the feminist movements of women's suffrage, birth control, and the fight for equality. When Marston was working with DC Comics editor Sheldon Mayer on the origins of Wonder Woman, Marston left no room for interpretation about what he wanted from his heroine.

"About the story's feminism," historian Lepore writes, "he was unmovable. 'Let that theme alone,' Marston said, 'or drop the project.'"

Wonder Woman fought for the people—all the people.

The injustices that moved Wonder Woman to action did not just take place in the world of fantasy heroes and villains, nor was she only about women's rights. She also fought for the rights of children, workers, and farmers.

In a 1942 issue of *Sensation Comics*, Wonder Woman targets the International Milk Company, which she has learned has been overcharging for milk, leading to the undernourishment of children. According to Lepore, the story came right out of a Hearst newspaper headline about "milk crooks" creating a "milk trust" to raise the price of milk, profiteering on the backs of American babies.

For the Wonder Woman story, Marston attributed the source of this crime to Nazi Germany. But the action Wonder Woman takes is the same as the real-life solution: She leads a march of women and men in "a gigantic demonstration against the milk racket."

There's a whole lot of bondage in Wonder Woman.

In the years that Marston was writing Wonder Woman, bondage was everywhere. "In episode after episode," Lepore writes, "Wonder Woman is chained, bound, gagged, lassoed, tied, fettered, and manacled." Even Wonder Woman herself expressed exhaustion at the over-use of being bound: "Great girdle of Aphrodite! Am I tired of being tied up!" she says.

She appeared on the first issue of Ms. Magazine, in 1972, with the headline "Wonder Woman for President."

There's little doubt that the sexual proclivities of the Marston family were in part responsible for this interest. A woman named Marjorie Wilkes Huntley was part of the Marston household—an "aunt" for the children, who shared the family home (and bedroom) when she was in town. Huntley was fond of bondage.

The theme was so persistent that an Army sergeant who was fond of the erotic images wrote to Marston asking where he could purchase some of the bondage implements used in the book. After that, DC Comics told Marston to cut back on the BDSM.

But that bondage was not all about sex.

The bondage themes in Wonder Woman are more complex than just a polyamorous fetish, though. Women in bondage was an iconic image of the suffrage and feminist movements, as women attempted to loosen the chains that bound them in society. Cartoonist and artist Lou Rogers drew many women in bonds, and Margaret Sanger appeared before a crowd bound at the mouth to protest the censorship of women in America.

Later, Margaret Sanger's *Birth Control Review* would use a similar motif. One cover image had a woman chained to the weight of unwanted babies.

Readers—boys and girls—loved Wonder Woman.

Despite the political and secretive history of Wonder Woman's creation, she was a wildly popular character. After Wonder Woman's early success, DC Comics considered adding her to the roster of the Justice Society, which included Batman and Superman and many other male superheroes. Charlie Gaines, who ran DC Comics, decided to conduct a reader poll, asking, "Should Wonder Woman be allowed, even though a woman, to become a member of the justice society?"

Readers returned 1,801 surveys. Among boys, 1,265 said yes, 197 said no; among girls, 333 said yes, and only 6 said no.

But Justice Society was not written by feminist Marston. After Wonder Woman was brought into the Justice Society, she spent her first episodes working as the secretary.

The feminist spirit of Wonder Woman waned for decades.

After the death of William Moulton Marston in 1947, DC Comics took the feminism out of Wonder Woman and created instead a timid and uninspiring female character. "Wonder Woman lived on," Lepore writes, "but she was barely recognizable."

The first cover not drawn by the original artist, Harry G. Peter, "featured Steve Trevor [Wonder Woman's heretofore hapless love interest] carrying a smiling, daffy, helpless Wonder Woman over a stream. Instead of her badass, kinky red boots, she wears dainty yellow ballerina slippers," Lepore observes. Without her radical edge, Wonder Woman's popularity waned until the rise of second wave feminism in the '60s and '70s, when Wonder Woman was trumpeted as an icon of women's empowerment.

Wonder Woman became president.

In a 1943 story, Wonder Woman is actually elected President of the United States. Marston was adamant that a women would one day rule the United States, and that the world would be better when civilization's power structures were in the hands of women instead of men.

Women in bondage was an iconic image of the suffrage and feminist movements.

Wonder Woman's popularity soared as the feminist movement picked up in the late 1960s. Wonder Woman appeared on the first issue of *Ms. Magazine*, in 1972, with the headline "Wonder Woman for President." At that time, Gloria Steinem said of Wonder Woman, "Looking back now at these Wonder Woman stories from the '40s, I am amazed by the strength of their feminist message."

The impact of Wonder Woman continues.

Wonder Woman is in for a great couple of years. *Ms. Magazine* just celebrated its 40th anniversary, and Wonder Woman is back on its cover. Jill Lepore's book has been getting wonderful coverage (see her on *The Colbert Report* below discussing the kinks of the Marston Family), and Noah Berlatsky's *Wonder Woman: Feminism and Bondage in the Marston/Peter Comics* will be published in January.

She's also gearing up for her first-ever theatrical film appearance: Wonder Woman will appear in Zack Snyder's 2016 film *Batman vs. Superman: Dawn of Justice*. In 2017, she will be the star of her own film, to be directed by Michelle McClaren (*Breaking Bad*, *The Walking Dead*). Wonder Woman will be played by the Israeli actress Gal Gadot.

Let us hope that Gadot in the role conjures the spirit of the original creation of Marston, Holloway, and Byrne: a radical, independent, fierce woman and leader for all women and men to admire.

Christopher Zumski Finke blogs about pop culture and is editor of The Stake.

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28: Why Sex Gets Better in Older Age (Forbes, Eaton, and Krueger)

#reportinginformation, #research, #sharedvalues, #systemanalysis, #cognitivebias, #logos, #health



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Aging is generally associated with improvements in our quality of life: We become more proficient in our work, learn how to manage our finances better and our bonds with loved ones deepen. With time and practice, most of the core domains of our lives improve as we develop skills and strategies to manage our lives with more mastery. An exception to this pattern is the quality of our sex lives, which has consistently been reported to deteriorate with age.

While this fits with the messages we receive from popular culture, which tell us that sex is a young person's domain, it is somewhat at odds with the fact that older adults continue to explore and enjoy sexuality well into old age. The majority of men and women over 60 in the U.S. are sexually active, most at least two to three times per month (more often than many younger adults). They also rate sex as an important part of life.

So, if there is no epidemic of age-related frigidity, why would sexual quality of life take a nosedive in later life? A common answer to this question cites declining physical health and sexual functioning with age. Another answer might be: The quality of our sex lives doesn't decline with age.

Studying sex and aging

There is a key element missing from nearly all studies of sex and aging: studying change over time. If we ask a group of people how satisfied they are with their sex life, and the younger people are more satisfied than the older people, does that mean that aging is responsible for this difference? What if instead the apparent age difference is because people born in the 1930s have different attitudes toward sex than people who grew up after the sexual revolution of the '60's and '70's?

To get to the bottom of how aging affects sexual quality of life, we analyzed patterns in longitudinal data collected from over 6,000 individuals followed over a period of 18 years, spanning ages 20-93. In 1995, 2004 and 2013, the representative sample of English-speaking Americans completed extensive self-administered survey questionnaires in private and returned them by mail.

A key question for our study was: How would you rate the sexual aspects of your life these days, from the worst possible situation (0) to the best possible situation (10)?

The basic trends in the data suggested that – without taking any other factors into account – sexual quality of life declines with age. But as people in the study aged, they placed more emphasis on the quality – not quantity – of sexual encounters. For example, frequency of sex became less important with age, and the amount of thought and effort invested in sex became more important.

These changing priorities were key predictors of sexual quality of life for older adults, and appeared to buffer its decline. When we matched older and younger adults on key characteristics of their sex lives – along with sociodemographic characteristics, and mental and physical health – older adults actually had better sexual quality of life.

For example, if we compared a 40-year-old man and a 50-year-old man with the same levels of perceived control over their sex life, who invest the same amount of thought and effort in their sex life, have sex with the same frequency and had the same number of sexual partners in the past year, we would expect the 50-year-old to report better sexual quality of life.

This is consistent with the improvement we see in other life domains with age, and highlights the benefits of life experience for sexuality as people learn more about their sexual preferences and their partners' likes and dislikes. The positive relationship between sexual quality of life and aging was strongest in the context of good-quality romantic relationships, where sexual exploration and a focus on partners' pleasure is more likely to take place.

Life experience related to a better sex life

Together these findings suggest that as we age, our sexual priorities change and we develop knowledge, skills and preferences that protect against aging-related declines in sexual quality of life. Since wisdom is "the quality of having experience, knowledge and good judgment," our study suggests that life experience is fostering sexual wisdom.

This is great news, as a satisfying sex life has been found to be important for health and well-being, regardless of age. For older adults in particular, being sexually active predicts a longer and healthier life.

We now know that age-related declines in sexual quality of life are largely related to modifiable factors, so we can target sexual skills, beliefs and attitudes in clinical interventions. Given that our life expectancy continues to grow, this research highlights the opportunity to facilitate positive sexual experiences across the lifespan.

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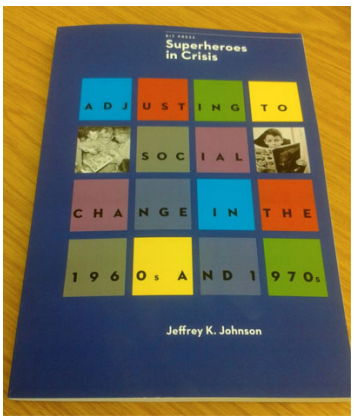
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29: Are Batman and Superman the Barometer of Our Times? A Review of ‘Superheroes in Crisis’ (Franco)

Ira Erika Franco

#heroes #review #artsandculture, #analysis, #scholarly, #informative



Abstract

The WWII historian Jeffrey K. Johnson studies how the two comic book legends Superman and Batman have adapted successfully to American cultural and social landscapes through time. This is a book review of ‘Superheroes in Crisis’, a monograph that details some decisive moments from their creation in the late 30’s up to the 70’s in which both characters have transformed in order to maintain their relevance as what Johnson calls ‘cultural barometers’.

Keywords: superheroes , history , batman , superman , monographs

The idea that superhero comic books are part of a modern American mythology is probably not a surprise to anyone. However, Jeffrey Johnson refocuses this concept in his monograph *Superheroes in Crisis* (RIT Press, 2014): after going into detail of the myriad of changes Superman and Batman have gone to stay relevant, he suggests we should narrow our assumptions of what constitutes a true comic book myth, given that the character stays true to what the present society demands. ‘American culture is littered with faint remembrances of characters who flourished for a season and then became inconsequential and vanished’ (Johnson 2014: 104). The author mentions The Yellow Kid and Captain Marvel as those characters who were once ü*ber* famous and popular and now are but receding memories in people’s minds. Avid comic readers can surely think of many other examples of great modern characters who, for some reason, just didn’t make it. Batman and Superman, however, remain ‘two heroes who have survived, and often thrived, for over seventy years because they are important to current Americans and speak to modern social problems and contemporary cultural necessities’ (Johnson 2014: 104).

A noted World War II historian, Johnson points out that the characters have endured the trials of time mainly because of their abilities to bend so as not to break. Even if most of us modern readers assume fixed traits for both The Dark Knight and The Man of Steel, Johnson carefully demonstrates there’s no such thing: Superman couldn’t even fly in his earliest adventures, and through the period of the TV series in the mid-sixties, Batman, the so-called Dark Knight, was a goofy, campy character with not a bit of darkness in his soul. Through Johnson’s account it is evident, though, that Batman and his creators have done a better job than Superman’s in adjusting to radical changes in American society (such as the US’s disillusionment after JFK’s assassination or the introduction of TV and its immediate popularity). This might also be the reason for Batman’s smoother translation to modern cinema: since the release of the first movie —*Batman* (Burton, 1989)— has always kept the public interest with strong sales figures, —*The Dark Knight* (Nolan, 2008) being the most popular to date, having made 533 million dollars in revenue for its creators in the US alone —. Not even the bad Batman movies have flopped in opening weekends: people always want to see The Dark Knight’s new metamorphosis, as if they wanted to understand what they’ve turned into.

In the four chapters of the book, Johnson provides the reader with the rare pleasure of being told old stories, gems actually: instead of just sociological analysis and high ideas, Johnson provides the actual plot of the comic issue he chooses in order to support his

commentary. We might remember that Superman was created during the Great Depression (1938), and it's fairly easy to assume that the caped hero was to provide a temporary escape for impoverished and desperate Americans, but unless we have an infinite (and expensive) golden age collection, it would probably never occur to us that during his first few years, Superman was actually a savior of the oppressed, almost in a Marxist fashion. One example is *Action Comics* #3, where Superman disguises himself as a coal miner to trap the mine owner and his socialite friends underground in order to show them the importance of safety regulations and working men. In *Action Comics* #8, Superman befriends a gang of delinquents and decides to burn down the slums they live in, just to prove that the government is partly responsible for their delinquency. In the end, Superman becomes a true hero: he forces the government to build new apartments providing these hooligans the dignity they deserve. Throughout the book, Johnson provides such examples in effective ways to prove the Historic turmoil to which our heroes reacted.

One compelling topic that defines both characters concerns their enemies. At first, being created as depression-era social avengers, they fight the common criminal: shoplifters, wife-beaters and even politicians. 'These often colorful foes provided action and adventure while also creating a binary narrative of good and evil' (Johnson 2014, XIV). But this narrative changes greatly throughout time, constituting probably the most important transformation in the stories of these two heroes: the evolution of their foes. At some point, the duality of pure good and evil stops being good enough. It stops explaining what is wrong with the world. At the end of the sixties, for example, Superman's petty villains become so unimportant that, for a while, his love interest Lois Lane impersonates a new kind of foe. In a way, Lois updates better than Superman as she wakes up to her newfound power, akin to the *zeitgeist* of her era. In *Lois Lane* #85 (she even gets her own title for a little while) the one-time docile girlfriend decides she no longer wants to marry Superman and refuses his once longed-for offer. In a kind of confused, first approach feminism, she is seen doing things such as lifting heavy stuff like men. 'Superman represents the older generations and is pressing to protect the status quo, while Lois is a change-minded baby boomer' (Johnson 2014: 43).

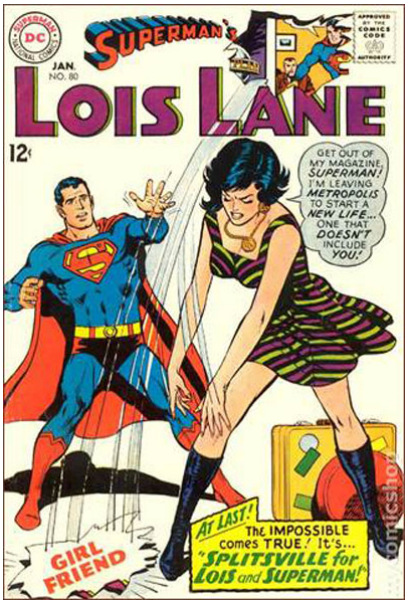


Image 1

Superman's Girlfriend, Lois Lane Vol 1 #80, Curt Swan, Leo Dorfman, DC Comics, January, 1968. Image via Wikia, DC Comics Database, http://dc.wikia.com/wiki/Superman's_Girlfriend,_Lois_Lane_Vol_1_80. © DC Comics.

Batman's enemies are, without a doubt, the most exciting ones. First of all, he gets one in the real world: he is accused of promoting homosexuality by the psychologist Frederic Werthan, in his book *Seduction of the Innocent* (1954), for which Americans changed the regulation code of the comic book industry. Later, in the early sixties, the character is handed to writer and editor Julius Schwartz and the stories become enriched with a focus on Batman's detective skills. The Riddler, Mr. Freeze and the Joker all demand The Caped Crusader's brainpower to discover complex *noir* plots, creating a three-dimensional world within the comic's pages: 'Perhaps most interesting is Detective Comics#332 (October 1964) in which Batman fights Joker for the first time under the new creative regime. In this story the Clown Prince of Crime creates a potent dust that causes anyone it comes in contact with to laugh uncontrollably. After encountering the drug, Batman researches possible cures and learns that a simple antihistamine

will stop the uncontainable laughter. The Caped Crusader soon thwarts the villain's evil plans and protects society from the psychopathic clown. This version of Batman is portrayed as being clearly more intelligent and cunning than his arch-nemesis, but The Joker is also more nefarious and crafty than he had been in recent appearances'. (Johnson 2014, 36). It is only natural to think that Batman's foes evolve in complexity over time, the greatest example being a villain like Ra's al Ghul, who, defying normal stereotyping, commits awful crimes believing it is best for the planet.

In this constant reshaping of the characters, one thing remains constant from the beginning: the foes are more metaphorical than the heroes for the darkest fears of American society in the way they reflect the heroes' moral codes. In the first chapter, for example, that covers the early years (from 1938 to 1959), most evildoers evoke the desperate need of common people to keep America's status quo. Superman fights against gamblers taking control over football games and 'declares war on reckless drivers'. Superman deals with them using the moral code of an entire society: he enjoys humiliating, beating and sometimes even killing them. 'These first superheroes were violent champions for a hardened people who demanded they act in such a way. The original versions of Superman and Batman did not conform to the rules against killing, maiming, battling authority figures and law enforcement' (Johnson 2014: XVII). Johnson thinks these initial times can be seen, especially in Superman, as a kind of an adolescence because of his disregard for any point of view except his own. More a bully than a hero, Superman reflects the state of millions of Americans, adult men out of work 'who had descended into hopelessness and Superman served as a bright spot in this bleak depressing age' (Johnson 2014: 2).

Just three years later, with the entry of the US to World War II, the nature of both criminals and heroes changed radically: both Batman and Superman had to support governmental and military mandates, slowly becoming in the years to come guardians of the conventional values that were established with the prosperity and the sense of social unity that came after the victory over the Axis armies. What happened to our heroes in the sixties reflected a harsh division in the American people: while Superman becomes almost infected with paranoia and self-righteousness that characterized the conservatives in the post war era —having nightmares of being exposed to red kryptonite, splitting into evil Superman and good Clark Kent, turning into a space monster, among other adventures—, Batman goes through some nice years of *detectivesque* narrative, preparing for the blossoming of sexual liberation and anti-war movements that would become popular among youngsters a few years later. 'The Dark Knight was now focusing more on his detective skills and was no longer fighting aliens or magical beings as he had in previous years…Batman was attempting to recreate himself from an evolving society, but it was unclear if a return to his detective roots combined with pop art influences was what readers demanded' (Johnson 2014: 35).

One last thing is to note of this book: the detailed attention Johnson pays to the creative minds that shaped these heroes. Bob Kane may have designed Batman to be a 'hardcore vigilante', but it was Julius Schwartz in 1964 who invented some of his most engaging traits as a resourceful hard-boiled detective with no other tools to fight crime but his mind. Writers and artists like Frank Robbins, Bob Brown and Dick Giordano are mentioned as inventive, but Johnson points out a very short but fertile period in the seventies that would prepare the dark and gothic traits of Batman we have come to love, under the hands of writer Denny O'Neal and artist Neal Adams. In this period Batman first gets his many layers as a character, his neurosis and most subtle psychological features that Frank Miller would use in his ground-breaking *The Dark Knight Returns* (1986), later revamped for Christopher Nolan's Dark Knight's Trilogy.

Above all, the great journey this book offers is discovering how our beloved heroes appear to be two ends of the same rope, because, paradoxically, even when they change, they stay the same: Superman representing (mostly) the moral standards of the conservative side of American society, and Batman exploring (mostly) the darker, subterranean side, both equally sustaining and fundamental to the American social fabric.

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Are Batman and Superman the Barometer of Our Times? A Review of ‘Superheroes in Crisis’ by Ira Erika Franco is licensed under a Creative Commons Attribution 3.0 International License.

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30: No, You Don’t Need to Go to Holiday Parties If You Feel Lonely (Gajwani)

By Neha Gajwani



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I was supposed to be happy.

The laughing, upbeat music, and endless cookies told me I should be. I sometimes think of myself as an entertainer at parties, waving my hands, poking fun at myself, and speaking in a voice that doesn’t sound like my own. And so when I told my friend I didn’t want to be friendly at this party, she rolled her eyes. “You love being friendly.”

I don’t. When I talk at parties sometimes, my mind feels hot and clouded, I’m suddenly aware of how often I’m swallowing, and I jump over silences like an Olympian. When I come home, I feel exhausted.

And so I felt frustrated when I read an article urging people who feel lonely during the holidays to go to parties and feel grateful for what they have.

I’ve spent the past two years researching and writing a book about connection and loneliness. I’ve learned a lot about what cultural practices cause disconnection, what happens in our bodies when we feel it, and what solutions people have pursued to feel connected. For instance, we now know that feeling disconnection from people affects the same part of our brain (the dorsal anterior cingulate cortex) as when we feel physical pain. Our brains process breaking up with someone and breaking a leg in similar ways. If disconnection feels like it hurts, it’s because it does.

Loneliness isn’t a misstep—it has a biological purpose. Humans evolved to feel lonely as a natural alert that we need more connection. We feel pain to get us to do things—just as we feel pain when touching a hot stove to tell us to move our hand, we feel loneliness to prompt connection. Evolutionarily, a group of people has meant safety for humans. The good news is that we’re all perfectly capable of forming connection.

Thankfully, loneliness is not connected to social ability. Dr. John Cacioppo, who studied loneliness, wrote that people who feel lonely “have the capacity to be just as socially adept as anyone else. Feeling lonely does not mean that we have deficient social skills. Problems arise when feeling lonely makes us less likely to employ the skills we have.” His research shows we are less likely to want to socialize when we feel lonely. This can cause us to not interact and feel lonelier. A most unfair cycle.

But forcing yourself to go out and smile doesn’t actually help you feel more connected. Pretending to be happy has a way of highlighting how you actually feel. When entrepreneur Tony Hsieh revamped Downtown Vegas, he created a culture where it was the norm to be “on,” where people celebrated being outgoing and happy. People praised his vision until they realized the Downtown Project had an unusually high suicide rate.

The expectation that everyone should be happy seemed to cause unhappiness. Kimberly Knoll, a therapist in the Downtown Project, explained, “Thinking that you have complete control over your emotions and if you don’t feel happy it’s your fault, that can make people feel shame. It’s anxiety inducing.”

Not only were people in the Downtown Project expected to be happy, but they were also encouraged to be outgoing. One anonymous citizen there said, “There is a danger of happiness as a goal. … It’s lonely. There’s a pressure to socialize and go out. There’s a pressure to party.” This made it seem like everyone else became happy after mingling, but you were a failure if you didn’t. Sort of like if social media came to life (*shudder*).

We can extract a lesson from this. When other people don’t know what you actually feel, then they can’t empathize with you. This can make you feel more isolated. Acting like a celebrity at an awards show at a holiday party hides what you feel and won’t provide connection.

An alternative is to volunteer. Look up volunteering at a soup kitchen in your area. No need to feign happiness and no need to go overboard and volunteer for days. Even a little bit helps. Giving to other people is one of the primary ways humans feel connected.

Research shows that volunteering weekly makes people as happy as moving from a $20,000 to $75,000 annual salary. It forces us to become someone’s ally, even briefly, and we’ve evolved to feel connection when we have allies. Volunteering helps others, but it also helps you feel more connected.

You can also find ways to soothe yourself. Think about the things that help you feel calmer, like writing, exercising, or talking to someone especially accepting. Finding effective ways to show yourself some love can hold you over during a time that’s particularly tormenting.

There is no universal, quick fix for loneliness. People have felt lonely through time and culture and it has also probably felt dejecting and painful for them. Ironically, you stand in good company when you crave connection to others. Jennifer Lawrence has said, “I am lonely every Saturday night.” Justin Bieber has said, “I feel isolated. … I would not wish this upon anyone.” If you feel like it’s just you, remember that it’s just you, Jennifer Lawrence, and Justin Bieber. So feel free to ignore the pressure to attend holiday parties. You may be better off volunteering—less entertaining, more giving.

Neha Gajwani is an entrepreneur and author. She has spent the last two years researching and writing a book exploring social connection in America, due to be published in fall 2019. This essay was originally appeared in Yes! Magazine.

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31: To Seek Common Ground on Life's Big Questions, We Need Science Literacy (Garlick)

By Jonathan Garlick



Get your head around some science basics and you're ready for the big questions. David Yu, CC BY-NC-ND

Science isn't important only to scientists or those who profess an interest in it. Whether you find fascinating every new discovery reported or you stopped taking science in school as soon as you could, a base level understanding is crucial for modern citizens to ground their engagement in the national conversation about science-related issues.

We need to look no further than the Ebola crisis to appreciate the importance of science literacy. A recently elected senator has linked sealing the US-Mexican border with keeping Ebola out of the US, even though the disease is nonexistent in Mexico. Four out of 10 Americans believe there will be a large scale Ebola epidemic here, even though there have been just four cases in the US and only one fatality. Flu, on the other hand, which killed over 100 children here last winter, barely registers in the public consciousness.

Increasingly we must grapple with highly-charged and politicized science-based issues ranging from infectious diseases and human cloning to reproductive choices and climate change. Yet many – perhaps even the majority – of Americans aren't sufficiently scientifically literate to make sense of these complicated issues. For instance, on one recent survey of public attitudes and understanding of science and technology, Americans barely got a passing grade, answering only 5.8 out of 9 factual knowledge questions correctly.

Without a solid understanding of the underlying science and its implications for our daily lives, we can neither respond intelligently on a personal level nor hold our public officials accountable for sound policy decisions. Moreover, we risk falling prey to the tremendous power of fear and partisan political rhetoric. By grounding our understanding of issues in knowledge, we can gain the confidence to participate in the science conversation in a thoughtful way. Science literacy is a path to that knowledge.

What's needed to be scientifically literate?

Science literacy is a foundational knowledge and understanding of scientific concepts and processes. For example, scientifically literate people should know that science is reproducible, evidence-based information that is fact and not opinion. They should have a working knowledge of the basic terminology needed to interpret the processes and outcomes of science. With this vocabulary in hand, they can engage in the critical thinking needed to apply healthy skepticism and to discern the grey areas and uncertainties inherent in science-based information.

As a stem cell scientist, I have spent my life tackling elusive questions such as "what is personhood" or "when does life begin." Recently, my interest has shifted to helping the public engage in open-minded discussions about these types of questions.

The goal isn't to move public opinion towards one side or another of the stem cell or any other debate, but rather to create a forum in which all sides are armed with basic scientific knowledge and have a legitimate voice in the conversation.

How to get literate

I teach a freshman seminar class at Tufts University called "Science and the Human Experience" that is largely populated with students whose interests are in the humanities and social sciences. The curriculum encourages these not-necessarily-science-lovers to explore the ways science affects their everyday lives. We talk about stem cells and abortion, right-to-die and drug treatment. We question when does life begin? What can our genome tell us? How do we experience pain? What does it mean to grow old? Students confront the emotional and personal consequences of science and its relationship to their lives.

Grappling with these issues is empowering. One student understood, for the first time, that her personal investment in science was connected to a loved one's struggle with addiction. Another freshman planning on an English major discovered that she was, to her own surprise, "just as capable as anyone else of understanding and applying scientific material to my life." Students uncover their own, personal rationales for engaging in these issues and then, most importantly, ask themselves, "Why does this matter to me?" They report that to learn the value of science, and to engage deeply in it, is to learn what it means to be human.

While knowledge is fundamental to addressing civic, science-based questions, our beliefs and values play an equally important role. As Yale law professor Dan Kahan, who studies science and civic engagement, says"What people 'believe' about global warming doesn't reflect what they know; it expresses who they are." In fact, understanding the science is perhaps the easier part of the equation. The greater struggle is for people with diverse views on science-related issues to wrestle with these conflicting values. This is a messy but necessary part of a healthy civic dialogue. Therefore, any program to increase science literacy must equally embrace the goals of promoting a respectful, civic conversation that will work towards shared understanding.

Informed citizens = productive dialogue

So what's a responsible citizen to do? First, become sufficiently science literate to understand the nuances of the important science-based issues of our day. Next, be prepared to engage in difficult conversations with fellow citizens with different opinions so that dialogue is valued over doctrine, as we work together to balance self-interest with compassion.

If everyone comes to the table with a base level of information and a willingness to listen to each other's concerns, we can replace the polarization of our current public discourse with productive public problem solving. We can then approach each other with a genuine curiosity to build a science conversation that is enlivened by a search for mutual understanding regardless of a position held on an issue. We need not hold the same beliefs or values to find common ground on the important science-based issues that face us today and will only become more urgent in the years ahead.

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32: How I Celebrate Life on the Day of the Dead (González)

Linda González

#argument, #sharedvalues, #ethos, #pathos, #descriptive, #kairos, #logos, #currentevents, #advice, #artsandculture #global



"Día de Los Muertos Celebration" by greeleygov is licensed under CC PDM 1.0

Every year as November 1 approaches, I do the math to remember how long ago my father passed away on Día de los Muertos. This year, I dutifully pulled up my calculator and subtracted 1996 from 2017. Twenty-one years. And then the obvious hits me. I can always know how long it has been since he passed on to his next life by subtracting one year from my twins' age. They are 22 and were just a year old when their abuelo died. I remember carrying Gina down the aisle behind the casket, her and Teo's new life blooming while that same year Tot's had faded.

I set up my altar this week, pulling out the pictures of my dearly departed and adding new ones from this year. The first step is always laying out the cross-stitched mantle with years of stains and a dark mark from when a candle burned too hot. I tape papel picado above the altar, remembering this ritual is not a dirge; it is an opening of the veil to celebrate the lives that touched me and my comunidades. It is a time to think about why I miss them and ponder how to keep them alive in the present moment.

I imagine my dad's disappointed spirit hovering over the Dodgers as they lost in the World Series. I invoke my mom's stovetop magic as I figure out what to do with a bag of zucchini that must be cooked tonight. I remember the mothers who grieve their sons' vibrant spirits every day, and I take a moment to send Snapchats to my beloved cuates.

Día de los Muertos is so ingrained in my being that I am startled to see people in costume; my mind wonders for a second, "What's that all about?" This is amazing because I was so involved in Halloween while my children were growing up—making costumes, figuring out the healthiest candy to hand out, trading my children's candy for money so they were not overloaded with sugar (and I could store their loot for the next Halloween).

In years past, I have hosted gatherings to decorate sugar skulls, loving this tradition of blending death with creativity. I treasured giving my children and their friends the chance to be playful and imaginative with something that so many people fear. As a writer, I live in that crevice of light and shadow, writing drafts only to end their existence for another version and then another and then yet another.

I love the transparency of life and death, the calaveras that dance and meditate and watch TV. Each skeleton could be anyone of us, and one day we will know what our antepasados experienced after their last out-breath. One day we will see there is no separation between any of us, alive and dead.



From the author's personal altar. Photo from Linda González.

The first and only altar in my parents' home was the one we created on a cake after my dad's funeral, laying out the detallitos of his life that he allowed to be visible. The secrets were still within him, wisps of energy that over the years encircled us with cariño or strangled our voices or tripped us as we ran.

As I set up my altar year after year, I breathe in the musty smell of the newspapers I have carried from home to home. These crinkled papelitos wrap and unwrap memories and give space for those I loved and lost to whisper consejos in the stillness. I unbind my heart wounds and apply the salve gained from another year of living—that little bit more of perspective and wisdom nestled in my corazón that wraps around me like a soft, colorful rebozo.

Linda González is the author of the memoir *The Cost of Our Lives.* She has published essays in literary journals and books, is a storyteller, and received her MFA from Goddard College. This essay is an excerpt from *Endangered Species, Enduring Values: An Anthology of San Francisco Area Writers and Artists of Color*, edited by Shizue Seigel, Pease Press, 2018. www.peasepress.com. It was published in *Yes!* Magazine, 31 October 2018.

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33: Do Interest-Free Loans Make Sense? No, But They Do Make a Difference (Green)

Marcus Harrison Green

#business #systemanalysis #sharedvalues #finances #policy



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Conventional laws of business borrowing are typically as uncompromising as they are sacrosanct: Thou shalt most assuredly charge interest on any money lent.

However, thanks to two Pacific Northwest-based lending institutions, small-business owners like Kristi Wokoma are now able to disregard those rules while seeing their enterprises thrive.

“Starting a biz is challenging, especially when you don’t have start-up capital,” says Wokoma, owner of food manufacturer That Brown Girl Cooks, in Seattle.

Wokoma spent nearly two decades attempting to get her business off the ground. Initially she sold her food products at farmers’ markets and local independent grocery stores. However, neither allowed her to make a sufficient living without taking on additional jobs, like catering and cooking.

Like most entrepreneurs who find their growth stunted by precarious financial histories and meager credit scores, Wokoma stood at a crossroads, wondering how to expand her business. She had limited access to traditional small-business financing free of astronomical interest rates.

It was after visiting a Seattle library to hear a presentation on community financing given by Casey Dilloway, president of Seattle-based Community Sourced Capital (CSC), that Wokoma finally saw a viable opportunity. Dilloway spoke about business loans that were financed by members of the community, with principal-only payments. Wokoma, known by locals for her Black Eye Pea Hummus and other creations, was impressed.

After some time mulling it over, she plunged into the world of zero-percent finance. Last October, she received a no-interest loan of $12,500 from CSC and their lending partner, Craft 3, and has since expanded the distribution of her hummus into larger chain stores like PCC Natural Markets, the largest consumer-owned natural grocery co-op in the U.S.

Wokoma’s That Brown Girl Cooks fits the criteria for the type of business the financing partners have been targeting: It’s owned by a woman who is also a person of color, and located in an economically challenged area, Seattle’s District 2 (median income is less than $42,000).

As far as the loan itself, if you’ve asked for $1,000, you pay back $1,000—no more, no less.

While traditionally zero-percent interest has been scorned by the lending world, it’s a way of life for “social underwriting” firm CSC and community development financial institution Craft 3. The two recently partnered up to provide microfinancing loans

between $5,000 and $50,000 primarily directed at businesses owned by women and people of color in low-income neighborhoods.

Craft 3 has been providing more conventional loans to underserved communities in Oregon and Washington state since 1994. They have built a reputation for enriching local communities by extending capital to community-based and ecologically sustainable businesses.

CSC's model, on the other hand, concentrates on small investments, typically $50 to $150 from community members wanting to support local entrepreneurs, something that is often difficult for economically challenged communities to do, as they typically have less income to devote to such causes.

"We knew our model worked well for businesses that had a really established community around them … but we really didn't see those people coming from low-income communities," says Alex Mondau, CSC's business development director.

"So rather than having a product that just doesn't work for low-income communities, which is the status quo in the financial industry, it's how can we do this better," he continues.

Founded in 2012, CSC acts as a crowdfunding platform for small businesses that need modest amounts of cash to reach the next level of operations but may have been blocked from traditional channels of financing, like loans from banks or credit unions (both typically shy away from lending small amounts). While anyone can contribute, CSC primarily raises the capital from residents within a business's surrounding area, allowing them to buy blocks of a loan, which they call squares.

Their investments directly strengthen their communities—building businesses, increasing jobs, and fulfilling the dreams of their neighbors.

The squares can be purchased in $50 increments capped at $1,000. The combined squares translate to the grand total a business owner is responsible for paying back, in monthly increments. While there is no interest attached, CSC does charge a $50 monthly service fee during the duration of a loan, which typically runs for 3 years. For a loan like Wokoma's, this would equate to an interest rate of 9 percent—comparable to the industry average that can reach between 9 and 10 percent when administrative and other costs are taken into account—but higher amounts would have a lower effective cost (CSC and Craft 3's borrower average is $25,400).

After months of discussion, CSC decided to partner with Craft 3 to offer a zero-percent interest loan where Craft 3 would match dollar-for-dollar any amount CSC raised. That $10,000 loan a business received from "squareholders," as CSC refers to its loaners, now would be doubled to $20,000. All free of any interest.

A major benefit of the partnership for Craft 3 was that the vetting process normally involved with offering a business loan, which can be time-consuming and expensive, was outsourced to CSC. This freed up Craft 3's resources to provide loans to more communities.

CSC and Craft 3 are loaning out amounts of money, expecting the exact amount back, no more no less (in addition to the monthly fee). All well and good, until you factor in that as time goes on the value of that money erodes. In 1965, $1,000 could buy you a lot more than it can today. You factor all that in and unfortunately and basically—outside of the few CSC charges—lenders are losing money on these loans.

If it sounds irrational, that's the point, says Craft 3 CEO John Berdes."Many, many normal people of modest means want to participate in a project/product that delivers intangible returns. People are irrational about what they're passionate about, including community."

Berdes says that local lenders agree to this bargain because their investments directly strengthen their communities—building businesses, increasing jobs, and fulfilling the dreams of their neighbors. This is especially true of communities of color, who are often denied the same level of access to financing as other communities; a recent survey of U.S. loan data revealed glaring disparities between the interest rate charged to minorities and other borrowers.

So far the partnership between CSC and Craft 3 has yielded more than $600,000 in financing for businesses in the region. Both Berdes and Mondau say the partnership is still in its embryonic stage, but they want to continue exploring how capital can help make the world a better place.

Here's hoping mortgage lending isn't far behind.

Marcus Harrison Green is the co-founder of the South Seattle Emerald. He regularly writes about social movements, juvenile justice and American society. This essay was originally published in the Seattle Star.

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34: “We Are Still Here”: Native Americans Win a Voice in Government (Hansen & Keeler)

Terri Hansen & Jacqueline Keeler

#nativeamerican #civilrights #history #politics



"U.S. Congresswoman Deb Halland (D-New Mexico) during visit to Kirtland Air Force Base" by Jesse Perkins, U.S. Air Forceis in the Public Domain

As we absorb the results of the 2018 midterm elections—and the question of whether a divided Congress and a willful chief executive means a looming constitutional crisis—it’s an excellent time to refocus our attention on the Indigenous origins of democracy in this country.

As Native journalists covering the stories of our people, we are lucky to have recorded thousands of hours of knowledge from our elders, our youth, our brave-hearted women and men, and it’s hard sometimes to express how much that inspires our work and keeps us going. As journalists come under attack around the world and even by this president, we are reminded to keep listening and keep sharing what is on our peoples’ minds.

We are reminded about the role Haudenosaunee leaders played in planting the seeds of democracy that led to the United States of America.



"Oren Lyons" by Syracuse Peace Council is licensed under CC BY-NC-SA 4.0

In 2011, Oren Lyons, Faithkeeper of the Turtle Clan of the Seneca Nations of the Iroquois Confederacy, took a timeout from a summit in Beaverton, Oregon, to tell one co-author of this piece the history of the Iroquois Confederacy—also called the Six Nations or Haudenosaunee.

What an honor.

A great deal has been written about the Iroquois' "Great Law of Peace," but listening to Lyons recite it recalled the initial cultural exchange that inspired English colonist Benjamin Franklin to print the speeches of Onondaga leader Canassatego at the signing of the Treaty of Lancaster of 1744. Canassatego urged the contentious colonies to unite, as had his people, using a metaphor that many arrows cannot be broken as easily as one. This inspired the bundle of 13 arrows held by an eagle in the Great Seal of the United States.

The Iroquois Confederacy was created among the Mohawk, Oneida, Cayuga, Onondaga, and Seneca in 1142 (and with the Tuscarora in 1722) under the guidance of the Great Peacemaker to ensure peace among their nations. They created a government based on a model that was fair and that met the needs of every person in their community. The example of the Iroquois sparked the spread of democratic institutions across the world, a story recently explored in episode 2 "Nature to Nations" of the new PBS series Native America.

"Our societies are based upon the democratic principles of the authority of the people," Lyons explained.

The Native American concept of always considering how our actions will affect the seventh generation to come is taken from the Iroquois Confederacy. And Indigenous nations in North America were organized by democratic principles that focused on the creation of strong kinship bonds that promoted leadership not compelled by financial gain or profit margins, but by service. Not like our country today.

A healthy democracy requires that all people participate. As a result of U.S. occupation of our homelands, Native Americans and, in particular, our national identities, have been hidden and shunted out of sight and out of mind. This shrouding of Native Nations' continued political existence is understandable as a full reckoning with our nations would greatly alter the map of the most powerful country in the world. Honoring treaties would mean returning land and resources. According to the 2010 U.S. Census, most Native Americans live off the reservation as economic refugees from their homelands. It's hard to understand why Native peoples are overlooked in the demographic analysis of urban areas when equally small populations are included. (Native Americans are usually relegated to the "other" category.)

In 2018, American schools still teach children that all of the Native Americans have died. A stunning 87 percent of references to American Indians in all 50 states' academic standards portray Native peoples in a pre-1900 context.

And the Indian Wars continue to be waged as Native Americans are killed at a higher rate by law enforcement than any other race or ethnicity, often in remote locations, according to data from the U.S. Centers for Disease Control and Prevention. If those numbers were addressed by agencies charged with oversight, it could help to lower them. But no one knows.

Our suicide rate is higher than any other race or ethnicity in the United States. Among people ages 18 to 24 nationwide, our suicide rate is 12.8 deaths per 100,000.

There is an epidemic of missing and murdered Indigenous women in this country. It's underreported, yet one in three Native American women and girls have either been raped or experienced attempted rape.

So, Native Americans have a lot at stake in U.S. elections—like the 2018 midterms—because we know that invisibility makes its way into policy and negates our issues at decision-making levels of government.

When a Supreme Court decision came close to keeping tribal members in North Dakota from voting for lack of physical addresses, the tribal nations worked to get them new IDs and addresses at their own expense before the polls opened.

And the first Native congresswomen were elected on Tuesday, including Sharice Davids, a Kansas Democrat and member of the Ho-Chunk Nation of Wisconsin who also identifies as LGBTQ, and Deb Haaland, a New Mexico Democrat and member of the Pueblo of Laguna Tribe.

Haaland told NPR she sees policies changing as a result of their being elected. She talked, for example, about the missing and murdered Indigenous women.

"It's an epidemic. With two Native women in office, and two Native men [both Republicans from Oklahoma], the four of us can push it easier than one." She ended the interview by saying, "We will listen to the voices of our constituents."

#NativeTwitter has been a trending a hashtag for about six months, and we're looking forward to the day when it can replace another trending hashtag:

#WeAreStillHere.

You bet we are.

Terri Crawford Hansen is a journalist who writes about environmental and scientific issues affecting indigenous communities. She is a member of the Winnebago Tribe of Nebraska. Jacqueline Keeler is a writer and activist of Dineh and Yankton Dakota heritage who co-founded Eradicating Offensive Native Mascotry.. Their essay was originally published in *YES!* Magazine.

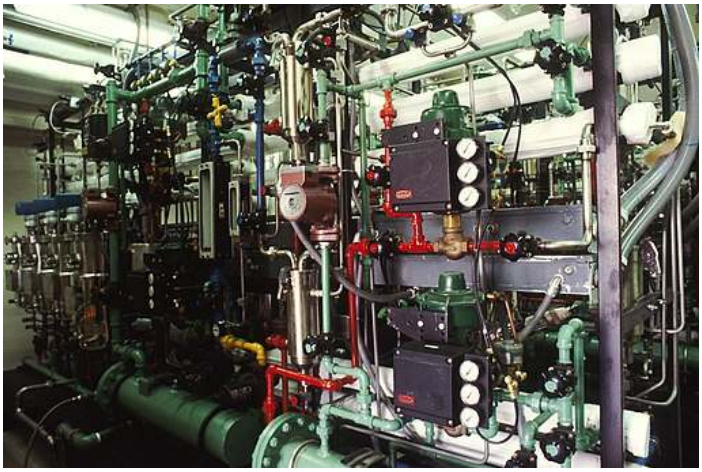
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35: Cheaper Versions of the Most Expensive Drugs May Be Coming, but Monopolies Will Likely Remain (Heled)

Yaniv Heled

#health #business #controversies #reportinginformation #science #finances



Manufacturing facilities for biologics are wildly expensive making it difficult for competitors to enter the market. "Biologics" by National Cancer Institute is in the Public Domain

In May, the Food and Drug Administration issued much-anticipated guidance that could revolutionize the pricing of some of the most expensive drugs on the market in the U.S. and, possibly, globally.

In this document, the FDA explains to drug manufacturers how to develop their own copycat versions of a special class of drugs called biologics. Unlike most drugs, biologics are not chemically synthesized but are made, for the most part, inside living organisms. This makes them complicated to manufacture and tricky to imitate.

The FDA's new guidance will allow drug manufacturers to create their own cheaper versions of biologics that could be automatically substituted for one another, including by pharmacists. Just as happened with "generic" drugs, bringing competition into biologics markets will, hopefully, lower the prices of these medicines. But, it is unclear by how much or whether the guidance will do so for all biologics.

As a legal researcher specializing in the regulation of novel biotechnologies, I have been following efforts over the last 10 to 12 years to bring competition into biologics markets in the United States. So, I am excited to see how the FDA's new guidance affects competition in biologics and whether it ultimately increases patient access to these drugs.

Why are biologics so expensive?

Following the maturation of recombinant DNA technology in the 1970s, biologics have been emerging as a prominent class of pharmaceuticals. To illustrate, seven out of the 10 best-selling pharmaceuticals in 2018 were biologics, including Humira, Opdivo, Keytruda, Enbrel, Herceptin, Avastin and Rituxan. The world's best selling pharmaceutical, Humira, which is prescribed for a variety of autoimmune diseases, including rheumatoid arthritis, Crohn's disease, ulcerative colitis, psoriasis and juvenile idiopathic arthritis, brought in nearly US$20 billion in worldwide sales last year.

The growing importance of biologics is due, in large part, to their remarkable therapeutic qualities. Biologics provide treatment and sometimes even a cure for some of the most devastating and often previously untreatable illnesses, including numerous types of cancer, autoimmune diseases such as arthritis, Crohn's disease and psoriasis, some forms of blindness and more.

But biologics are also very expensive, typically costing in the range of many tens of thousands to hundreds of thousands of dollars a year. In a few cases of biologics indicated for the treatment of rare diseases such as neuronal ceroid lipofuscinosis type II or Batten disease and spinal muscular atrophy the price comes closer to a million dollars per treatment year. As a result, although

biologics account for only about 1 to 2% of prescriptions written in the United States, they are responsible for more than 30% of the spending on pharmaceuticals overall and their "share" in pharmaceutical spending only continues to grow.

The high price of biologics is partly due to the costly manufacturing facilities and the large investment in research and development necessary in order to take biologics through clinical trials and FDA approval processes. In 2009, the R&D cost for a copycat biologic was estimated at between $100–200 million. Conducting the research and clinical trials necessary to develop a *new* biologic is estimated to cost in the range of hundreds of millions of dollars for a typical biological product.

But the primary reason biologics prices are so steep is that the manufacturers of these drugs enjoy a monopoly and are able to keep their prices very high for a very long time.

The reason most pharmaceutical companies have monopolies on biologics is that these products are structurally and chemically complex. It is very difficult and sometimes even impossible – at least using current technologies – to know their exact structure and composition. This, in turn, makes it difficult to produce identical or near-identical replicas of biologics, which is what generics drugs are. This is why there are no generic biologics on the market. But that might soon change.

FDA guidance could make biologics cheaper

Congress has long recognized that the best way to lower the prices of expensive pharmaceutical products is through competition. That was the rationale behind the enactment of the Hatch-Waxman Act in 1984, which created a legal pathway for approval of imitation or "generic" versions of pharmaceuticals.

The Hatch-Waxman Act revolutionized competition in pharmaceutical markets that led to significant price drops – often by as much as 80-90% – in thousands of pharmaceutical products. This has saved American consumers hundreds of billions of dollars each year.

Following Europe's lead, in 2010, as part of the Affordable Care Act, or Obamacare, Congress passed the Biologics Price Competition and Innovation (BPCI) Act. This was meant to do for biologics markets what the Hatch-Waxman Act did in 1984 for non-biologic pharmaceuticals.

But the BPCI Act only created the legal pathway for approval of imitation biologics. It did not address the technical challenge of comparing the original, expensive biologic with its cheaper imitation. That is something that the FDA must still figure out. Not an easy task.

Now, more than nine years after the enactment of the BPCI Act, the FDA issued its guidelines which explain, for the first time, to potential follow-on biologics manufacturers what the FDA requires in order to approve a copycat biologic. In the guidance, the FDA provides instructions how to prove that two products – the original biologic and the copycat – are similar enough to be deemed substitutable.

Monopolies may persist

Once FDA approves interchangeable versions of biologics, this should drive competition in biologics and, ultimately, cause their prices to drop. As many regulatory agencies in countries around the world follow the FDA's lead, agencies in other countries will likely do the same, leading to larger cost savings globally.

But concerns remain that the FDA's guidance might not be enough to drive prices down significantly. Development of similar biologics is estimated to cost about $100-200 million. This is much higher than the development of generic drugs, which is estimated to cost, typically, between $1-5 million. There are not very many companies with the kind of facilities, expertise, and money necessary to develop interchangeable versions of biologics and chaperon them through the FDA's approval process. As a result, it is quite possible that there will not be a lot of companies able to compete.

Previous research shows that significant price drops in pharmaceuticals occur only after several competitors enter the market. So, it is quite possible that many biologics will have too few competing interchangeable versions to drive prices down significantly.

Also, original biologics makers have been taking a variety of measures to avoid losing their monopolies. Some have been amassing large patent portfolios. Others have been known to file lawsuits and abuse regulatory processes to delay the entry of competing products into the market. It is likely that they will continue to do so in order to prevent interchangeable versions of their biologics from entering the market.

Finally, the FDA guidance itself only applies to protein products, which are only one kind of biologics. So, there still is no clear regulatory path for FDA to approve interchangeable versions of some of the most expensive biologics – like gene therapies.

The FDA guidance may prove to be an important step toward lowering the prices of biologics. It comes at a good time, given the drug pricing crisis in the United States. But the guidance alone may not be enough.

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36: Getting a Scientific Message Across Means Taking Human Nature into Account (Hendricks)

Rose Hendricks

#reportinginformation, #cognitivebias, #logos, #ethos, #kairos, #pathos, #currentevents, #science



"Hear no evil. Speak no evil. See no evil" by smileham is licensed under CC BY-NC 2.0

We humans have collectively accumulated a lot of science knowledge. We've developed vaccines that can eradicate some of the most devastating diseases. We've engineered bridges and cities and the internet. We've created massive metal vehicles that rise tens of thousands of feet and then safely set down on the other side of the globe. And this is just the tip of the iceberg (which, by the way, we've discovered is melting). While this shared knowledge is impressive, it's not distributed evenly. Not even close. There are too many important issues that science has reached a consensus on that the public has not.

Scientists and the media need to communicate more science and communicate it better. Good communication ensures that scientific progress benefits society, bolsters democracy, weakens the potency of fake news and misinformation and fulfills researchers' responsibility to engage with the public. Such beliefs have motivated training programs, workshops and a research agenda from the National Academies of Science, Engineering, and Medicine on learning more about science communication. A resounding question remains for science communicators: What can we do better?

A common intuition is that the main goal of science communication is to present facts; once people encounter those facts, they will think and behave accordingly. The National Academies' recent report refers to this as the "deficit model."

But in reality, just knowing facts doesn't necessarily guarantee that one's opinions and behaviors will be consistent with them. For example, many people "know" that recycling is beneficial but still throw plastic bottles in the trash. Or they read an online article by a scientist about the necessity of vaccines, but leave comments expressing outrage that doctors are trying to further a pro-vaccine agenda. Convincing people that scientific evidence has merit and should guide behavior may be the greatest science communication challenge, particularly in our "post-truth" era.

Luckily, we know a lot about human psychology – how people perceive, reason and learn about the world – and many lessons from psychology can be applied to science communication endeavors.

Consider human nature

Regardless of your religious affiliation, imagine that you've always learned that God created human beings just as we are today. Your parents, teachers and books all told you so. You've also noticed throughout your life that science is pretty useful – you especially love heating up a frozen dinner in the microwave while browsing Snapchat on your iPhone.

One day you read that scientists have evidence for human evolution. You feel uncomfortable: Were your parents, teachers and books wrong about where people originally came from? Are these scientists wrong? You experience cognitive dissonance – the uneasiness that results from entertaining two conflicting ideas.

Psychologist Leon Festinger first articulated the theory of cognitive dissonance in 1957, noting that it's human nature to be uncomfortable with maintaining two conflicting beliefs at the same time. That discomfort leads us to try to reconcile the competing

ideas we come across. Regardless of political leaning, we're hesitant to accept new information that contradicts our existing worldviews.

One way we subconsciously avoid cognitive dissonance is through confirmation bias – a tendency to seek information that confirms what we already believe and discard information that doesn't.

This human tendency was first exposed by psychologist Peter Wason in the 1960s in a simple logic experiment. He found that people tend to seek confirmatory information and avoid information that would potentially disprove their beliefs.

The concept of confirmation bias scales up to larger issues, too. For example, psychologists John Cook and Stephen Lewandowsky asked people about their beliefs concerning global warming and then gave them information stating that 97 percent of scientists agree that human activity causes climate change. The researchers measured whether the information about the scientific consensus influenced people's beliefs about global warming.

Those who initially opposed the idea of human-caused global warming became even less accepting after reading about the scientific consensus on the issue. People who had already believed that human actions cause global warming supported their position even more strongly after learning about the scientific consensus. Presenting these participants with factual information ended up further polarizing their views, strengthening everyone's resolve in their initial positions. It was a case of confirmation bias at work: New information consistent with prior beliefs strengthened those beliefs; new information conflicting with existing beliefs led people to discredit the message as a way to hold on to their original position.



Just shouting louder isn't going to help. Photo by Maritime Union of New Zealand is licensed under CC BY 2.0

Overcoming cognitive biases

How can science communicators share their messages in a way that leads people to change their beliefs and actions about important science issues, given our natural cognitive biases?

The first step is to acknowledge that every audience has preexisting beliefs about the world. Expect those beliefs to color the way they receive your message. Anticipate that people will accept information that is consistent with their prior beliefs and discredit information that is not.

Then, focus on framing. No message can contain all the information available on a topic, so any communication will emphasize some aspects while downplaying others. While it's unhelpful to cherry-pick and present only evidence in your favor – which can backfire anyway – it is helpful to focus on what an audience cares about.

For example, these University of California researchers point out that the idea of climate change causing rising sea levels may not alarm an inland farmer dealing with drought as much as it does someone living on the coast. Referring to the impact our actions today may have for our grandchildren might be more compelling to those who actually have grandchildren than to those who don't. By anticipating what an audience believes and what's important to them, communicators can choose more effective frames for their messages – focusing on the most compelling aspects of the issue for their audience and presenting it in a way the audience can identify with.

In addition to the ideas expressed in a frame, the specific words used matter. Psychologists Amos Tversky and Daniel Kahneman first showedwhen numerical information is presented in different ways, people think about it differently. Here's an example from their 1981 study:

Imagine that the U.S. is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimate of the consequences of the programs are as follows: If Program A is adopted, 200 people will be saved. If Program B is adopted, there is ⅓ probability that 600 people will be saved, and ⅔ probability that no people will be saved.

Both programs have an expected value of 200 lives saved. But 72 percent of participants chose Program A. We reason about mathematically equivalent options differently when they're framed differently: Our intuitions are often not consistent with probabilities and other math concepts.

Metaphors can also act as linguistic frames. Psychologists Paul Thibodeau and Lera Boroditsky found that people who read that crime is a beast proposed different solutions than those who read that crime is a virus – even if they had no memory of reading the metaphor. The metaphors guided people's reasoning, encouraging them to transfer solutions they'd propose for real beasts (cage them) or viruses (find the source) to dealing with crime (harsher law enforcement or more social programs).

The words we use to package our ideas can drastically influence how people think about those ideas.

What's next?

We have a lot to learn. Quantitative research on the efficacy of science communication strategies is in its infancy but becoming an increasing priority. As we continue to untangle more about what works and why, it's important for science communicators to be conscious of the biases they and their audiences bring to their exchanges and the frames they select to share their messages.

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37: Jessie Simmons: How a Schoolteacher Became an Unsung Hero of the Civil Rights Movement (Hill-Jackson)

Valerie Hill-Jackson

#civilrights #expository #sharedvalues #heroes #education #policy



Jessie Dean Gipson Simmons, shown top center about age 37, c. 1961. [Clockwise: daughter Angela, sons Obadiah Jerone, Jr. and Carl, and husband Obadiah Jerone, Sr.; daughters Carolyn and Quendelyn are not pictured] Simmons family archives, Author provided

Jessie Dean Gipson Simmons was full of optimism when she and her family moved from an apartment in a troubled area of Detroit to a new development in Inkster, Michigan in 1955.

With three children in tow, Jessie and her husband settled into a home on Colgate Street in a neighborhood known as “Brick City” – an idyllic enclave of single, working-class families with a shared community garden.

The plan was simple. Like many African Americans who left the South as part of the Great Migration, Jessie’s husband, Obadiah Sr., would find a stable factory job just outside of Detroit. Then Jessie would put to use the bachelor’s degree she had earned in upper elementary education from Grambling State University in the township of Taylor - just a few blocks from their new home.

But the plan went awry. Jessie first applied for a teaching position with the Taylor school district in April 1958, but was denied. The same thing happened in March 1959. And a third time in May 1959. The repeated denials may have set back Jessie’s plans, but they also set her up to fight an important battle for justice for black educators at a time when many were being pushed out of the teaching profession.

I interviewed Jessie’s family as part of my ongoing research into the history of black women teachers from the Reconstruction Era to the 21st century.

Fighting back

The battle began when Jessie filed a grievance with the Michigan Fair Employment Practices Commission, or MFEPC, on Sept. 1, 1959. Jessie’s grievance detailed her conversation with the superintendent Orville Jones in March 1958, in which he told her “there would be vacancies in 1959.”

In August 1958, the Taylor Township Board of Education – the body overseeing the school district where Jessie wanted to teach – took up the matter of employing Negro teachers at a board meeting. The reason the item was placed on the agenda? The

Superintendent at the time, Orville Jones, “felt that any handicap” – he deemed race as a handicap – “be pointed out to the board.”

The chair of the school board, Mr. Randall, stated applications were “considered in the order of the dates they were received.” Since the Taylor school board was now on record regarding its hiring practices for teachers, Jessie used that statement in her grievance.

Jessie’s decision to file a grievance would be a costly one for her family. The couple had planned on two steady incomes. In 1959, now a mother of five children, Jessie took a job as a waitress and a cook in a cafe to make ends meet. Her job drew scorn from family members in Louisiana who knew she was severely underemployed. And though her children didn’t know it at the time, Jessie and her husband “gave up meals so the children could eat,” according to Jessie’s oldest son, Obidiah Jr.

In 1960 the MFEPC held a public hearing for the grievance filed by Jessie and Mary Ruth Ross - a second black teacher who was also denied employment by the Taylor board of education. According to the Detroit Courier, Jessie and Mary “were passed over for employment in favor of white applicants who lacked degrees.” Records uncovered by the MFEPC found that 42 non-degreed teachers hired between 1957 through 1960 were all white and “had a maximum of 60 hours of college credits.” Jessie and Mary, on the other hand, were both degreed teachers with some credits toward a graduate degree.

How the Brown decision hurt black teachers

While the 1954 Brown v. Board of Education decision is often celebrated and considered a legal victory, many scholars believe it had a harmful effect on black teachers. In 1951, scholars writing in the Journal of Negro Education rightly warned that Brown “might conceivably” impact “Negro teachers”. Nationwide, school district leaders pushed back against Brown in two ways.

First, school leaders slow-walked the implementation of Brown – for many school districts as late as the mid-1980s. Second, black teachers across the country lost their once-secure teaching jobs by the tens of thousands after Brown when black schools closed and black children integrated into white schools. In the South, for example, the number of black teachers had soared to around 90,000 pre-Brown. But by 1965 nearly half had lost their jobs. A 1965 report from the National Education Association, a leading labor union for teachers, concluded school districts had “no place for Negroes” in the wake of Brown. School officials railed against Brown and refused to hire black teachers like Jessie, turning them into what sociologist Oliver Cox described as “martyrs to integration.”

My own research confirms that the forced exodus of black women from the teaching profession was ignited by Brown. Discrimination by school leaders fueled the demographic decline of black teachers and remains one of the leading factors for their under-representation in the profession today.

First ruling of its kind

At the eight-day public hearing, Jones admitted that “the hiring of Negro teachers would be something new and different and something we had not done before.” He stated he felt that the Negro teachers were “not up to par.” The hearing eventually revealed that applications for “Negroes” were kept in distinct folders – separated from the submissions of the white applicants.

After more than a year, the MFEPC issued a ruling in Jessie’s case. The decision got a brief mention from Jet Magazine on Dec. 1, 1960:

In the first ruling of its kind, the MFEPC ordered the Taylor Township School Board to hire Mrs. Mary Ruth Ross and Mrs. Jessie Simmons, two Negro teachers, and pay them back wages for the school years of 1959-60 and 1960-61. FEPC Commissioner Allan A. Zaun said the teachers were refused employment on the basis of race.

The attorney for the Taylor board of education, Harry F. Vellmure, threatened to challenge the ruling in court - all the way “to the Supreme Court if necessary,” according to the Detroit Courier. The board stuck to its position that Jessie and Mary were given full and fair consideration for teaching jobs and simply lost out to better qualified teachers.

As a result of noncompliance with the MFEPC’s order, Carl Levin, future U.S. senator and general counsel for the Michigan Civil Rights Commission, filed a discrimination lawsuit against the Taylor school district on Jessie’s and Mary’s behalf. Even though the matter did not reach higher courts, Vellmure filed several appeals that effectively slowed down the commission’s order for seven years.

As the lawsuit dragged on, Jessie became an elementary school teacher with the Sumpter School District in 1961. By 1965, she left Sumpter for the Romulus Community School District. According to Jessie's children, they would continue in the Taylor school district and were known as the kids "whose mother filed the lawsuit against the school district."

In 1967, after seven years of fighting the Taylor school district in local court, Jessie and Mary prevailed. They were awarded two years back pay and teaching positions. Saddled by hurt feelings after a long fight with the Taylor school district, Jessie declined the offer and continued teaching in Romulus.

The Simmons moved into a larger, newly constructed home on Lehigh Avenue. Jessie gave birth to her sixth child, Kimberly, one month before moving in. Although the new home was only two blocks south of their old home on Colgate Avenue, Jessie's four surviving children recall that their lifestyle improved and their childhood was now defined by two eras: "before lawsuit life and after lawsuit life." And by 1968, Jessie earned a master's degree in education from Eastern Michigan University.

Unsung civil rights hero

At her retirement in 1986, Jessie's former students recalled that she was an effective teacher of 30 years who was known as a disciplinarian with a profound sense of commitment to the children of Romulus.

Jessie's story is a reminder that the civil rights movement did not push society to a better version of itself with a singular, vast wave toward freedom. Rather, it was fashioned by little ripples of courage with one person, one schoolteacher, at a time.

Valerie Hill-Jackson is Clinical Professor of Educator Preparation and Director, Educator Preparation and School Partnerships, Texas A&M University and the author of five books on education the latest of which is *What Makes a Star Teacher: 7 Dispositions That Support Student Learning* (ASCD, 2019).



Jessie Simmons: How a schoolteacher became an unsung hero of the civil rights movement by Valerie Hill-Jackson is licensed under a Creative Commons Attribution-NoDerivatives 4.0 International License.

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38: Why Rituals Are Good for Your Health (Honarvar)

Ari Honarvar

#sharedvalues, #descriptive, #narrative, #pathos, #currentevents, #argument, #valuesbasedargument, #research, #kairos #global #religion #health



"Buddhist Ritual" by sasint is in the Public Domain, CC0

I don't know if I could have survived seven years of my childhood without the soul-saving rituals of my Persian culture. I grew up amid the Iran-Iraq War, which killed a million people. Besides the horrors of the war, freedom of thought and expression were severely restricted in Iran after the Islamic revolution. Women bore the brunt of this as, in a matter of months, we were forced to ditch our previous lifestyle and observe a strict Islamic attire, which covered our bodies and hair. We lost the right to jog, ride a bicycle, or sing in public. Life seemed unbearable at times, but we learned to bring meaning into uncertainty and chaos by maintaining grounding practices and developing new ones.

It helped that in Persian culture we had ceremonies to turn to. We clung to 3,500-year-old Zoroastrian ceremonies that correspond to the seasons. Several of these rituals take place during the spring because the equinox marks the Persian New Year. Besides a thorough spring cleaning, we jump over a bonfire to cleanse our inner landscape and give our maladies to fire and gain vitality from it. On the longest night of the year, winter solstice, we stay up all night eating fruits and nuts, reciting poetry, playing music, and dancing. This is to symbolize survival and celebration during dark times.

Rituals, which are a series of actions performed in a specific way, have been part of human existence for thousands of years. They are not habits. According to research psychologist Nick Hobson, a habit's inherent goal is different from a ritual's. With habit, the actions and behaviors are causally tied to the desired outcome; for example, brushing our teeth to prevent cavities and gum disease and exercising to keep healthy. Rituals, on the other hand, are "goal demoted," which means that their actions have no instrumental connection to the outcome. For example, we sing "Happy Birthday" to the same melody even though it isn't tied to a specific external result.

Cristine Legare, a researcher and psychology professor at the University of Texas at Austin, says, "Rituals signify transition points in the individual life span and provide psychologically meaningful ways to participate in the beliefs and practices of the community." They have been instrumental in building community, promoting cooperation, and marking transition points in a community member's life. And as strange as rituals might be from a logical perspective, they have evolved as distinct features of human culture.

While it's not clear exactly how they help, rituals reduce anxiety, improve performance and confidence, and even work on people who don't believe in them, research shows. In a University of Toronto study, participants who performed a ritual before completing a task exhibited less anxiety and sensitivity to personal failure than when they completed the task without first performing the ritual.

Additionally, rituals benefit our physical well-being and immune system. According to Andrew Newberg, the associate director of research at the Marcus Institute of Integrative Health, rituals lower cortisol, which in turn lowers heart rate and blood pressure and increases immune system function.

We live amid a loneliness epidemic where the lack of belonging and community has been linked to high suicide rates and an increased sense of despair. The United States has one of the worst work-life balance scores in the world, while more Americans have become disillusioned with organized religion, as a broad and rapidly rising demographic consider themselves spiritual but not religious. Perhaps with fewer opportunities for people to be in community, many shared cultural rituals are falling away and with them a grounding source for connection and mental health.

In Iran during the war, we found uses for rituals when we were faced with food rations. We gathered family and friends, reciting the ancient story of the poor abused girl who had run away from home and had a vision of being visited by three celestial bibis (matrons). The bibis instructed her to make a sweet halva and donate it to the poor. The girl said she didn't have any money, and the bibis told her to borrow or work for the ingredients. This worked well with food rations as each guest brought a few ingredients to make the halva. Like the girl in the story, each participant made a wish and took a bite of the halva. I walked away feeling calmer and more supported.

Stories, such as those told during the Jewish ceremony of Passover Seder, have become ritualized because they are recited in the same way each time. Rhythm and music play a similar role in ritual. Whether we're chanting in Sanskrit or singing the national anthem, "our brains tend to resonate with those around us, so if everyone is doing the same dance, hymn, or prayer, all of those brains are working in the same way," Newberg explains. "This can engender a powerful feeling of connectedness. It also reduces stress and depression through a combination of effects on the autonomic nervous system, which is ultimately connected to the emotional areas of the brain—the limbic system." According to one study, chanting the Sanskrit syllable "om" deactivates the limbic system, softening the edge of fear, anxiety, and depression.

Psychologist Hobson confirms that rituals aren't just a benefit to our mental health—they're actually essential. "We are an intensely social and ritualistic species," he says. "Take this piece out of our modern human narrative and you lose a piece of our history and our humanity."

I moved to the U.S. when I was 14. After living here for two decades, I became a mother and was confronted with the phrase, "It takes a village to raise a child." But where was that mythical village and the rituals that made it sane? For example, a pregnant woman in Iran had a rotating menu of dishes made for her by friends and family. A new mother was surrounded by people who took turns assisting with daily tasks. But in the U.S., she was expected to fend for herself and her baby immediately after childbirth. I observed that besides standard holiday traditions, community-building practices were lacking.

So after 20 years of living in the U.S., I decided to create my own community rituals.

I started with my family. At dinners we banned books and devices, lit candles, and discussed set topics of conversation. We held weekly family meetings with opening and closing ceremonies and used a talking stick to enforce respectful communication. At birthday dinners, we took turns saying, "I love you because …"

Candlelit dinners were no longer saved for a special occasion. Using a talking stick helped me listen more attentively and choose my words more carefully. Huddling together at the end of each family meeting provided me with a sense of accomplishment. Each ritual, no matter how small, anchored me in something bigger and provided a sense of belonging.

Then we began to build rituals within the larger community. First, we hosted a multigenerational Sunday potluck with friends and family. Each week, five to 10 of us gathered, shared food, and recounted what made us grateful. During each meal, I noticed I was lighter, more engaged with others, and laughed more.

Later, we built more community rituals into the week. I posted on Nextdoor, asking our neighbors to join us on Monday evening walks to the neighborhood park and back.

In this age of isolation, we need nourishing and uplifting means of creating community by bringing together members of different generations as our ancestors did. From my experience in Iran, rituals can be particularly valuable during hard times. In the U.S., we don't have to worry about bombs and food rations, but we still have challenges to our security that affect our mental and physical health. Rituals can help us, though, by offering our communities opportunities for healing and support.

Ari Honarvar is an award-winning writer, speaker, and performer. In her work, she explores poetry, parenting, rituals, and the plight of refugees and asylum seekers. Her website is rumiwithaview.com. This work was previously published in Yes! Magazine.

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39: The Dirt on Soil Loss from the Midwest Floods (Ippolito & Al-Kaisi)

Jim Ippolito & Mahdi Al-Kaisi

#science #environment #climatechange #nature #rural



"Farmland being flooded by Missouri and Red Rivers in North Dakota" by Good Free Photos is in the Public Domain, CC0

As devastating images of the 2019 Midwest floods fade from view, an insidious and longer-term problem is emerging across its vast plains: The loss of topsoil that much of the nation's food supply relies on.

Today, Midwest farmers are facing millions of bushels of damaged crops such as soybean and corn. This spring's heavy rains have already caused record flooding, which could continue into May and June, and some government officials have said it could take farmers years to recover.

Long after the rains stop, floodwaters continue to impact soil's physical, chemical and biological properties that all plants rely on for proper growth. Just as very wet soils would prevent a homeowner from tending his or her garden, large amounts of rainfall prevent farmers from entering a wet field with machinery. Flooding can also drain nutrients out of the soil that are necessary for plant growth as well as reduce oxygen needed for plant roots to breathe, and gather water and nutrients.

As scientists who have a combined 80 years of experience studying soil processes, we see clearly that many long-term problems farmers face from floodwaters are steeped in the soil. This leads us to conclude that farmers may need to take far more active measures to manage soil health in the future as weather changes occur more drastically due to climate change and other factors.

Here are some of the perils with flooded farmland that can affect the nation's food supply.

Suffocating soil

When soil is saturated by excessive flooding, soil pores are completely filled with water and have little to no oxygen present. Much like humans, plants need oxygen to survive, with the gas taken into plants via leaves and roots. Also identical to humans, plants – such as farm crops – can't breathe underwater.

Essentially, excess and prolonged flooding kills plant roots because they can't breathe. Dead plant roots in turn lead to death of aboveground plant, or crop, growth.

Another impact of flooding is compacted soil. This often occurs when heavy machinery is run over wet or saturated farmland. When soils become compacted, future root growth and oxygen supply are limited. Thus, severe flooding can delay or even prevent planting for the entire growing season, causing significant financial loss to farmers.

Loss of soil nutrients

When flooding events occur, such as overwatering your garden or as with the 2019 Midwest flooding, excess water can flush nutrients out of the soil. This happens by water running offsite, leaching into and draining through the ground, or even through the

conversion of nutrients from a form that plants can utilize to a gaseous form that is lost from the soil to the atmosphere.

Regardless of whether you are a backyard gardener or large-scale farmer, these conditions can lead to delays in crop planting, reduced crop yields, lower nutritive value in crops and increased costs in terms of extra fertilizers used. There is also the increased stress within the farming community – or for you, the backyard gardener who couldn't plant over the weekend due to excess rainfall. This ultimately increases the risk of not producing ample food over time.

Small microbial changes have big effects

Flooding on grand scales causes soils to become water-saturated for longer than normal periods of time. This, in turn, affects soil microorganisms that are beneficial for nutrient cycling.

Flooded soils may encounter problems caused by the loss of a specific soil microorganism, *arbuscular mycorrhizae* fungi. These fungi colonize root systems in about 90% to 95% of all plants on Earth in a mutually beneficial relationship.



"IMGP0157" by *juliamaddison42* is licensed under *CC BY-NC-ND 2.0*

The fungi receive energy in the form of carbon from the plant. As the fungi extend thread-like tendrils into the soil to scavenge for nutrients, they create a zone where nutrients can be taken up more easily by the plant. This, in turn, benefits nutrient uptake and nutritive value of crops.

When microbial activity is interrupted, nutrients don't ebb and flow within soils in the way that is needed for proper crop growth. Crops grown in previously flooded fields may be affected due to the absence of a microbial community that is essential for maintaining proper plant growth.

The current Midwest flooding has far-reaching effects on soil health that may last many years. Recovering from these types of extreme events will likely require active management of soil to counteract the negative long-term effects of flooding. This may include the adoption of conservation systems that include the use of cover crops, no-till or reduced-till systems, and the use of perennials grasses, to name few. These types of systems may allow for better soil drainage and thus lessen flooding severity in soils.

Farmers have the ability to perform these management practices, but only if they can afford to convert over to these new systems; not all farmers are that fortunate. Until improvements in management practices are resolved, future flooding will likely continue to leave large numbers of Midwest fields vulnerable to producing lower crop yields or no crop at all.

Jim Ippolito is Associate Professor of Environmental Soil Quality/Health at Colorado State University. Mahdi Al-Kaisi is Professor of Soil Management and Environment, Iowa State University. This essay originally appeared in *The Conversation.*

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40: Who Are the 1 in 4 American Women Who Choose Abortion? (Ireland)

Luu Ireland

#health #analysis #logos #research #reportinginformation #argument #science #selfdiscovery #currentevents #politics #sharedvalues



"0615091005.jpg" by kelly cree is licensed under CC BY 2.0

The abortion debate is at the center of U.S. political dialogue. Voices from both sides flood social media feeds, newspapers, radio and television programs.

In the last year, attacks on reproductive rights sharply increased. In 2019, Georgia, Missouri, Ohio, Kentucky and Mississippi successfully passed so-called “heartbeat” bans to prohibit abortion as early as 6 to 8 weeks. Alabama is the first state to pass a complete abortion ban without exceptions for rape or incest. Due to ongoing legal challenges, these bans have yet to go into effect.

One important group’s voice is often absent in this heated debate: the women who choose abortion. While 1 in 4 women will undergo abortion in her lifetime, stigma keeps their stories untold. As an obstetrician/gynecologist who provides full spectrum reproductive health care, I hear these stories daily.

Unintended pregnancy

In 2011, nearly half of pregnancies in the U.S. were unintended. This reflects a 6% drop in unintended pregnancies since 2008, largely due to Title X family planning programs and easier access to birth control.

Unintended pregnancy remains most common among poor women, women of color and women without a high school education. Women living in poverty have a rate of unintended pregnancy five times higher than those with middle or high incomes. Black women are twice as likely to have an unintended pregnancy as white women.

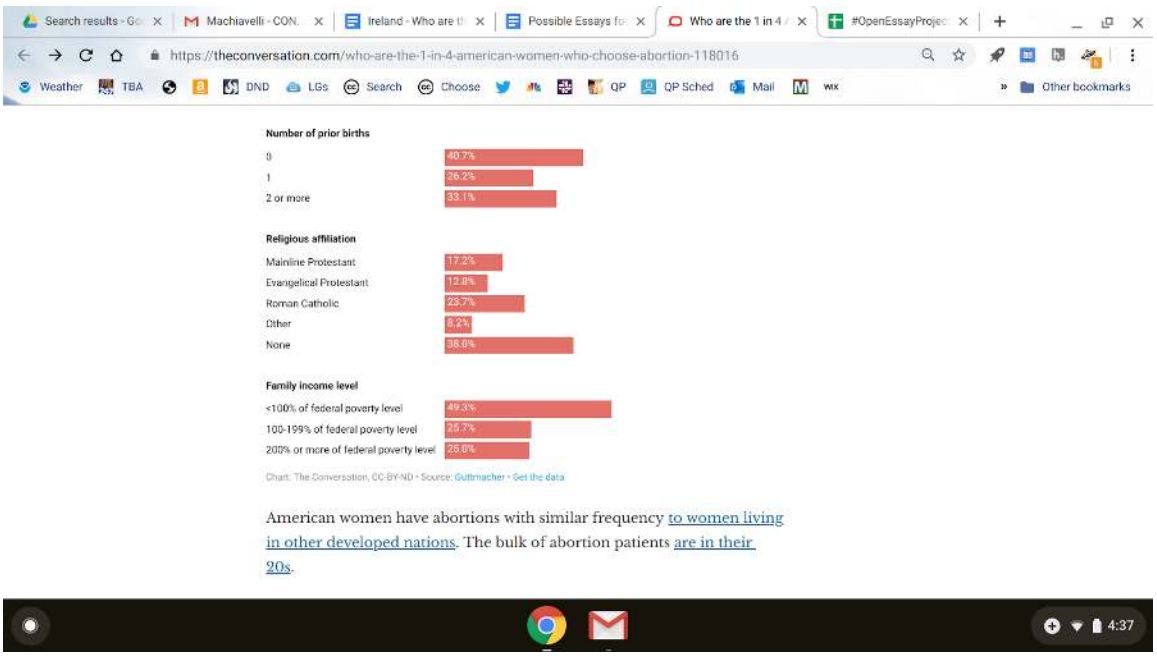
Barriers to contraception play a major role. Among women with unintended pregnancies, 54% were using no birth control. Another 41% were inconsistently using birth control at the time of conception.

Forty-two percent of women with unintended pregnancy choose to end their pregnancies.

The women who choose abortion

Abortion is a routine part of reproductive health care. Approximately 25% of women in the U.S. will undergo an abortion before the age of 45. The Guttmacher Institute, a research and policy institute in New York City, has been tracking these data for the last 50 years.





American women have abortions with similar frequency to women living in other developed nations. The bulk of abortion patients are in their 20s.

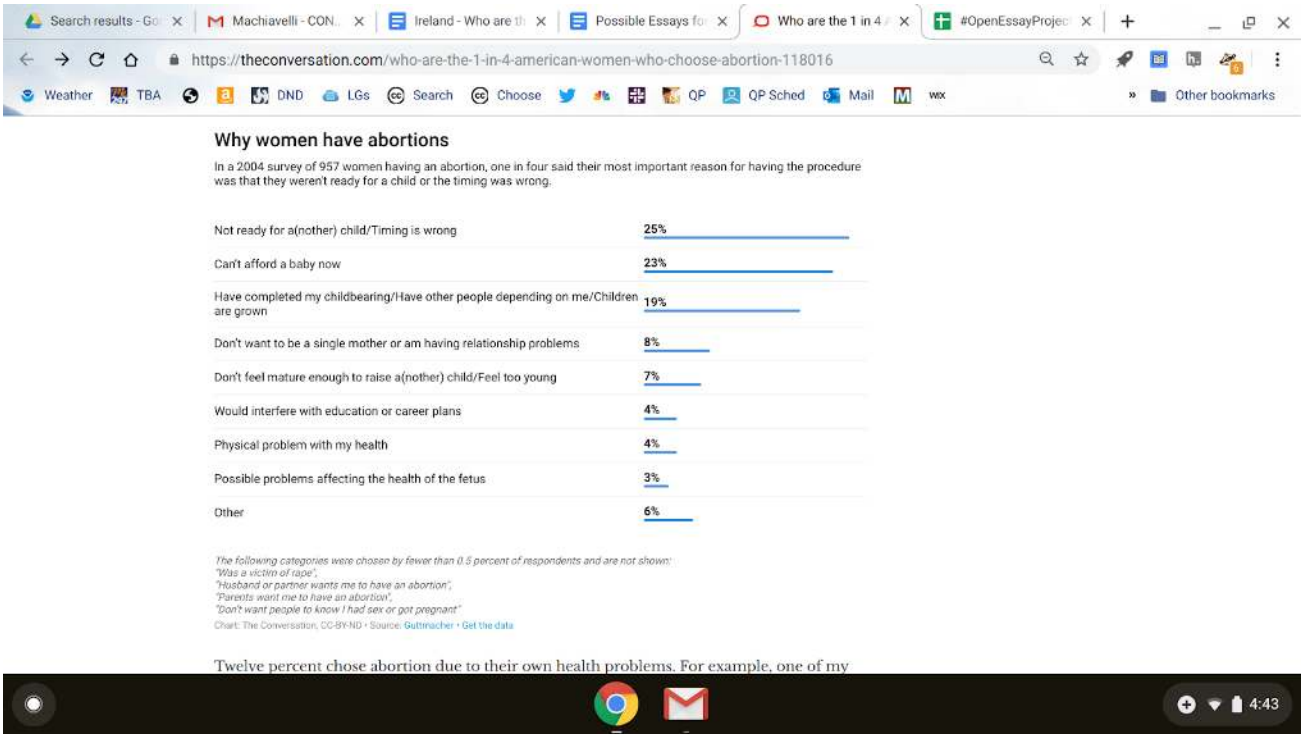
Women of all races and ethnicities choose abortion. In 2014, 39% of abortion patients were white, 28% were black and 25% were Latinx. Similarly, women of all religious affiliations choose to end their pregnancies at similar frequencies.

Most of these women understand what it means to parent a child. More than half of abortion patients in 2014 were already mothers.

Poor women account for the majority of abortion patients. Fifty-three percent of women pay out-of-pocket for their abortion. The rest use private or state-funded insurance plans.

Women choose abortion for multiple reasons. The most common reason cited is that pregnancy would interfere with education, work or ability to care for dependents.

Financial stress also plays a major role in women's decision-making. Seventy-three percent of women reported that they could not afford a baby at the time. Nearly half cited relationship difficulties or wanting to avoid single motherhood. More than a third of women felt their families were complete.



Twelve percent chose abortion due to their own health problems. For example, one of my patients and her husband were thrilled to find out she was pregnant for the first time. Then she received the diagnosis of metastatic breast cancer. She had to choose between lifesaving chemotherapy and radiation or her pregnancy.

Safety of abortion

Nine in 10 women who receive abortions undergo abortion in the first trimester. Only 1.3% of abortions happen with pregnancies past 20 weeks of gestation.

When performed legally by skilled practitioners, abortion is a safe medical procedure with a low complication rate. The risk of major complications – such as hospitalization, infection, blood transfusion or surgery – in first-trimester procedures is less than 0.5%. The risk of dying in childbirth is 14 times higher than the risk of dying from safe abortion.

Studies show that abortion is not linked to long-term health complications, including breast cancer, infertility, miscarriage or psychiatric disorders. The American College of Obstetricians and Gynecologists, the nation's leading professional organization of obstetricians and gynecologists, has reaffirmed the safety of abortion.

Conversely, the negative impacts from abortion restrictions are well-documented. Women unable to obtain abortions are more likely live in poverty or depend on cash assistance, and less likely to work full-time.

Since 2011, politicians have enacted over 400 pieces of legislation restricting this medical procedure.

Access to safe and legal abortion is an essential part of health care. Most Americans agree. Sixty-four percent of Americans, regardless of pro-choice or pro-life status, would like to see the 1973 Roe v. Wade decision upheld. Another 79% want abortion to remain legal. As a physician, the health and livelihood of my patients depend on it.

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41: The Politics of Fear: How It Manipulates Us to Tribalism (Javanbakht)

By Arash Javanbakht



President Barack Obama walks away from the lectern with Vice President Joe Biden after making a statement about the mass shooting in Orlando, Fla., June 16, 2016. (Official White House Photo by Pete Souza) Public Domain

The cruel murder of 50 people in New Zealand was another tragic reminder of how humans are capable of heartlessly killing their own kind just based on what they believe, how they worship, and what race or nationality they belong to. There is a longstanding history of the fear of "the others" turning humans into illogical ruthless weapons, in service to an ideology.

Fear is arguably as old as life. It is deeply ingrained in the living organisms that have survived extinction through billions of years of evolution. Its roots are deep in our core psychological and biological being, and it is one of our most intimate feelings. Danger and war are as old as human history, and so are politics and religion.

Demagogues have always used fear for intimidation of the subordinates or enemies, and shepherding the tribe by the leaders. Fear is a very strong tool that can blur humans' logic and change their behavior.

I am a psychiatrist and neuroscientist specializing in fear and trauma, and I have some evidence-based thoughts on how fear is abused in politics.

We learn fear from tribe mates

Like other animals, we humans can learn fear from experience, such as being attacked by a predator. We also learn from observation, such as witnessing a predator attacking another human. And, we learn by instructions, such as being told there is a predator nearby.

Learning from our conspecifics – members of the same species – is an evolutionary advantage that has prevented us from repeating dangerous experiences of other humans. We have a tendency to trust our tribe mates and authorities, especially when it comes to danger. It is adaptive: Parents and wise old men told us not to eat a special plant, or not to go to an area in the woods, or we would be hurt. By trusting them, we would not die like a great-grandfather who died eating that plant. This way we accumulated knowledge.

Tribalism has been an inherent part of the human history. There has always been competition between groups of humans in different ways and with different faces, from brutal wartime nationalism to a strong loyalty to a football team. Evidence from cultural neuroscience shows that our brains even respond differently at an unconscious level simply to the view of faces from other races or cultures.

At a tribal level, people are more emotional and consequently less logical: Fans of both teams pray for their team to win, hoping God will take sides in a game. On the other hand, we regress to tribalism when afraid. This is an evolutionary advantage that would lead to the group cohesion and help us fight the other tribes to survive.

Tribalism is the biological loophole that many politicians have banked on for a long time: tapping into our fears and tribal instincts. Some examples are Nazism, the Ku Klux Klan, religious wars and the Dark Ages. The typical pattern is to give the other humans a different label than us, and say they are going to harm us or our resources, and to turn the other group into a concept. It does not have to necessarily be race or nationality, which are used very often. It can be any real or imaginary difference: liberals, conservatives, Middle Easterners, white men, the right, the left, Muslims, Jews, Christians, Sikhs. The list goes on and on.

When building tribal boundaries between “us” and “them,” some politicians have managed very well to create virtual groups of people that do not communicate and hate without even knowing each other: This is the human animal in action!

Fear is uninformed

A soldier once told me: “It is much easier to kill someone you have never met, from distance. When you look through the scope, you just see a red dot, not a human.” The less you know about them, the easier to fear them, and to hate them.

This human tendency and ability of destruction of what is unknown and unfamiliar is meat to the politicians who want to exploit fear: If you grew up only around people who look like you, only listened to one media outlet and heard from the old uncle that those who look or think differently hate you and are dangerous, the inherent fear and hatred toward those unseen people is an understandable (but flawed) result.

To win us, politicians, sometimes with the media’s help, do their best to keep us separated, to keep the real or imaginary “others” just a “concept.” Because if we spend time with others, talk to them and eat with them, we will learn that they are like us: humans with all the strengths and weaknesses that we possess. Some are strong, some are weak, some are funny, some are dumb, some are nice and some not too nice.

Fear is illogical and often dumb

Very often my patients with phobias start with: “I know it is stupid, but I am afraid of spiders.” Or it may be dogs or cats, or something else. And I always reply: “It is not stupid, it is illogical.” We humans have different functions in the brain, and fear oftentimes bypasses logic. There are several reasons. One is that logic is slow; fear is fast. In situations of danger, we ought to be fast: First run or kill, then think.



Some people are afraid of spiders, others of snakes or even cats and dogs. "Spider orb weaver" by kmousky is licensed under CC BY-NC-ND 2.0

Politicians and the media very often use fear to circumvent our logic. I always say the U.S. media are disaster pornographers – they work too much on triggering their audiences’ emotions. They are kind of political reality shows, surprising to many from outside the U.S.

When one person kills a few others in a city of millions, which is of course a tragedy, major networks’ coverage could lead one to perceive the whole city is under siege and unsafe. If one undocumented illegal immigrant murders a U.S. citizen, some politicians use fear with the hope that few will ask: “This is terrible, but how many people were murdered in this country by U.S. citizens just today?” Or: “I know several murders happen every week in this town, but why am I so scared nowthat this one is being showcased by the media?”

We do not ask these questions, because fear bypasses logic.

Fear can turn violent

There is a reason that the response to fear is called the “fight or flight” response. That response has helped us survive the predators and other tribes that have wanted to kill us. But again, it is another loophole in our biology to be abused to turn on our aggression toward “the others,” whether in the form of vandalizing their temples or harassing them on the social media.



"Desecrated Graves in the Old Jewish Section of the Cemetery, Vienna" by Scott Rettberg is licensed under CC BY 2.0

When ideologies manage to get hold of our fear circuitry, we often regress to illogical, tribal and aggressive human animals, becoming weapons ourselves – weapons that politicians use for their own agenda.

Arash Javanbakht is Assistant Professor of Psychiatry, Wayne State University. This essay originally appeared in *The Conversation.*

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42: To Feel Happier, We Have to Resolve to the Life We Evolved to Live (Javanbakht)

Arash Javanbakht

#science #health #advice #food #research #history



When humans had to hunt for food, they had to move more. Sedentary lifestyles have made humans far less active than they need to be. "Hunting Wooly Mammoth" by http://cloudinary.com is licensed under CC BY-SA 4.0

When we have to give a talk to a group of people, we feel anxious and experience the bodily fear responses that do not make sense now: The system is not meant to function in this safe context.

As a psychiatrist specialized in anxiety and trauma, I often tell my patients and students that to understand how fear works in us, we have to see it in the context where it evolved. Ten thousand years ago, if another human frowned at us, chances were high one of us would be dead in a couple minutes. In the tribal life of our ancestors, if other tribe members did not like you, you would be dead, or exiled and dead.

Biological evolution is very slow, but civilization, culture, society and technology evolve relatively fast. It takes around a million years for evolutionary change to happen in a species, and people have been around for about 200,000 years. Each of us, however, sees drastic changes in our lifestyle and environment over a matter of a few years.

Let's compare the life for which this body and brain has evolved with the life we live, from my perspective as a scientist and a physician.

What we eat

We evolved in a context of scarcity, and had to walk or run for miles and scavenge to find food; we had to work for it. When we ate, we did not know when the next time would be. When we had it, we were better off eating the high-calorie food that increased our chance of survival when hungry (greasy food feels appealing). Food was not quick to digest, stomachs also had to work hard for it: meat, fruits, vegetables, seeds and nuts. None of these contained "easy" sugary calories. The body that was prone to starvation, evolved to eat it all when available, and store it, and be stingy in its use.

But now, food is just a few feet away, and we can easily consume thousands of calories in one serving. Fatty food, which required days and miles of hunting and scavenging to acquire, is now right there in the fridge or at the McDonald's. It is like giving full fridge privileges to your Labrador. Easy calories like soda and candies provide a very large amount of energy in a very short amount of time and confuse the whole system. We end up fat and fatigued.

How we move

Our ancestors had to be active to survive in the wild. They had to walk miles a day, and were frequently involved in high intensity physical activity: moving heavy objects, climbing, fighting, chasing a prey or fleeing predators.

This body did not evolve to sit at a desk eight hours a day, and then lie on a couch for the rest of the day munching on high calorie food, looking at a small or large screen. A contemporary American may only walk a few dozen steps to the car, drive to work, ride the elevator to the office, walk a few dozen steps back to the car, get drive-thru food, then be back on the couch. Suboptimal muscle use leads to weaker joint support, and weird postures cause pain. Pain leads to reduced activity, more obesity and weaker muscles; then comes opioid epidemic, overuse of pain medications, and back surgeries for all!

How we sleep

Before TVs, halogen lamps, and video games, our sleep was regulated by diurnal change in exposure to the big lamp in the sky and environment temperature. Light and sounds got dimmed, the body and brain had time to slow down and get ready for sleep.

Well now, we go 60 miles per hour with TV and music and video games and intense stimulation by the social media (switching through hundreds of subjects in a matter of minutes), and then hope for a good night's sleep – that ain't happening. Quick 60 to 0 is not how our brains are wired.

How we fear

Back when we had regular exposure to fear, fear was a normal part of life. Predators were always ready to munch on us, and other tribes or our tribe mates were ready to take over our food or stone hammer. The fear circuitry got regularly stimulated. Paired with regular intense physical activity, the adrenergic system, which increased activity causes fight-flight responses, would get a good share of workout.

Our current life is usually too safe, and we feel anxious and terrified about things which may be important but really do not threaten our life or integrity, such as a work meeting, going to a party or an exam. I do not have solid scientific evidence for this claim, so please take it with a grain of salt: I think some of our anxieties may be due to the absence of a normal exposure to real danger. The same way our bodies need regular exercise, our brains and bodies may also need a regular normal dose of real fear. That may be one reason for our love of horror and mystery movies, games, haunted houses and other controlled fear experiences.

What can we do to feel better?

When we adopt a pet, we learn about their normal environment, activity level and nutrition. Isn't it interesting that we do not apply that to the animal we live in? To feel normal, we should live normal, and a human's normal life is that for which she or he has evolved.

So I believe the first step is to understand ourselves, and why we do what we do, and desire what we desire. When we crave fatty food, or cannot stop eating, that is because the human animal had to do so to survive. Such understanding brings empathy, reduces judgment and helps us get creative.

Keep away the high-calorie sugary food. I tell my patients: do not buy it, or if you do, buy in small amounts. Try to eat what you were evolved to eat. Know the body is lazy, because it wants to save precious energy. The drag of going to the gym may be because of that. Also know that this body would be much happier when it is regularly, and highly active. We know that exercise is not only helpful for cardiovascular and bodily health, but also reduces anxiety.

I ask all my patients to commit to some level of exercise, as part of their treatment plan. And it does not have to be treadmill or gym. Whatever rocks your boat: yoga, boxing, walking, running up the stairs at work, doing 20 push-ups, 20 sit-ups and 20 squats a day, or dancing to a TV ad; whatever makes your heart pound faster. Other bonuses come with exercise: getting sun exposure or to know your neighbor when walking the dog, making new friends (or a date) at the gym, feeling better about yourself, and being more attractive to yourself and others. All these factors lift your mood. Do not feel disappointed if you did not lose weight, it's not the only goal. Other benefits are abundant and even more important: increased strength and energy, cardiovascular and joint health, improved mood, etc.

When it comes to sleep, changing behavior works. Here are some tips for better sleep: avoid late caffeine, bright screens (including your phone – Facebook can wait), and use your bed only for sleep and sex.

Finally, you may need a regular dose of healthy and safe exposure to real-life excitement, and a little bit of fear.

Bottom line: If we treated our body the way responsible dog owners treated their dog, we would live a much happier life.

Arash Javanbakht is Assistant Professor of Psychiatry, Wayne State University. This essay originally appeared in *The Conversation.*



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43: 48 Hours as a Muslim American: A Professor Reflects (Khalil)

Mohammad Hassan Khalil

#civilrights #politics #religion #currentevents #global



"Muhammad ALI Funeral Procession on 06-10-16" by Louisville Images is licensed under CC BY-NC-ND 4.0

What a difference 48 hours can make.

Last Friday afternoon, before a global audience, former president Bill Clinton (a Christian) and comedian Billy Crystal (a Jew) eulogized "the Greatest," the most famous Muslim American of all time, Muhammad Ali.

The televised audience also took in Islamic invocations, recitations from the Qur'an, and, if they listened carefully, gleeful shouts of "Allahu akbar" ("God is the greatest") from many of the thousands of attendees who packed Louisville's KFC Yum! Sports Arena for the memorial service. President Barack Obama declared that Ali "will always be America." And prior to his passing, a moment of silence in his honor was taken before tip-off at two NBA Finals games, once at Oracle Arena in Oakland, another time at Quicken Loans Arena in Cleveland.

On Sunday, Americans awoke to the tragic news that a young Muslim American had perpetrated the deadliest mass shooting in American history when he took the lives of dozens of innocents at Orlando's Pulse nightclub.

His proclaimed affiliation to ISIS and reports of his homophobia and anger problems were all over the news.

Presidential candidate Donald Trump tweeted that the shooter reportedly shouted "Allahu akbar" during the horrific rampage. President Obama condemned what "was an act of terror and an act of hate." And a moment of silence in honor of the victims was taken prior to tip-off at the most recent NBA Finals game in Oakland.

To say this past week has been a turbulent one would be an understatement.

Numerous Muslim Americans expressed how pleasantly surprised they were at seeing widely broadcast positive portrayals of their coreligionists in a nonetheless sobering Ali memorial.

At the Louisville, KY Islamic funeral service, the prominent Muslim American scholar Sherman Jackson had declared, "Ali put the question as to whether you could be a Muslim and an American to rest." What is more, "Ali made being a Muslim cool."

But with vile criminals such as the above-mentioned shooter (whose name I shall not bother to mention) dominating the headlines, it is easy to see why many Americans see Muslims as being very uncool.

Surveys show that non-Muslims who do not regularly interact with Muslims tend to have a significantly more negative impression of them. This should not come as a surprise given recent events and the media coverage of these events.

It certainly does not help that there exist numerous misconceptions and oversimplifications about both Islam and Muslims that are widely propagated online. (Of course, one could say something similar about America itself. If Islam and Muslims have a "public relations problem" in the West, the same is true for America and Americans in many countries overseas.)

Indeed, as a professor of religious studies, I find that I spend much of my time debunking popular myths.

The demographics

The reality is that with a population of over three million, most Muslim Americans are not nearly as “great” as Ali; and they are certainly nothing like the Orlando shooter. The reality is that most Muslims are everyday people.

Muslim Americans are extremely diverse: 63 percent are immigrants hailing from 77 countries. They are, on average, relatively young. Their levels of education mirror those of the U.S. population as a whole. As a Pew survey put it several years ago, they are “decidedly American in their outlook, values and attitudes.”

What is more, they have been here for a long time.

Coming to America

Some arrived on slave ships centuries ago. Others – including famous figures such as Ali, Malcolm X, basketball legend Kareem Abdul-Jabbar, U.S. Representative Keith Ellison, author G. Willow Wilson, singer Jermaine Jackson, comedian Dave Chappelle and a 19th-century writer and U.S. Consul to the Philippines named Alexander Russell Webb (1846-1916) – chose to convert to Islam.

Most – including numerous physicians, researchers, business owners and cab drivers – immigrated to this country to seek a better life, and, in the process, like other immigrants, made America a better country.

One such immigrant was the late Fazlur Khan, an architect originally from Bangladesh who designed the iconic Sears Tower (now called Willis Tower) and the John Hancock Center in Chicago. And just this past year, another immigrant, this time from Turkey, scientist Aziz Sancar,received the Nobel Prize, making him the second Muslim American Nobel Laureate in Chemistry. (The first was Egyptian-American Ahmed Zewail in 1999.)



"Lupe Fiasco" by OzFutura is licensed under CC BY-NC-ND 2.0

Finally, many Muslims – from hip-hop artist Lupe Fiasco to U.S. Army Specialist and Purple Heart recipient Kareem Khan (who was killed in combat in 2007) – were born into Muslim families right here in the United States. According to the Pentagon, there are almost 6,000 Muslims currently serving in the U.S. military.

The Islamic State does not even account for one percent of one percent of the worldwide Muslim population. And among the many devout Muslim Americans I know personally, I have yet to meet or even hear about a single ISIS sympathizer; I see only looks of disgust whenever they’re mentioned.

Such sympathizers obviously exist. But this relatively small collection of individuals represent only themselves.

A friend on Facebook shared a story about how he came to learn about the Orlando shootings. He was passing through an airport when he noticed a crowd huddled around a television screen. When it was revealed that the shooter came from a Muslim family, a man in the crowd remarked, “Those damn Muslims.”

Three million diverse, overwhelmingly peaceful and productive Muslim Americans reduced to “those damn Muslims.”

Interestingly, just hours before the attack in Orlando I was discussing the Ali memorial service with a group of Muslim friends. Though sad about the passing of “the Greatest,” they all had smiles on their faces as they recounted the speeches from the service and imagined the effects those speeches might have on the broader American public. They had never felt better represented. At that moment, at least, they felt cool.

Mohammad Hassan Khalil is an associate professor of Religious Studies, an adjunct professor of Law, and Director of the Muslim Studies Program at Michigan State University. He is the is author of *Islam and the Fate of Others: The Salvation Question* (Oxford University Press, 2012) and editor of *Between Heaven and Hell: Islam, Salvation, and the Fate of Others* (Oxford University Press, 2013). His essay was previously published in *The Conversation.*

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44: So, What Really Is Jihad? (Khalil)

Mohammad Hassan Khalil

#civilrights #politics #religion #currentevents #global #definition



This term 'jihad' can include various forms of nonviolent struggles: for instance, the struggle to become a better person. "Studying in the Mosque" by tjulrich is licensed under CC BY-NC-SA 4.0 / A derivative from the original work (cropped)

Often, many people conflate the terms jihad and terrorism. This is in part because many writers use the term "jihadist" when describing violent Muslim radicals.

To be sure, such radicals have invoked jihad to justify their heinous acts, such as the 9/11 attacks on the World Trade Center and more recent Islamic State group (also known as ISIS) operations. But these acts have been strongly condemned by numerous Muslim clerics and scholars on Islamic grounds.

And as I show in my own research, violent radicals who attempt to justify terrorism on religious grounds are often misrepresenting the scholarly sources they cite.

Jihad, according to Islamic law

The Arabic term jihad literally means a "struggle" or "striving." This term appears in the Quran in different contexts and can include various forms of nonviolent struggles: for instance, the struggle to become a better person. This falls under the category of "jihad of the self," an important subject in Islamic devotional works.

In the specific context of Islamic law, however, jihad generally signifies an armed struggle against outsiders.

Medieval scholars of Islamic law delineated two basic forms of armed jihad: defensive jihad, an armed struggle against invaders; and aggressive jihad, a preemptive or offensive attack commissioned by a political authority.

Not surprisingly, Muslim scholars have long debated when exactly warfare can be justified.

Much less controversial, however, is the general rule that various categories of civilians must not be targeted.

This rule of civilian immunity is so widely accepted that it is even typically recognized by violent Muslim radicals. But such radicals also invoke loopholes to get around this rule. When attempting to justify 9/11, for instance, Osama bin Laden argued, among other things, that American civilians could be targeted since, he asserted, American forces had previously targeted Muslim civilians.

To justify this loophole, bin Laden invoked the writings of medieval Muslim scholars such as al-Qurtubi. As I show in a recent book, however, al-Qurtubi actually held the exact opposite view: Civilians should never be targeted as a form of retribution.

This is but one example of why it is critical not to conflate the prevailing interpretations of jihad with Muslim terrorism.

Mohammad Hassan Khalil is an associate professor of Religious Studies, an adjunct professor of Law, and Director of the Muslim Studies Program at Michigan State University. He is the is author of *Islam and the Fate of Others: The Salvation Question*. His essay appeared in *The Conversation.*

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45: Mapping the US Counties where Traffic Air Pollution Hurts Children the Most (Khreis)

Haneen Khreis

#health #science #climatechange #systemanalysis #research



"TrafficJam-scott-color" by MPCA Photos is licensed under CC BY-NC 2.0

In the U.S., over 6 million children had ongoing asthma in 2016. Globally, asthma kills around 1,000 people every day – and its prevalence is rising.

This condition has a high economic cost. Each year in the U.S., more than US$80 billion is lost because of asthma. This is mainly due to premature deaths, medical payments and missed work and school days. The burden is higher for families with asthmatic children, who, on average, spend $1,700 more on health care than families with healthy children.

One major environmental factor that might contribute to the development of asthma is air pollution from traffic. In our study, published on April 3, our team mapped where in the U.S. children are most at risk for developing asthma from this type of pollution.

Traffic and asthma

Asthma is likely the most common chronic disease in childhood, according to the World Health Organization.

Asthma presents as episodes of wheezing, coughing and shortness of breath due to the reversible, or partially reversible, obstruction of airflow. Six in 10 of children with asthma worldwide had a form of persistent asthma, meaning that either they were on long-term medication or their condition could not be controlled even with medication.

Traffic pollution contains a mixture of harmful pollutants like nitrogen oxides, carbon monoxide, particulate matter, benzene and sulfur. These pollutants are known to harm health in many ways, causing a number of cardiovascular, respiratory and neurological diseases.

One 2013 review suggested that long-term exposure to common traffic-related air pollutants is linked to the development of asthma in children and adults.

A much larger meta-analysis in 2017, which focused on children and included more recently published studies, found consistent connections between this type of pollution and childhood asthma development. The researchers concluded that there is now sufficient evidence showing a relationship between this type of pollution and the onset of childhood asthma.

Studies from the nonprofit research group Health Effects Institute and the U.S. Environmental Protection Agency have concluded along these lines.

Mapping the problem

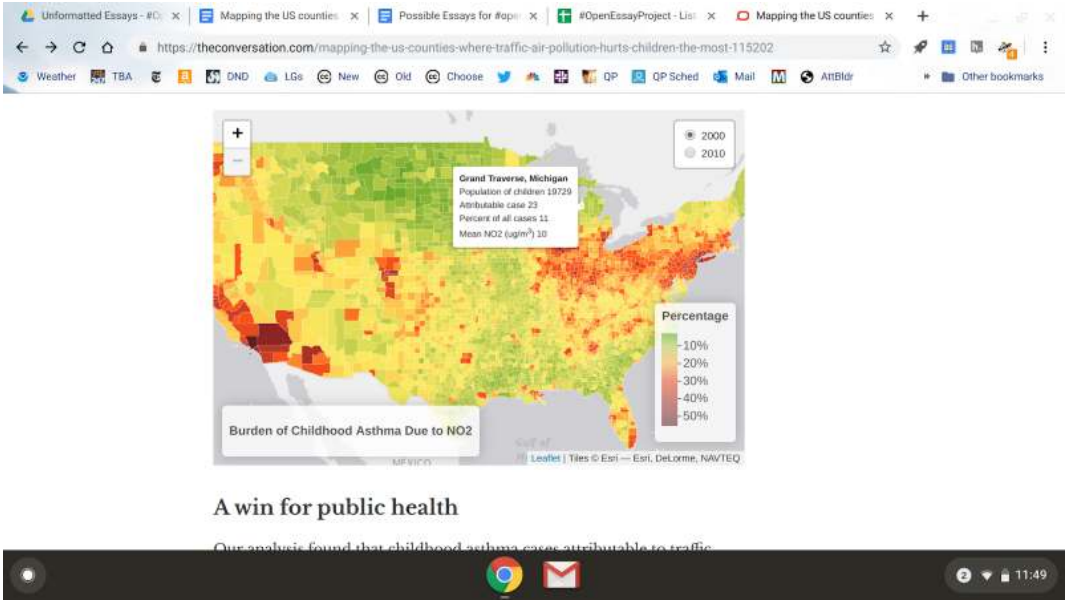
Despite this emerging evidence, the burden of childhood asthma due to traffic-related air pollution is poorly documented. Very few studies explore the geographic and spatial variations.

My research team wanted to quantify the connection between exposure to traffic pollution and the onset of childhood asthma across 48 U.S. states and the District of Columbia. We also wanted to make these data open to the public.

In our analysis, we looked at 70 million kids and conducted all calculations at the census block level, the smallest available geographical unit for census data. We collaborated with researchers from the University of Washington, who modeled the concentrations of nitrogen dioxide, a strong sign of traffic-related air pollution, using satellite imagery combined with environmental ground monitoring data.

We then took data extracted from surveys by the Centers for Disease Control and Prevention, estimating childhood asthma incidence in the U.S. Alongside data from our air pollution models, we used these data to estimate the number of childhood asthma cases caused by exposure to traffic pollution.

We then created a first-of-its-kind, county-by-county interactive heat map and city-by-city table detailing the distribution of childhood asthma due to nitrogen dioxide across the U.S. in both 2000 and 2010. Each county is represented, and users can explore the data to see the findings for a particular county.



Screenshot from interactive map. CC BY

A win for public health

Our analysis found that childhood asthma cases attributable to traffic pollution across the U.S. decreased, on average, by 33% between 2000 and 2010. In 2000, we estimated that 209,100 childhood asthma cases could be attributed to traffic pollution, while this number dropped to 141,900 cases in 2010. That's a major win for public health.

What caused the decline in traffic-related asthma cases? There may be multiple causes, including more fuel-efficient vehicles, more stringent regulation on nitrogen oxide emissions and, potentially, reductions in total vehicle miles traveled due to the recession.

Despite this encouraging decrease in air pollution and its associated health burden, there were 141,900 childhood asthma cases due to traffic-related air pollution in the U.S. That's 18% of all childhood asthma cases.

Moreover, we found that children living in urban areas had twice the percentage of asthma cases attributable to nitrogen dioxide exposures as compared to children living in rural areas.

Our estimates underline an urgent need to reduce children's exposure to air pollution. We hope that our analyses and heat maps will better inform policymakers, transportation agencies, medical associations and anyone else interested in learning more about the

burden of childhood asthma due to air pollution.

Haneen Khreis is an Assistant Research Professor at Texas A&M University with an interest in the health impacts of transport planning and policy. Her article is reprinted from *The Conversation.*



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46: Why Native Americans Do Not Separate Religion from Science (LaPier)

By Rosalyn R. LaPier



"Photo" by U.S. Department of Agriculture is licensed under CC BY 2.0

Last year five Native American tribes in Washington state managed to repatriate the remains of the “Ancient One,” as they called him, or “Kennewick Man,” as scientists called him.

For the tribes, the Ancient One is to be revered as a human ancestor. But for the scientists, the rare specimen of a 9,000-year-old Kennewick Man was important to understanding the history of North America. After a 20-year court battle, the tribes finally reburied the Ancient One. However, this could be done only after scientists had created his multi-dimensional model for future study.

For a long time, the relationship between Native Americans and scientists has been a contentious one. It would appear from this case that what matters most to Native Americans are religious beliefs and not science.

While this might be the case with human remains, which are a sensitive issue with most tribes, scientific endeavors are very important to Native Americans.

That is why indigenous scientists and scholars including myself supported the March for Science on April 22.

Sacred ecology

Scientists began thinking and writing about how Native Americans understand the natural world in the 20th century. Instead of seeing a conflict between Western science and Native American knowledge, they started thinking about ways to learn how Native Americans addressed environmental and ecological issues differently.

Ecologist Fikret Berkes pointed out these distinctions in his seminal book “Sacred Ecology,” where he noted that both Western and indigenous science can be regarded as “the same general intellectual process of creating order out of disorder.”

Native American traditions blend science and religion. Carling Hale, CC BY-NC-ND

He provided his own research as an example. He stated that the Native Americans he worked with knew far more than he did about aquatic ecological systems, even though he had academic training. He noted their knowledge was both scientific and viewed through a religious lens.

“One important point of difference is that many systems of indigenous knowledge include spiritual or religious dimensions (beliefs) that do not make sense to science…. This is ‘sacred ecology’ in the most expansive, rather than in the scientifically restrictive, sense of the word ‘ecology.’”

Traditional knowledge

Native American scholars are now writing about this blending of science and religion.

Native American scientist Robin Kimmerer, for example, tells her story as a trained botanist learning about Native American worldview in her book *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*. She describes

how she learned words in her native language, Anishinaabe, that explained biological processes better than Western science could in English.

As a Native American scholar, I, too, have spent the past year at the intersection of science and religion at Harvard Divinity School, researching “ethnobotany” and “ethnopharmacology” – the scientific study of the medicinal qualities of plants and Native American belief.

I learned from my grandmother, Annie Mad Plume Wall, who was regarded as a “doctor” on the Blackfeet reservation in Montana, that certain plants were medicine. She understood the ethnopharmacology of plants that were used as analgesics, antibacterials or anti-inflammatory agents. She knew which plants to use when one of her patients was ill.

The knowledge of the medicinal qualities of these plants clearly grew out of a process of observation and experimentation. She learned how to distill the essential elements of a plant to create an extract of its medicinal properties. In fact, her refrigerator was filled with bottles of extracts.



"Inipi" by Monica Mendoza, U.S. Air Force is in the Public Domain

Native Americans believe in a sacred ecology. Here, tribal elder Gordon Yellowman shows several of the tools that he uses in rituals. Nick Oxford/Reuters

However, some of these plants also had mythological stories that spoke of their origin in the supernatural realm. These stories instructed the Blackfeet how to communicate with the plant, to care for it, how to protect its ecosystem, restrict knowledge of the plant and its over-harvesting.

My grandmother believed that a powerful supernatural being, “Ko’komíki’somm,” gave humans certain plants to use as medicine. She also understood, based on their scientific properties, that a plant was indeed a medicine.

Alternative paradigm

It is true that Western science and Native Americans have a complicated history, as the struggle over the Ancient One attests. Anthropologist Chip Colwell discusses in “Plundered Skulls and Stolen Spirits: Inside the Fight to Reclaim Native America’s Culture” that the problem is that the items scientists consider “objects” for study, such as human remains, Native Americans would view through their own worldview, their own belief system.

More recently, there has been a better recognition of the role of indigenous sciences. In 2016, a U.S.-Canada joint statement on Climate, Energy, and Arctic Leadership recognized the importance of both Western science and indigenous science to help solve global issues. It urged that both “science-based approaches” and “indigenous science and traditional knowledge” be incorporated in efforts to both address commercial interests in the Arctic, such as oil and gas development and shipping lanes, and protect the Arctic and its people.

Native American scientists and scholars have also weighed in on this debate. For the March of Science, many Native American scholars, including Kimmerer and myself, have written a declaration of support that states:

“Let us remember that long before western science came to these shores, there were scientists here….Western science is a powerful approach, but it is not the only one. Indigenous science provides a wealth of knowledge and a powerful alternative paradigm.”

For many Native Americans, like my grandmother, myth and medicine, religion and science, are not viewed as separate, but are interwoven into the fabric of our lives.

Rosalyn R. LaPier is Associate Professor of Environmental Studies at the University of Montana who studies the intersection of traditional ecological knowledge (TEK) learned from elders and the academic study of environmental history and religion. Rosalyn is an enrolled member of the Blackfeet Tribe in Montana and Métis. Her essay originally appeared in *The Conversation*.

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47: Juneteenth - Freedom's Promise Is Still Denied to Thousands of Blacks Unable to Make Bail (Larson)

By Matthew Larson



Freed Woman and Freed Man Sculptures by Adrienne Rison Isom at the Juneteenth Memorial Monument at The George Washington Carver Museum, Culture, and Genealogy Center representing how the news of freedom spread. "Freedom Sun" by Jennifer Rangubphai is licensed under CC BY-SA 4.0

June 19 marks Juneteenth, a celebration of the de facto end of slavery in the United States.

For hundreds of thousands of African-Americans stuck in pretrial detention – accused but not convicted of a crime, and unable to leave because of bail – that promise remains unfulfilled. And coming immediately after Father's Day, it's also a reminder of the loss associated with the forced separation of families.

On a very personal level, I know how this separation feels. Every Father's Day since 2011, I've been reminded of the unexpected death of my dad at the age of 48. But also on a professional level, as a criminologist who has been researching mass incarceration for the past decade, I understand the disproportionate impact it's had on African-Americans, destabilizing black families in the process.

Blacks behind bars

Juneteenth is a celebration of African-Americans' triumph over slavery and access to freedom in the U.S., which occurred in Galveston, Texas, in June of 1865, over two and a half years after President Lincoln's Emancipation Proclamation.



"_6233175.jpg" by Julie, Dave & Family is licensed under CC BY-SA 2.0

While Juneteenth is a momentous day in U.S. history, it is important to appreciate that the civil rights and liberties promised to African-Americans have yet to be fully realized. As legal scholar Michelle Alexander forcefully explains, this is a consequence of Jim Crow laws and the proliferation of incarceration that began in the 1970s, including the increase of people placed in pretrial detention and other criminal justice policies.

There are 2.3 million people currently incarcerated in American prisons and jails – including those not convicted of any crime. Black people comprise 40 percent of them, even though they represent just 13 percent of the U.S. population.

Not yet guilty but not free

More troubling is the number of incarcerated individuals currently held in jail for crimes of which they have not yet been convicted.

The Prison Policy Initiative, a nonpartisan think tank that focuses on mass incarceration, has reported that over a half million citizens are languishing in pretrial detention. And like most criminal justice outcomes, the burden of this disproportionately falls on minorities, especially black men and women.

In local jails alone, over 300,000 people are awaiting trial for property, drug or public order crimes. And again, these disproportionately black defendants are confined and separated from their families, friends and jobs simply because they lack the means to post cash bail – the only reason they can't get out.

Toll on families

It should be no surprise, then, that 1 in 9 black children now has a parent behind bars, compared with the national rate of 1 in 28.

And many of these children are at an increased likelihood of experiencing physical and mental health issues, academic struggles and a range of other behavioral problems. Children of incarcerated mothers are also at heightened odds of ending up in foster care and being exposed to other traumas.

Being the partner of an incarcerated individual is another often stressful experience that also falls disproportionately on black citizens, particularly women.

Some good news

The good news is that such injustices are receiving growing attention nationwide.

Just City, a nonprofit organization working to reduce the harms of the criminal justice system, has campaigned to raise funds and promote awareness of its Memphis Community Bail Fund project for Father's Day – in part because nearly half a million of the black men behind bars are dads.

The aim of the project is to provide both financial and legal support for defendants lacking resources to independently secure their pretrial release, with the goal of the campaign being the release of jailed fathers so that they could be with their kids for the holiday.

Bail funds similar to Just City's have proliferated throughout the U.S.

On one hand, the multiplication of these organizations is encouraging and reason for optimism. On the other, their growth is another reminder that many of the freedoms celebrated on Juneteenth remain unrealized.

A long road continues

In cities like Detroit, where 1 in 7 adult males is under some form of correctional control in some communities, it is a monumental task to make sense of the short- and long-term impacts of incarceration for black families.

Children suffer. Parents struggle. Relationships deteriorate. And as a result, so too do so many African-American communities. Lost wages matter to families, but they also matter to communities. The lower tax base that results makes it more difficult for struggling public institutions, like schools, to progress. And with such a large share of individuals removed from some communities due to incarceration, and branded as felons upon their release, these communities lose potential voters and the political capital they carry. They are too often disenfranchised and stripped of their full power and potential.

Juneteenth celebrates the freedom of black Americans and the long, hard road they were forced to traverse to gain that freedom. But as criminologists like me have maintained time and again, the U.S. criminal justice system remains biased, albeit implicitly, against them.

Matthew Larson is an Assistant Professor in the Department of Criminal Justice at Wayne State University in Detroit, Michigan and a graduate of Arizona State University's School of Criminology and Criminal Justice. His essay was originally published in *The Conversation.*

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48: Guardians of the Galaxy and the Fall of the Classic Hero (Lewis)

By A. David Lewis



The Guardians of the Galaxy – whose protagonists are a morally-gray motley crew – could be seen as a satire of the classic hero tradition. BagoGames/Flickr , CC BY

A beautiful assassin. A superstrong thug. A star-lost child of the ‘80s. A sentient tree. A gun-toting raccoon. Meet the morally gray protagonists of Marvel’s Guardians of the Galaxy, the film that raked in $770 million at the box office this past summer and was just released on DVD.

Guardians, I’d like you to meet 20th-century mythology theorist Joseph Campbell. Trust me, you’ll have a lot to talk about.

…Oh, what’s that? You already know Mr. Campbell? Ah, that’s right, I’d forgotten: you beat the *stuffing* out of his heroic monomyth in your movie this year.

For those unfamiliar with the term: Campbell’s monomyth, also known as the “Hero’s Quest” or “Hero’s Journey,” is a narrative pattern derived from his extensive analysis of myths and stories from all around the world. In his 1949 book The Hero with a Thousand Faces, Campbell outlines the pattern that nearly every “heroic” protagonist, going all the way back to ancient times, follows.

> *A hero ventures forth from the world of common day into a region of supernatural wonder: fabulous forces are encountered and a decisive victory is won: the hero comes back from this mysterious adventure with the power to bestow boons on his fellow man.*

In other words, the protagonist is placed outside of his or her comfort zone, and, after toiling through various obstacles and setbacks, emerges to beat the bad guys and change the world for the better.



Mythologist Joseph Campbell noticed a pattern in the character arc of hero protagonists. Joan Halifax/Wikimedia Commons, CC BY

Since the trailer of its newest installment was released last week, think of the original Star Wars as an example. George Lucas had Campbell in mind when he created Luke Skywalker, farmboy turned rebel hero. Lucas even paid attention to the finer points of

Campbell's model, giving Luke a teacher (Obi-Wan), helpers (Han Solo, the droids), a magic talisman or weapon (the light-saber), and, most importantly, a moment that Campbell calls "the Abyss."

It's this Abyss – also known as "The Belly of the Whale" – that's the low point in the monomythic cycle and vital to understanding what's so notable about Guardians of the Galaxy. In the original Star Wars, Luke Skywalker experiences – all things considered – an "easy" low point: he's sucked underwater in the Death Star trash compactor. In The Empire Strikes Back, things get a bit thornier: he gets his whole hand chopped off (rumored to be a plot point in JJ Abrams's The Force Awakens) and plummets from Cloud City. Basically, if a hero doesn't face an actual death, he or she has to (at least) deal with a metaphorical death before returning as a stronger, savvier version of himself.

But where was the Abyss moment in Guardians of the Galaxy? Was it when young Peter Quill loses his mother and is taken by aliens? Or, wait – maybe it's when he's thrown into that space prison and escapes? There's also that moment when his team is nearly killed by an explosion in the Collector's establishment. And Quill is all-but-dead when he leaves the safety of his ship to freeze and suffocate in exposed space while selflessly saving his teammate Gamora. And who can forget the scene when he is practically torn apart by wielding the Infinity Stone?

It's as if Quill and his Guardians are running in loops around Campbell's monomyth. Or, even better, the movie-makers are flagrantly disregarding it. They're nearly satirizing it.

If audiences step back a bit, it's easier to see how Guardians of the Galaxy might be a satire of the classic hero tradition. Villains are constantly interrupted mid-maniacal monologue, elaborate plans are impulsively overturned, and Quill, the movie's closest thing to a hero, challenges the film's protagonist to a dance-off. (Of course, there's also the fact that two of the main characters are a tree and a raccoon!)

This is not to write off Guardians of the Galaxy and claim it's a goof on Campbell's model. Instead, it could be seen as a reaction to just how predictable, how tired, and even how broken the monomyth is today. The Guardians, remember, are just as much rogues as they are good guys. As Quill asks his team of misfits, "What should we do next: Something good, something bad? Bit of both?"

What Guardians of the Galaxy will do next – presumably in their Summer 2016 sequel – is continue to challenge our modern notions of heroism. Campbell's monomyth was proposed just after World War II, at the dawn of the Cold War. It was a time when, in popular culture, the distinctions between heroes and villains were far more explicit.

Today, Quill and company are being presented to movie-going audiences at a time when when we're distancing ourselves from old models – when we sorely crave a new pattern. The pure hero, the "white hat" of the old Westerns, is largely lost to us. Brilliant actors like Robin Williams and Phillip Seymour Hoffman are done in by their own personal ghosts, musicians like Amy Winehouse and Whitney Houston succumb to their addictions, and politicians – like the four Illinois governors who have been sent to prison – continue to disappoint. The Dark Knight perhaps said it best: "You either die a hero or you live long enough to see yourself become the villain."

The monomyth is making its final orbit. Heroes are so yesterday. Welcome, instead, to the tomorrow of the Guardians: characters who are a little good, a little bad, and more unpredictable than ever.

A. David Lewis is an
Arts & Sciences Faculty Associate at Massachusetts College of Pharmacy and Health Sciences. He is the author of *American Comic Books, Literary Theory, and Religion: The Superhero Afterlife*, as well as the co-editor of both *Graven Images: Religion in Comic Books and Graphic Novels*, and *Digital Death: Mortality and Beyond in the Online Age*. His essay originally appeared in The Conservation.

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49: Wastewater Is an Asset – It Contains Nutrients, Energy and Precious Metals, and Scientists Are Learning How to Recover Them (Li)

Yalin Li

#science #environment #research



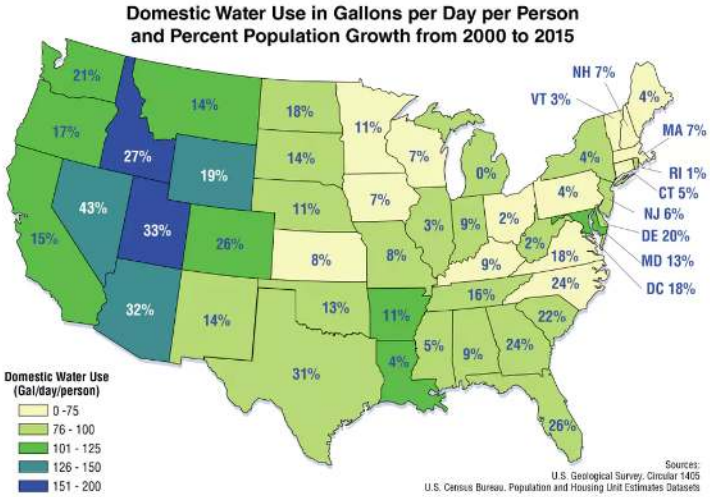
Aeration tanks at the Oaks wastewater treatment plant in New Providence, Penn. Montgomery County Planning Commission, CC BY-SA

Most people think as little as possible about the wastewater that is produced daily from their showers, bathtubs, sinks, dishwashers and toilets. But with the right techniques, it can become a valuable resource.

On average, every Americans uses about 60 gallons of water per day for purposes that include flushing toilets, showering and doing laundry. This figure can easily double if outdoor uses, such as watering lawns and filling swimming pools, are also included.

Most of the used water will eventually become wastewater that must be treated before it can be discharged into nature. And that treatment uses a lot of energy. According to the U.S. Environmental Protection Agency, water and wastewater facilities account for more than a third of municipal energy budgets.

My research focuses on recovering resources from wastewater. This process is difficult because wastewater contains many different types of contaminants. But researchers in our fields are exploring many creative ways to make valuable products from them.



Energy from organic materials

Diehard wastewater engineers understand the value of wastewater, which they view as an asset rather than a waste. That's why some of them call it "used water" instead, and refer to what most people call wastewater treatment plants as water resource

recovery facilities.

In fact, wastewater can contain more than three times the amount of energy needed to treat it. One simple and mature technique for recovering part of this energy is anaerobic digestion, a natural process in which microorganisms feed on grease and other organic materials in wastewater and produce biogas, just as yeast can eat up barley and spit out beer. Biogas contains roughly 50 percent methane, which can be used as a renewable fuel for boilers, furnaces and heating systems or to turn turbines and generate electricity.



Inside these anaerobic 'egg' digesters at the Deer Island Treatment Plant on Boston Harbor, microbes break down sewage sludge and scum into methane gas, carbon dioxide, water and organic solids that are processed into fertilizer. Frank Hebbert/Wikimedia, CC BY

More advanced techniques, such as hydrothermal processes, take sewage sludge – the solids removed from wastewater during treatment – and convert it into biobased fuels that can be used to replace gasoline and diesel fuel. This process is currently at the demonstration stage.

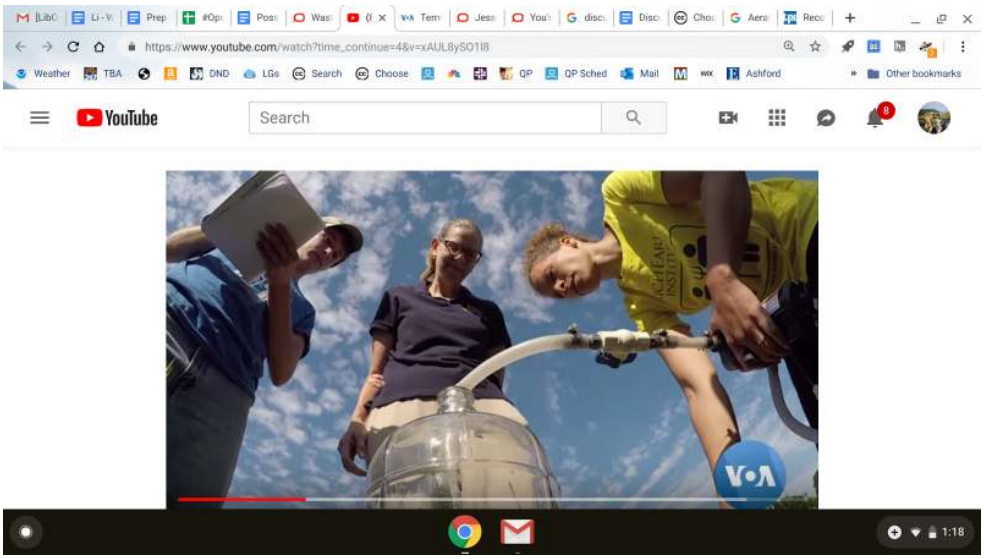
In additional to sewage sludge, many researchers – including me – are very interested in microalgae. Microalgae are promising feedstocks for biofuels, and some of them can grow in wastewater. My colleagues and I have designed hydrothermal systems to turn wastewater-grown microalgae into biofuels. They are still being tested in the lab, but we hope to scale them up in the near future.

Mining nutrients from wastewater

Wastewater also contains nutrients like nitrogen and phosphorus, which are essential elements that plants need to grow. In current wastewater treatment processes, we use energy to convert ammonia in the wastewater, which comes mostly from urine, into nitrogen gas. However, industries then use large quantities of natural gas to convert nitrogen gas back into ammonia, predominantly for producing fertilizer, through the Haber-Bosch process.

Clearly, it would be much more efficient to directly extract the ammonia from wastewater without converting it. One way is to use urine-diverting toilets, which already are commercially available, to separate urine from other sources of wastewater. Then the collected urine could be used as fertilizer after sanitizing it to remove pathogens.

Sanitized urine also contains other nutrients like phosphorus and potassium. The Rich Earth Institute, a Vermont-based nonprofit supported by federal agencies and foundations, is researching ways to turn human urine into fertilizer. The institute is testing harvested urine on real crops, and has found that it works effectively.



Using pasteurized urine as fertilizer reduces waste and resource extraction. Photo still from "Project Recycles Human Urine as Fertilizer" by VOA News, Public Domain.

Alternatively, we can recover these nutrients as struvite, or magnesium ammonium phosphate, a mineral that contains magnesium, nitrogen and phosphorus. Struvite can naturally form during wastewater treatment processes, but tends to deposit in tanks and pipes and will damage the equipment if left unattended. By controlling the formation of struvite, it can be recovered in separate reactors.

Researchers have tested recovered struvite on crops in laboratories and achieved yields comparable to commercial fertilizers. The technique is still maturing, but companies are developing commercial versions for wastewater treatment plants.

More possibilities

Want more valuable stuff? Wastewater is literally a gold mine. It contains metals valued up to millions of U.S. dollars per year. These metals are often toxic to aquatic life, so they need to be removed. But conventional removal technologies require a lot of energy and produce toxic sludge.

Researchers are developing new ways to remove and reuse these metals, including membrane systems that can selectively remove precious metals from water and biosystems that use microorganisms to recover them. These techniques are at a very early stage and it is not clear yet whether they will make economic sense, but they have the potential to make wastewater more valuable.

In addition, wastewater is generally warmer than natural water supplies, especially in the winter, so it can serve as a heat source. This technique is well-established and is not limited to commercial scale. You can install drain-water heat recovery systems at home to lower your energy bill.

To me, this is just a beginning. With proper techniques, "wastewater" can offer us much more – and I very much look forward to the day when there is no "wastewater," just "used water."

Yalin Li is a Ph.D. Candidate/Research Assistant, Colorado School of Mines and also a student researcher in ReNUWIt She received her master's degree from University of Illinois at Urbana-Champaign and bachelor's degree from Tongji University (China), both in environmental engineering. Her research focuses on resource recovery from wastewater. This essay was originally published in On the Commons.

Wastewater is an asset – it contains nutrients, energy and precious metals, and scientists are learning how to recover them by Yalin Li is licensed under a Creative Commons Attribution-NoDerivatives 4.0 International License.

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50: Memorial Day (Lively)

Janet Lively

#argument, #pathos, #sharedvalues, #descriptive, #ethos, #informative, #systemanalysis



"Cherry Pie with Lattice" by Benny Mazur is licensed under CC BY 2.0

I bake pies, which puts me in a class with people who play the harpsichord or spin wool or read Latin. Pie baking is a lost art, according to my mother and pie mentor. It's a dying enterprise, according to a food-company executive I once interviewed for a newspaper article. "Every time a hearse goes down the street, there goes one of our customers," he said, explaining why the passing of little old ladies was bad for his firm's pie filling business. His remark was tasteless, but I put it in my story because I figured that little old ladies have the right to know the type of operation their pie-filling dollars support.

Not that I'm an advocate for pie filling. I make my own pie crust, and I refuse to ruin the anachronism by opening a can. Besides, the filling is usually simple to concoct, especially for a fruit pie. Peaches and apples can be peeled, sliced and mixed with sugar in only a few minutes. Blueberries can be practically dumped right in. But cherries, those hard-hearted fruits, are a different story. It takes forever to pit enough cherries to make a pie. And fresh cherries must be soaked in ice water to keep them firm while they await their evisceration, which means that that even on the hottest July day, your fingers will ache with cold by the time your "pitless" bowl is full.

I have pitted cherries for only two pies, the first of which I gave to a man I had been dating for just two months. Because he was so wonderful, I hardly noticed how my fingers bled with cherry juice and my back throbbed from the repetitive motion of my paring knife. This man was surprised and pleased with the steaming pie. Cherry! His favorite! He ate greedily, and as the molecules of fruit, sugar, flour and shortening passed from his gut to his blood and pumped through his heart, they did something that no amount of hoochie-coo had heretofore accomplished. My eventual husband, dizzy on pie a la mode, told me that he loved me.

The next summer I once again sat in our (formerly his) backyard with a bowl of water, cherries and ice cubes. But I complained the whole pitting time to the neighbor girl who had stopped by to play with the dog. The honeymoon was over.

I still make cherry pies, however, and my husband still swoons. But now I use frozen, pre-pitted cherries that my father brings from his home in Traverse City, Michigan, the Cherry Capital of the World. Although vastly more convenient, the frozen cherries nevertheless must be cooked. I consider that an advantage because when a guest asks if I made my cherry pie from scratch, I can still say, "Why, yes." Did I make the crust, too? "Well, it's really not that hard," I say, smug. The women in the room comment approvingly and express their amazement and inferiority, even as they think, "Thank God I've got better things to do than make pie crust!" I understand. I feel the same mix of admiration and bemusement toward women who knit sweaters or make their own Christmas decorations. And yet, I can't stop with the pies. When invited to a potluck, I very often take a pie, not just because I like to eat pies or because I've gotten fairly good at making them, but because I figure mine will be the only pie – or at least the only from-scratch pie – at the dessert table. There it will glow like the Statue of Liberty at dawn, overshadowing the masses of brownies

and M&M cookies, beckoning the hungry. The pie, once the proud symbol of democracy, has become my personal attention-getting device.

Motherhood and apple pie. As American as apple pie. Bye, bye Miss American Pie. The pie is fast becoming history, and its decline is not simply a consequence of the shrinking population of housewives, little old ones or otherwise. Plenty of working people still bake, and they bake things more complicated than pies. Cookies, for example, must be put on and taken off a baking sheet several times before a batch is finished. Cakes, just when they are cool enough to eat, are supposed to be frosted. But pies are done as soon as they come out of the oven; they generally require few ingredients and, with a little practice, can be quickly made. And yet the pie dies, killed, I maintain, by mass-produced crusts so hideous that they have removed pie from the American gastronomic imagination. Commercial bakeries roll out their pie crusts like asphalt, entombing fruit filling in a quarter-inch of flour and fat, forcing the pie-eater to disinter the sweet insides and leave the rest, unsatisfied. With this as its prototype, the pie is doomed.

And yet it doesn't have to be. My crusts are as thin as skin, rising and falling as the pies bake and cool, breathing puffs of fruity steam. As my mother taught me, I use only half the recipe to make both the top and bottom crusts -- only one cup of flour, one-third cup of shortening. Crusts this delicate are tricky to handle, and my pies are not always pretty. But my mother's crusts were almost always beautiful, so lovely that I pestered her for years to enter an apple pie, her specialty, in Michigan's State Fair. She demurred. I persisted. "Think what you could do for the cause of thin crusts," I said, appealing to her reformist spirit. "You really owe it to the people." I finally quit my campaign, but it was more successful than I realized. My father told me recently that my mother, who couldn't even talk about lard-laden crusts without making a face, had contacted Fair officials and gotten all the necessary paperwork. If they hadn't moved from Detroit, where the Fair is held, she probably would have entered the contest, my father said.

I once made a blue-ribbon pie -- two pies, actually, both peach perfection. Each piece of fruit used for those pies was at its prime, juicy but not soft, as sweet as sunshine. Sacrificing these exquisite peaches to the oven when I craved them raw wasn't easy, but I was invited to a picnic and I decided to show off. As it happened, the kitchen goddess was on my side that day: My crust required no patching, no peach juice bubbled down the side of the pan, and I pulled my pies from the oven just as the tops blushed gold. I left one pie on the counter to cool and carried the other in the car, on a towel on my lap. Picnic guests raved, but my husband and I ate no pie. "We have another whole one at home," we bragged. But, of course, this story does not end happily. We returned home to find an empty pie plate, licked spotlessly clean, somehow still on the counter, and a contented dog, who didn't even have the decency to get sick from so much fruit and sugar.

"Pride goeth before a fall," my mother would mock preach, or, sometimes, "Don't get the big head." I told her my dog-eats-pie story again during one of my extended visits to Traverse City when we made a peach pie for dinner guests. She told me her tips for making pie crust, which I'd heard many times. Use *ice* water in the dough. Chill the dough before you roll it out. Put your rolling pin and pastry cloth in the refrigerator so they're cold, too. Sprinkle lemon juice on the apples if they aren't tart enough. She felt relatively strong that day and so rolled out the crust for her last pie. My mother, who had never smoked, who watched her health, who was only 62, died like they said she would six months after being diagnosed with lung cancer. She would not or could not acknowledge that she was dying, even at the end, and we did not push her to spill words. But she seemed eager to respond when I asked her advice on making pie crusts or raising children or even doing the laundry. It was my meager attempt to sum up all I'd learned from her, my acknowledgement of my coming loss.

On the first anniversary of my mother's death, I baked an apple pie. I had found at the market some Northern Spy apples, which my mother recommended because they hold their texture while baking and are not too juicy. Still, the filling of this pie oozed free and smoked in the oven, and the crust burned black-brown around the edges. I fretted that I had managed to bake my usual pie even on this significant occasion. But I also pictured my mother waving her hand dismissively, saying, "It just takes practice." A congenital teacher, she didn't expect learning to come quickly and had planned herself to have many more years to master the subjects that interested her. But pies she had conquered. Perhaps that's one reason why when there were so many other ways I could have memorialized her that day -- read T.S. Eliot or the letters of Abigail Adams; written a check to the Democrats or volunteered at a school; planted some daisies or had a neighbor over for tea – all I wanted to do was bake a pie.

My mother sent me her apple pie recipe, typed in a letter, when I was a high school exchange student in Sweden. I used that version for years, and it is dappled with Crisco and apple juice. But when my mother got sick, I copied down her formula and instructions and put away the original recipe for a keepsake. On the back of that scrap of paper I found the last paragraph of my mother's letter, which I had not read since it came to me across the ocean some 20 years ago. There she had written how much she missed me and how glad she was to have a daughter.

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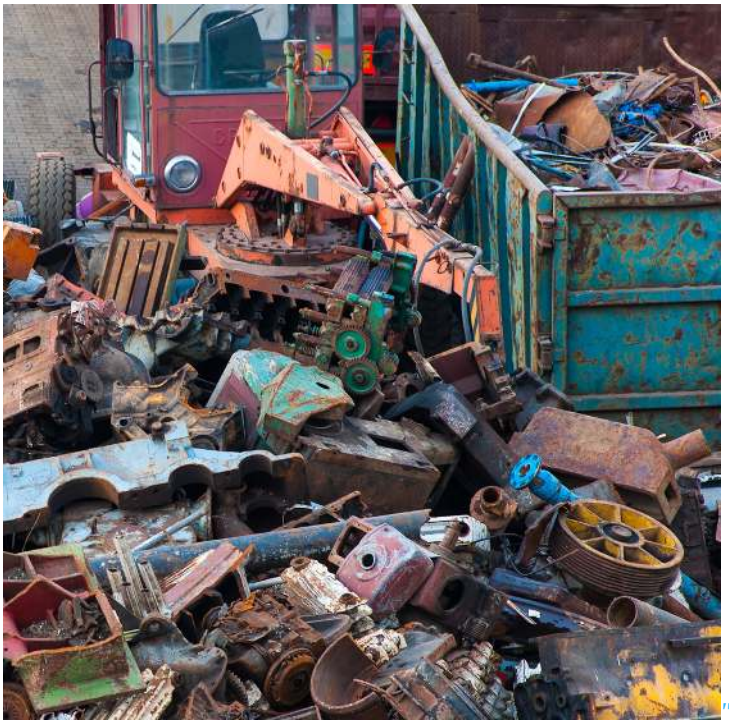
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51: Does Recycling Actually Conserve or Preserve Things? (MacBride)

Samantha MacBride

#scholarly, #argument, #systemanalysis, #logos, #ethos, #kairos, #cognitivebias, #currentevents, #research, #science



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There are a series of assumptions behind the familiar assertion that recycling saves resources and energy, and in so doing, protects the environment. These assumptions are in the motto, "recycling saves trees." With recycling – one assumes – used materials stand in for raw materials. This way, recycled content cuts down on the need to extract (conservation), which in turn prevents some of the environmental damage from extraction that would be taking place without recycling (preservation).

Conservation and preservation are distinct, though linked, ideas. Historians of North American environmentalism distinguish the Conservation Movement, which focused on the responsible management of materials to sustain production and economic growth, from the Preservation Movement, which stressed the protection of wilderness.1 Both movements have been rightly critiqued for failing to consider questions of power and equity in people's health, dignity, and livelihoods.2 Still, the distinction between **conserving** resources for use in production, and **preserving** complex ecosystems (which include people in human settlements), is useful for a question I now pose about recycling. **Does recycling, in the way it is practiced today, actually conserve *or* preserve things that matter?**

To answer "yes" requires that a set of assumptions hold true. When we say recycling saves trees, we start by assuming that the paper in the recycling bin goes to a plant to be sorted and baled. Plant managers find buyers for the bales, which are shipped off to a manufacturer. We assume that this manufacturer, individually or as part of a larger industry sector, is weighing the options between using virgin input (wood pulp) or secondary input (recycled paper). When it costs less to use recycled paper as an input, the manufacturer is going to use the secondary material to make things. So far, so good.

But to save trees, much less forests, more has to happen. When the decision is made to use recycled input, the virgin alternative ought to be conserved in a way that preserves ecosystems and people. Preservation isn't achieved if the virgin stock is directed into a new product that hasn't existed before; or if it is conserved technically for later use, and then harvested and utilized when economic growth makes for favorable conditions to ramp up production. It's not enough to simply offer up recycled paper on a commodity market to be grabbed when price signals are favorable. It doesn't do to merely measure increases in recycled content of various products on the market. Nor is it sufficient to theorize that recycling *may* have slowed a sectoral growth rate that would have proceeded, all things being equal, faster in an imaginary world in which there was no recycling at all. To save trees in a way

that matters ecologically and socially means something more. It means that forests, including forest ecosystems and surrounding livelihoods in all of their complexity, are actually protected in today's world.

Theoretically, there is no reason why recycling couldn't deliver on such protection, were it integrated into a system of monitoring that followed through on promises. Such a system would need to identify limits on rates of extraction in accordance with their ecosystemic threat; include long term planning for stabilization of some extractive industries, and phase-out of others; and ensure maximum protection of future lands and ecosystems from development. Under such a system, extractive industries would need to demonstrate to what degree recycled inputs substituted for virgin sources in their sectors annually, and also that their sectors were not encroaching with new development in terrains that matter to people and other living things.

Empirically, there is no question that at certain times, for certain periods, recycling may have conserved virgin resources to some degree; and even that recycling may play a role in localized resource policies, such as boosting timber plantations that spare virgin forests as sources in papermaking. In fact, portions of the assumption of conservation, can be and regularly are dragged out for theoretical and/or empirical testing within the disciplines of resource economics, materials flow analysis, and life cycle analysis. There is much scholarship that asks whether recycling has resulted in, or could theoretically result in, less net extraction or harvest.3 Such inquiries are interesting in their own right, and to the extent that they tell us something about tradeoffs that manufacturers make between virgin and recycled inputs, they inform an understanding of what recycling could, under ideal circumstances, achieve in terms of actual conservation — which would be a precondition for, but not a guarantee of, actual preservation.

We are on shaky ground, however, if we take these assumptions for granted. I trace my concern on this matter to the work of William Stanley Jevons.4 In the 19th century, technological improvements in mining and combustion were greatly improving the efficiency of using coal as fuel. Noting these developments, Jevons argued that, rather than conserve coal, improvements in efficiency, and a subsequent drop in coal price, would paradoxically lead to an increased demand for coal.

The Jevons Paradox. Public Domain.

Now known as Jevons' Paradox, this perspective observes that when you increase efficiency in production and consumption, you may well see an *increase* in overall extraction.5 Massive amounts of scholarship have followed the Jevons' Paradox, most around energy efficiency.6 In the materials realm, recycling can be thought of as a form of efficiency (getting more out of the same input).7 There is a growing body of work tracing the effects of recycling on extraction of virgin materials, in particular in the area of metals.8 Scholars ask questions about conservation of metals in part because the data on their trade is more available than for other materials. It's more organized. It's more harmonized among different nations, given the nature of these economies. Both the economy of metals and as well as the material properties of metals make them relatively easy to be recycled over and over again and be reintroduced back into production, especially in comparison the heterogeneous range of synthetic polymers we call plastics. Yet **we see growing rates of metals extraction taking place *alongside* growing recycling rates, worldwide.** We can speculate about what those growth rates would have been had recycling not existed, but it would be hard to argue that global production systems are using less virgin raw material as a result of metals recycling, much less that metal recycling is preserving lands from mining.9

"French waste lines" by Charos Pix is licensed under CC BY-NC-SA 2.0

The caveats and careful measurements in the specialized literatures above suggest that recycling *can* conserve resources temporarily in some cases, almost always absent considerations of preservation. Such nuances fall away, however, as recycling becomes idealized and abstracted as an ethical, "earth-saving" end unto itself. Under-examined assumptions of conservation and preservation run deep through recycling discourse, and are also core to the notion that *reuse* will cut down on the flow of materials and energy from cradle to grave. **Each time reuse and recycling are affirmed in the waste hierarchy, there is a hazy sense that somewhere, by someone, some sort of accounting is going on to ensure that overall, recycling is delivering protection of things that matter.** I would wager that many in the media, in environmental education, and even in environmentally focused NGOs hold this position. This is how recycling would, actually and not just in theory, "save the planet." But is there really any coordinating body who is conducting such accounting? No.10 And is recycling actually preserving ecosystems and livelihoods, or achieving real-world "dematerialization" (the technical term for less use of raw materials overall)? Not in any systematic way.11

Oil, Gas, and Plastics

So far I've used the examples of forest products and metals. I have done so because of the historical potency of the motto "recycling saves trees", and the relatively developed scholarship around steel, aluminum, and other metals. In reality, much more is going on around forestry, or the mining and metals trade, than is taken into account when one simply looks at recycling. But at least we have some data to inform questions. If we examine the plastics industry and the role of plastics recycling, we find that similar assumptions abound, with particular complications, and little information. How can we evaluate the assumption that plastic recycling reduces the need to extract fossil fuels; or the separate but related claim that manufacturing with recycled inputs uses less energy, meaning lower fuel use economy-wide, meaning diminished carbon emissions?

It is well known that only a small percentage of global fossil fuel extraction is used directly in plastics production.12 So even recycling every shred of plastic would not, on its own, diminish the need to drill at current rates by much. Looking specifically at the U.S., the situation is no different. Let's say we build up domestic plastic recycling capacity in the U.S., as many are calling for in the wake of China's imports restrictions. What would the effect be of repatriating that tonnage, and feeding it back into domestic production, on domestic fossil fuel extraction – to make plastics, or to generate electricity?

It may surprise you to learn that the U.S. Energy Information Administration (EIA) "is unable to determine the specific amounts or origin of the feedstocks that are actually used to manufacture plastics in the United States."13

The reason hints at the constantly fluctuating conditions of virgin raw material sourcing that I've alluded to above, and data limitations that I'll elaborate below. The EIA writes:

Because the petrochemical industry has a high degree of flexibility in the feedstock it consumes and because EIA does not collect detailed data on this aspect of industrial consumption, it is not possible for EIA to identify the actual amounts and origin of the materials used as inputs by industry to manufacture plastics. 14

Let's pivot back to the day-to-day understanding of recycling, in which it is it is axiomatic to assert that plastic recycling saves oil and gas resources.15 On a ton-for-ton basis, in a hypothetical scenario in which recycled materials actually substitute for fossil fuels, and lead to a concomitant net decrease in extraction or fuel combustion, such claims hold. But without data on "actual amounts and origin of materials used as inputs," it is not possible to evaluate the actual effect of plastics recycling on conserving such inputs. This would be the precondition to assessing what role, if any, plastics recycling has on actual preservation of things that matter in the U.S. (such as coastal communities, Indigenous peoples' lands, and/or arctic wildlife refuges).

"Plastic Ocean" by Kevin Krejci is licensed under CC BY 2.0

Frequent assumptions are being made among well-intentioned members of the media, environmental organizations, and concerned individuals that actual, current recycling efforts are part of real world protection. **In more specialized discussions around Zero Waste and Circular Economy, there is a rolling process of coming to terms with hints that assumptions of conservation *and* preservation don't hold.** If, for example, we are dismayed to learn that plastics are "downcycled," our dismay betrays a faith in the assumption of preservation in the background. If only plastic bottles could be produced in a closed-loop fashion, we reason, then we would be able to conserve at least some of the resources that would otherwise be extracted. Presumably, such conservation is needed for ecosystemic preservation, not just to boost the economic fortunes of the plastics industry.

Now let's turn to the huge, multinational firms in the petrochemical industry that drill for the precursor materials for plastics at the beginning of the production chain. Let's say more Americans recycled their plastics, and this resulted in an influx of more recycled plastic onto the market. Even with robust closed loops achieved, does anyone really think that the executives at one of these multinationals would get to the point of saying, "well, you know, it's good that the need for input materials is being met by recycled plastic, and that means that this year we can scale back production a bit. We don't need to open up a new offshore platform. It isn't required to meet society's needs after all!"

Ultimately, this would have to be the scenario in which more and more recycling of plastics actually preserved things that matter ecologically and socially. Yet very little of the empirical work needed to trace materials flows exists in the area of plastics recycling, in part because of a dearth of data.16 **And in the area of plastics waste we have perhaps the most egregious misuse of claims that recycling is going to address problems related to pollution and climate change.** The industry, and affiliated academic researchers, carry out life-cycle analyses that are impeccable in their methodological approach to quantifying different energy and material requirements associated with primary and secondary flows of plastics.17

None to my knowledge, however, answer the question of what more plastics recycling would do to diminish overall ecosystem withdrawals of fossil fuels. Does tar-sands extraction slow as a result? How about pipeline construction? Perhaps, with improved plastics recycling, we don't need a Northeast U.S. expansion of storage capacity for hydrofractured natural gas. Not yet? Well, then, what are the plans for the scaleback?

Ideological Implications

These are both empirical and ideological questions. 18 They are ideological because a general optimism about recycling as earth-saving has become internalized in the thought processes of children and adults genuinely concerned about preservation. In

everyday speak, assumptions of conservation and preservation swirl in a distant, misty background. In order to preserve optimism, can-doism, and a solutions oriented outlook it is easier not to look into these depths. **In fact, critique of recycling's earth-saving claims falls harshly on concerned ears, leaving bewilderment and a sense of betrayal. Sometimes, it is met with a binary response: either recycling is part of an overall process of saving resources and saving energy and by extension it's saving the planet, *or* it's a waste of time and it's a sham and a lie.**

I would urge all who are interested in this kind of thing to move away from binaries. The alternative is uncertain and less morally satisfying. It requires taking multiple perspectives, and wading through material complexity, power relations, institutional arrangements, and ideological maneuvering around recycling, asking again and again how, or even if, this or that initiative — often proudly and cheerfully announced by a consortium of producers — preserves things that matter. It also means looking at how recycling actually takes place in any particular place and time, not just under modelled conditions. Some of this work involves redirecting outrage. So, for example, if recycling plants are unable to sell recycled plastics because of market slumps, it is less morally shocking than a reflection of market conditions that they will landfill them instead? When people ask me about the crisis in North American plastics and paper recycling, which China's trade policies has brought about, I'm tempted to respond, "what did you expect?" Recycling firms are tails wagged by massive dogs: neither evil, nor earth-saving, but actually a reflection of the organization of material exchange under the global market system, today.

In part, the potential for recycling to actually conserve and preserve *is* an empirical question, and the answers will vary from place to place and material to material. But it's not just a matter of collecting data, or organizing the right technical systems. **It also means recognizing that recycling as we know it may start with an ethical impulse, but materially translates into nothing more or less than a set of business practices.** As with the 19th and early 20th scrap trades, recycling is part of smart industrial operations (nothing wrong with that). But let us dismantle the faith that recycling, as practiced currently, will save the earth if we do more of it. Affirming this ideal is a potent tool used by powerful networks of big producers, big extractors, and constellations of firms at the global level. Make no mistake, they are undertaking this strategy daily, with increasing sophistication. They understand the nuances of material sourcing, production volumes, input substitution, and property acquisition all too well. They rely on the fact that you don't — and, in fact, can't — because much of the data you would need for such an understanding is proprietary to them.

It is no easy feat to press producers to explain how recycling stands to scale back their operations, reduce their net output, or redress the ravages they have left behind. Such questions are typically outside the scope of a particular recycling project; easy to evade. As a group, these are smart folks. They know which NGOs to fund, which scholars to support, and where to make public appearances. They even understand the critiques that come out of discard studies, so they start to speak of "plasticity" instead of plastics; and they use the term"litter" to name the crisis of marine plastics.

But if you are in a position to do so, politely ask corporate spokespeople how the tonnage they take credit for recycling fed back into their operations last year, in a specific country, and how it in turn measurably reduced virgin extraction. Be specific. Ask them where and when it led to a reduced material throughput in their company or industry. Query them on the documented, not speculative, environmental protection afforded by, say, making cheap picture frames made out of spent polystyrene packaging. Reject the notion that cheap picture frames are a social good that would have needed to be manufactured with fracked natural gas, had polystyrene recycling not yielded up secondary inputs.

In the meantime, sit for a while to contemplate the fact that recycling, as it exists today, does not in fact save ecosystems in a way that matters on the whole ecologically or socially. How would recycling need to be practiced to achieve this desired end? In a different context of extraction, production, and growth – with different politics, knowledge structures, and ideologies. I realize this is an unsatisfying conclusion, but I believe in the importance of critique as a precondition to developing collaborative solutions. I have presented this information as part of a process of thinking through short-, medium- and long-term characteristics of this different context. This is an ongoing project to which I invite responses, as well as empirical contributions that would refine or refute what I have presented here.

Footnotes

1. Hays, S. (1999). Conservation and the gospel of efficiency: The progressive conservation movement, 1890–1920. No. 40. University of Pittsburgh Press.
2. See Guha,R. (YEAR). "Radical American environmentalism and wilderness preservation: a third world critique" *Environmental Ethics* 11, no. 1:71–83; Faber, D., and D. McCarthy. "Neo-liberalism, globalization and the struggle for ecological democracy:

linking sustainability and environmental justice." *Just sustainabilities: Development in an unequal world* (2003): 38-63.

3. See Geyer, R. et. al. (2016) "Common Misconceptions about Recycling" *Journal of Industrial Ecology* 20, no. 5: 1010–17
4. Jevons, W. S. (1866) *The coal question: an inquiry concerning the progress of the nation, and the probable exhaustion of our coal-mines*. London, UK: Macmillan and Company .
5. See Alcott, B. (2005). "Jevons' paradox" *Ecological Economics* 54, no. 1: 9–21.
6. See Dimitropoulos, J. (2007). "Energy productivity improvements and the rebound effect: an overview of the state of knowledge." *Energy Policy* 35, no. 12: 6354–63.
7. I am grateful to Bruce Lankford for helping me clarify this. See Lankford, B. (2013) *Resource efficiency complexity and the commons: the paracommons and paradoxes of natural resource losses, wastes and wastages*. London: Routledge.
8. See Modaresi, R. and D.B. Müller. (2012) "The role of automobiles for the future of aluminum recycling." Environmental Science & Technology 46, no. 16: 8587–8594.
9. OECD (2019), G*lobal material resources outlook to 2060: economic drivers and environmental consequences*. Paris: OECD Publishing
10. The closest I have come to identifying such a body is the OECD, which has published interesting research on the this subject for a range of materials, but not plastics. OECD (2019), http://www.oecd.org/environment/global-material-resources-outlook-to-2060-9789264307452-en.htm
11. The OECD writes that, "Recycling is projected to become more competitive compared to the extraction of primary materials," but that, "The strong increase in demand for materials implies that both primary and secondary materials use increase at roughly the same speed." OECD (2019), p. 3
12. Most estimates cite to data from the British Petroleum Federation, http://www.bpf.co.uk/press/oil_consumption.aspx
13. Energy Information Administration (EIA).2018. "How much oil is used to make plastic?" accessed 1/29/2019 at www.eia.gov/tools/faqs/faq.php?id=34&t=6.
14. EIA 2018.
15. The plastics industry is careful about how it phrases conservation claims in its public relations. It tends to talk about the importance of growing plastics recycling to jobs, litter cleanup, and generally as an end unto itself.
16. Geyer, R. et. al. (2017) "Production, use, and fate of all plastics ever made." Science Advances 3, no. 7
17. The Plastics Division of the American Chemistry Council (2018). "Life Cycle Impacts of Plastic Packaging Compared To Substitutes in the United States and Canada" accessed 1/29/2019 at https://plastics.americanchemistry.com/Plastic-Packaging-Life-Cycle-Study/
18. See Lifset, R.(1995). "Foreward", in Ince, P. *What won't get harvested, where, and when: the effects of increased paper recycling on timber harvest*, Yale University School of Forestry and Environment.

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52: Concerning the Way in Which Princes Should Keep Faith - The Prince, Chapter 18 (Machiavelli)

Niccolò Machiavelli

#analysis #proposalargument #systemanalysis #argument #logos #ethos #kairos #politics #sharedvalues



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Every one admits how praiseworthy it is in a prince to keep faith, and to live with integrity and not with craft. Nevertheless, our experience has been that those princes who have done great things have held good faith of little account, and have known how to circumvent the intellect of men by craft, and in the end have overcome those who have relied on their word. You must know there are two ways of contesting, the one by the law, the other by force; the first method is proper to men, the second to beasts; but because the first is frequently not sufficient, it is necessary to have recourse to the second. Therefore it is necessary for a prince to understand how to avail himself of the beast and the man. This has been figuratively taught to princes by ancient writers, who describe how Achilles and many other princes of old were given to the Centaur Chiron to nurse, who brought them up in his discipline; which means solely that, as they had for a teacher one who was half beast and half man, so it is necessary for a prince to know how to make use of both natures, and that one without the other is not durable. A prince, therefore, being compelled knowingly to adopt the beast, ought to choose the fox and the lion; because the lion cannot defend himself against snares and the fox cannot defend himself against wolves. Therefore, it is necessary to be a fox to discover the snares and a lion to terrify the wolves. Those who rely simply on the lion do not understand what they are about. Therefore a wise lord cannot, nor ought he to, keep faith when such observance may be turned against him, and when the reasons that caused him to pledge it exist no longer. If men were entirely good this precept would not hold, but because they are bad, and will not keep faith with you, you too are not bound to observe it with them. Nor will there ever be wanting to a prince legitimate reasons to excuse this non-observance. Of this endless modern examples could be given, showing how many treaties and engagements have been made void and of no effect through the faithlessness of princes; and he who has known best how to employ the fox has succeeded best.

But it is necessary to know well how to disguise this characteristic, and to be a great pretender and dissembler; and men are so simple, and so subject to present necessities, that he who seeks to deceive will always find someone who will allow himself to be deceived. One recent example I cannot pass over in silence. Alexander the Sixth did nothing else but deceive men, nor ever thought of doing otherwise, and he always found victims; for there never was a man who had greater power in asserting, or who with

greater oaths would affirm a thing, yet would observe it less; nevertheless his deceits always succeeded according to his wishes,because he well understood this side of mankind.

Therefore it is unnecessary for a prince to have all the good qualities I have enumerated, but it is very necessary to appear to have them. And I shall dare to say this also, that to have them and always to observe them is injurious, and that to appear to have them is useful; to appear merciful, faithful, humane, religious, upright, and to be so, but with a mind so framed that should you require not to be so, you may be able and know how to change to the opposite.

And you have to understand this, that a prince, especially a new one, cannot observe all those things for which men are esteemed, being often forced, in order to maintain the state, to act contrary to fidelity, friendship, humanity, and religion. Therefore it is necessary for him to have a mind ready to turn itself accordingly as the winds and variations of fortune force it, yet, as I have said above, not to diverge from the good if he can avoid doing so, but, if compelled, then to know how to set about it.

For this reason a prince ought to take care that he never lets anything slip from his lips that is not replete with the above-named five qualities, that he may appear to him who sees and hears him altogether merciful, faithful, humane, upright, and religious. There is nothing more necessary to appear to have than this last quality, inasmuch as men judge generally more by the eye than by the hand, because it belongs to everybody to see you, to few to come in touch with you. Every one sees what you appear to be, few really know what you are, and those few dare not oppose themselves to the opinion of the many, who have the majesty of the state to defend them; and in the actions of all men, and especially of princes, which it is not prudent to challenge, one judges by the result.

For that reason, let a prince have the credit of conquering and holding his state, the means will always be considered honest, and he will be praised by everybody; because the vulgar are always taken by what a thing seems to be and by what comes of it; and in the world there are only the vulgar, for the few find a place there only when the many have no ground to rest on.

One prince of the present time, whom it is not well to name, never preaches anything else but peace and good faith, and to both he is most hostile, and either, if he had kept it, would have deprived him of reputation and kingdom many a time.

Niccolò di Bernardo dei Machiavelli (1469-1527) was an Italian diplomat, politician, historian, philosopher, writer, playwright and poet of the Renaissance period. He wrote his best-known work *The Prince* (*Il Principe*) in 1513.

PUBLIC DOMAIN

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53: The 1995 Anime “Ghost in the Shell” Is More Relevant than Ever in Today’s Technologically Complex Society (Maynard)

Andrew D. Maynard

#review, #descriptive, #reportinginformation, #argument, #currentevents, #kairos #technology



"Motoko Kusanagi- Ghost in the Shell cosplay" by GEMMA DENISE is licensed under CC BY-NC-ND 2.0

When the anime movie *Ghost in the Shell* was released in 1995, the world wide web was still little more than a novelty, Microsoft was just beginning to find its GUI-feet, and artificial intelligence research was in the doldrums.

Against this background, *Ghost* was remarkably prescient for its time. Twenty-three years later, it’s even more relevant as we come to grips with advances in human augmentation, AI, and what it means to be human in a technologically advanced future.

Ghost in the Shell is one of twelve science fiction movies that feature in a new book that grapples with the complex intersection between emerging technologies and social responsibility. In *Films from the Future: The Technology and Morality of Sci-Fi Movies* (from Mango Publishing), I set out to explore the emerging landscape around transformative trends in technology innovation, and the social challenges and opportunities they present.

The movies in the book were initially selected to help tell a story of technological convergence and socially responsible innovation. But to my surprise, they ended up opening up much deeper insights into the nature of our relationship with technology.

Identity-hacking

Ghost in the Shell opens with cyborg special-operative Major Kusanagi helping track down a talented hacker—aka the “Puppet Master”—who’s re-writing people’s “ghost”, or what makes them uniquely “them”, using implanted brain-machine interfaces.

Kusanagi inhabits a world where human augmentation is commonplace, and is almost entirely machine. This technological augmentation provides her and others with super-human abilities. But it also makes them vulnerable—especially to hackers who can effectively re-code their memories.

This seems to be the modus operandi of the Puppet Master. Yet as the narrative unfolds, we learn that this is not a person, but an AI developed by US security services that has escaped the leash of its handlers.

The Puppet Master (or “2051” as it's formally designated) is seeking asylum from its US masters. But it’s also looking for meaning and purpose as a self-aware entity.

Through the ensuing story, *Ghost* touches on a number of deeply philosophical questions that lie at the heart of society's relationship increasingly powerful technologies. These include what it means to be human, the value of diversity, and even the nature of death. As Emily Yoshida so aptly put it in their *Beginner's Guide to the Ghost in the Shell Universe*, *Ghost* is a "meditation on consciousness and the philosophy of the self".

This is where the film comes into its own as it jolts viewers out of the ruts of conventional thinking, and leads them to reflect more deeply on the potential social impacts of technologies like AI, human augmentation, and computer-brain interfaces.

Navigating responsible brain-machine augmentation

In 2016 Elon Musk established the company Neuralink to develop science fiction-like wireless brain-machine interfaces. Inspired by the neural laces of Iain M. Banks' Culture novels, and echoing Ghost, Musk announced on Twitter that, in his opinion, "Creating a neural lace is the thing that really matters for humanity to achieve symbiosis with machines."

Yet as Ghost in the Shell so presciently illustrates, where you have read-write brain connections, you're likely to have brain-hackers.

It's by no-means clear how successful Neuralink will be (the company is still largely flying under the radar). But its launch coincides with intense efforts to better-understand and control the human brain, and breakthroughs in optogenetics that could one day enable wireless machine-mind networks.

Given these and similar developments, it's not beyond the realms of possibility that someone will try and fit a subject up with an internet-connected brain interface that can write as well as read what's going on inside their head; and that someone else will attempt to hack into it.

Developing such capabilities responsibly will require great care as scientists and others tread the fine line between "could" and "should". And it'll demand novel ways of thinking creatively about what could possibly go wrong, and how to avoid it.

This is where films like Ghost are remarkably helpful in illuminating the risk-landscape around such technologies—not because they get the tech right, but because they reveal often-hidden aspects of how people and technologies interact.

But Ghost's insights go far beyond unpacking the problems of hackable brain implants.

Who owns and controls your augmented self?

Throughout *Ghost*, Major Kusanagi is plagued by doubts of who she is. Do her cybernetic augmentations make her less human, or having less worth? Is her sense of self—her "ghost"—simply an illusion of her machine programming? And what autonomy does she have when she malfunctions, or needs an upgrade?

These are questions that are already beginning to tax developers and others in the real world. And as robotic and cyber technologies become increasingly advanced, they are only going to become harder to navigate.

In 2012, the South African athlete Oscar Pistorius made history by being the first runner to compete in the Olympic Games with two prosthetic legs. His iconic racing blades came to represent the promise of technological enhancements to overcome human limitations. Yet they stirred up fears of them giving him an unfair advantage that led to him being barred from competing in the previous Olympics.

The same year that Pistorius successfully competed in the Olympics, the Canadian researcher Steve Mann was allegedly assaulted because his computer-augmented eye extension offended someone. And in 2015, patient-advocate Hugo Campos discovered he didn't legally have access to the implanted defibrillator that kept him alive.

These are all relatively small examples of the tension that's growing between conventional thinking and human augmentation. But they illustrate how the angst that Kusanagi feels about her augmented body, and how it defines her, is already part of today's society. And we've barely touched the tip of this particular iceberg.

Again, this is where *Ghost* forms a powerful canvas on which to explore challenges that often transcend conventional thinking, and play out at the borders of our moral and ethical understanding. Watched in the right way, it can help reveal hidden truths around our relationship with the technologies we're building, and guide us toward more socially responsible ways of developing and using it.

This, to me, is a power that is inherent in science fiction movies. And isn't limited to *Ghost*—in *Films from the Future*, I draw on films as diverse as *Never Let Me Go* and *Minority Report*, to *Ex Machina*, to tease out insights into the moral and ethical challenges and opportunities that increasingly powerful technologies present.

Having immersed myself in these movies and the technologies that inspire them, it's clear that, if we want to ensure these trends don't cause more problems than they resolve, we desperately need the perspectives that movies like *Ghost in the Shell* and others reveal.

The alternative is risking losing our own "ghosts" in the drive to innovate bigger and better, without thinking about the consequences.

Dr. Andrew Maynard is the author of *Films from the Future: The Technology and Morality of Sci-Fi Movies* (Mango Publishing, 2018), a physicist, and leading expert on the socially responsible development of emerging and converging technologies in the School for the Future of Innovation in Society at Arizona State University. He can be found on Twitter at @2020science.



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54: What the Ban on Gene-Edited Babies Means for Family Planning (Menke)

By Marie Menke



"Viljakuskliinik Fertility Clinic Nordic" by Merlilindberg is licensed under CC BY-SA 4.0

Technology surrounding the human embryo has moved out of the realm of science fiction and into the reality of difficult decisions. Clinical embryologists fertilize human eggs for the purpose of helping couples conceive. The genetic makeup of these embryos are tested on a routine basis. And today, we no longer ask “can we,” but rather, “should we” edit human embryos with the goal of implantation and delivery of a baby?

As a reproductive endocrinologist, I frequently encounter couples grappling with complicated reproductive issues. If one or both parents are affected by single gene disorders, these couples have the opportunity to first test their embryos and then decide whether to transfer an embryo carrying a mutation rather than finding out the genetic risk of their baby while pregnant. In some cases they may decide not to transfer an embryo that carries the mutation as part of the in vitro fertilization procedure.

These issues seem simple, but carry large consequences for patients. “Should we transfer an embryo affected with our genetic disorder?” “What should we do with our affected embryos if we do not transfer them?” Some patients will opt to skip testing altogether.

Clinical trials of GM embryos banned in the US

House Democrats this year considered, then backed away from, lifting a ban written into the budget of the U.S. Food and Drug Administration that bars the approval of any clinical trial or research “in which a human embryo is intentionally created or modified to include a heritable genetic modification.” The current gene-editing ban prohibits editing the genes inside the cell’s nucleus, as Chinese scientist He Jiankui did. He used the gene-editing tool CRISPR to modify the CCR5 gene in twin girls to give them immunity from HIV.

The current ban also prohibits so-called mitochondrial replacement therapy, or three-parent babies.

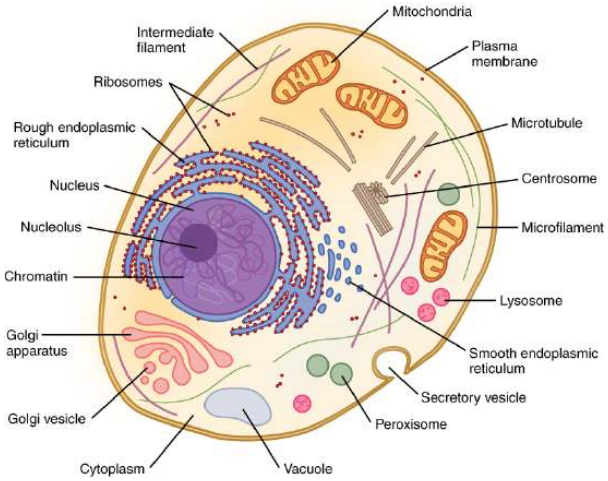
Mitochondria replacement therapy, in which mitochondria carrying defective genes are replaced by healthy mitochondria from a third party is more palatable to some as mitochondrial DNA only carries a handful of genes that provide cellular energy production.

These scenarios of a three-parent baby involve transfer of the nucleus - containing the 23 chromosomes - from the egg of the mother with the defective mitochondria into an egg from which the nucleus has been removed but the healthy mitochondria remain. The actual genetic material is changed because there is DNA from two women. However, the DNA has not been cut, pasted or otherwise modified. Although testing the safety of three-parent babies will be allowed in some countries such as the United Kingdom, the U.S. ban includes this procedure.

What is germline editing?

At the heart of the issue is making genetic changes to cells that could be passed on to the next generation. These are called germline cells, and changing them is called germline editing. This brings these questions to the next level, with little information to support

these heart wrenching choices.

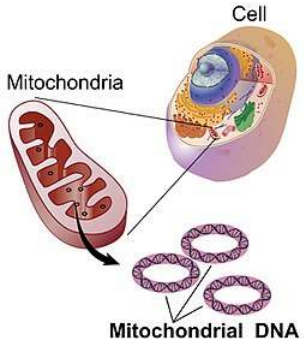


The 23 pairs of chromosomes, which are made from DNA, are stored in the nucleus of the cell. The mitochondria produce the energy for the cell and have their own DNA. "0312 Animal Cell and Components" by OpenStax is licensed under CC BY 4.0

Germline editing can happen at different phases of fertilization. If we change the genetic makeup of a human egg or sperm, fertilize it, and transfer the resulting embryo into the womb, the result is a heritable genetic modification. Similarly, genetic changes to the embryo itself within the first few days after fertilization will be inherited by the embryo's offspring. Both of these actions are currently banned.

Is there any DNA that is OK to edit?

Our genetic material is made up of DNA. This DNA is found in two locations within our cells – the nucleus and mitochondria. The DNA, which makes up our 23 pairs of chromosomes, is found inside the nucleus of every cell is a combination of the DNA from the biological mother's egg and biological father's sperm. Genes composed from this nuclear DNA provide the basis of most of our biologic functions and appearance including our height, eye color and our overall predisposition to diseases such as diabetes, heart disease and cancer. These traits are often the product of multiple genes working in tandem. The products of these genes work together throughout our lives, which makes the impact of editing at the embryonic level impossible to predict.



Sometimes the DNA inside the mitochondria carry mutations that cause disease. In mitochondria replacement therapy, the unhealthy mitochondria are replaced with those from a third party, or 'parent.' "Mitochondrial DNA lg" by National Human Genome Research Institute is in the Public Domain

He Jiankui performed gene editing on nuclear DNA. This action provoked calls for regulatory oversight of gene-editing techniques. The concern lies in the long-term effects. In addition to their constant interaction, most of genes in the cell's nucleus serve multiple functions. "Fixing" one aspect of a gene's function may therefore result in unintended consequences.

Those diseases caused by a single gene mutation in nuclear DNA are more obvious candidates for gene editing because they are more likely to result in a cure. These include cystic fibrosis, muscular dystrophy and sickle cell anemia.

Are three-parent babies different?

Mitochondrial DNA is located outside the cell's nucleus and passed down directly from the female egg to the embryo. Genes composed of mitochondria DNA enable mitochondria to produce energy for the whole cell. Mutations in mitochondrial genes have been associated with severe disorders such as Leigh syndrome and mitochondrial complex III deficiency that can affect the brain, kidney and heart.

Just as nuclear DNA modification may remove the risk for single gene disorders, mitochondria replacement therapy would replace these mutated mitochondrial genes with mitochondria from a donor egg – a change that will passed to future generations.

Throughout this discussion, I try to maintain a sense of empathy for those families for whom this could be their only hope of having a healthy biologically related child. I also try to convey that we are at the beginning of a long road that will require a thoughtful approach to anything we do. The technology is here, but we know so much less about its effects than we should.

These editing therapies will permanently change all the descendants of a couple. In some cases it could rid a family of a genetic disease. In others, the unintended effects may be worse than the disease itself. This is the purpose of ethically appropriate research with careful oversight. The ban does not change the need for discussion. If anything, it brings the debate back to the reality of patients seeking care for diseases that currently have no cure.

Marie Menke is an Assistant Professor of Obstetrics, Gynecology & Reproductive Sciences at the University of Pittsburgh. She is a reproductive endocrinologist whose research focuses on the effect of obesity and lipids on infertility. Her essay was originally published in The Conversation.

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55: There Is More than One Religious View on Abortion - Here's What Jewish Texts Say (Mikva)

Rachel Mikva

#religion #controversies #sharedvalues #health #policy



"Talmud - Mikraot Gedolot" by *Rachel-Esther* is licensed under *CC BY-SA 2.0*

Alabama's governor signed a bill recently that criminalizes nearly all abortions, threatening providers with a felony conviction and up to 99 years in prison.

It is one of numerous efforts across the United States to restrict access to abortion and challenge the Supreme Court's 1973 decision in Roe v. Wade that legalized abortion nationwide.

Six states have recently passed legislation that limit abortions to approximately six weeks after the end of a woman's last period, before many know they are pregnant. Although the laws have not yet taken effect and several have been blocked on constitutional grounds, if enacted they would prohibit most abortions once a doctor can hear rhythmic electrical impulses in the developing fetus.

Called "fetal heartbeat" bills, they generally refer to the fetus as an "unborn human individual." It is a strategic choice, trying to establish fetal personhood, but it also reveals assumptions about human life beginning at conception that are based on particular Christian teachings.

Not all Christians agree, and diverse religious traditions have a great deal to say about this question that gets lost in the polarized "pro-life" or "pro-choice" debate. As an advocate of reproductive rights, I have taken a side. Yet as a scholar of Jewish Studies, I appreciate how rabbinic sources grapple with the complexity of the issue and offer multiple perspectives.

What Jewish texts say

Traditional Jewish practice is based on careful reading of biblical and rabbinic teachings. The process yields "halakha," generally translated as "Jewish law" but deriving from the Hebrew root for walking a path.

Even though many Jews do not feel bound by "halakha," the value it attaches to ongoing study and reasoned argument fundamentally shapes Jewish thought.

The majority of foundational Jewish texts assert that a fetus does not attain the status of personhood until birth.

Although the Hebrew Bible does not mention abortion, it does talk about miscarriage in Exodus 21:22-25. It imagines the case of men fighting, injuring a pregnant woman in the process. If she miscarries but suffers no additional injury, the penalty is a fine.

Since the death of a person would be murder or manslaughter, and carry a different penalty, most rabbinic sources deduce from these verses that a fetus has a different status.

An early, authoritative rabbinic work, the Mishnah, discusses the question of a woman in distress during labor. If her life is at risk, the fetus must be destroyed to save her. Once its head starts to emerge from the birth canal, however, it becomes a human life, or "nefesh." At that point, according to Jewish law, one must try to save both mother and child. It prohibits setting aside one life for the sake of another.

Although this passage reinforces the idea that a fetus is not yet a human life, some orthodox authorities allow abortion only when the mother's life is at risk.

Other Jewish scholars point to a different Mishnah passage that envisions the case of a pregnant woman sentenced to death. The execution would not be delayed unless she has already gone into labor.

In the Talmud, an extensive collection of teachings building on the Mishnah, the rabbis suggest that the ruling is obvious: the fetus is part of her body. It also records an opinion that the fetus should be aborted before the sentence is carried out, so that the woman does not suffer further shame.

Later commentators mention partial discharge of the fetus brought on by the execution as an example – but the passage's focus on the needs of the mother can also broaden the circumstances for allowing abortion.

Making space for divergent opinions

These teachings represent only a small fraction of Jewish interpretations. To discover "what Judaism says" about abortion, the standard approach is to study a variety of contrasting textsthat explore diverse perspectives.

Over the centuries, rabbis have addressed cases related to potentially deformed fetuses, pregnancy as the result of rape or adultery, and other heart-wrenching decisions that women and families have faced.

In contemporary Jewish debate there are stringent opinions adopting the attitude that abortion is homicide – thus permissible only to save the mother's life. And there are other lenient interpretations broadly expanding justifications based on women's well-being.

Yet the former usually cite contrary opinions, or even refer a questioner to inquire elsewhere. The latter still emphasize Judaism's profound reverence for life.

According to the 2017 Pew survey, 83% of American Jews believe that abortion should be legal in all or most cases. All the non-orthodox movements have statements supporting reproductive rights, and even ultra-orthodox leaders have resisted anti-abortion measures that do not allow religious exceptions.

This broad support, I argue, reveals the Jewish commitment to the separation of religion and state in the U.S., and a reluctance to legislate moral questions for everyone when there is much room for debate.

There is more than one religious view on abortion.

Rachel Mikva is Associate Professor of Jewish Studies, Chicago Theological Seminary. Her essay first appeared in The Conversation.

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56: Why Women From Asia Are Confronting U.S. Fracking: Oil Extraction Equals Plastic Production (Morrison)

Isabelle Morrison

#environment #global #health #policy #nature #systemanalysis #science



"Littered beach, Bali, Indonesia" by GRID Arendal is licensed under CC BY-NC-SA 2.0

Heaps of plastic waste cover the shores of Manila Bay in the Philippines. Myrna Dominguez remembers when an abundance of fish inhabited its waters—locals would catch enough to feed their families and sell at the market. Today, she says, they are catching more plastic than fish.

“We’re very afraid that if this is not addressed, the bay, which 100,000 small fishers rely on, will no longer be viable for them,” Dominguez says.

In May, Dominguez and Indian labor organizer Lakshmi Narayan visited communities in the U.S. that are affected by pollution from oil extraction and plastic production, to show the effects that these processes have on communities overseas. The “Stopping Plastic Where It Starts Tour,” organized by #Breakfreefromplastic and Earthworks, is part of a project that aims to reduce plastic consumption and production by raising awareness about the impacts of plastic production on the communities at either end of its supply chain.

Dominguez and Narayan, representing communities in Asia experiencing the effects of plastic pollution, visited places in the U.S. experiencing the impacts of hydraulic fracturing (fracking) oil and gas production—an industry that is producing the raw materials to build plastic.

Dominguez is the policy and advocacy adviser of the Asia Pacific Network on Food Sovereignty, which campaigns to protect the rights of small food producers such as fishers and farmers, and to preserve fishing grounds and cultural lands of indigenous communities.

Narayan is the co-founder of Solid Waste and Collection Handling, a cooperative of waste-pickers in Pune, India, who collect waste throughout the city and separate it into categories for proper disposal.

Both women represent groups from Asian countries that are dealing with the effects of plastic pollution—particularly plastic that is produced and distributed by U.S. companies.

“I’m hoping this tour will change American people’s views of how they live every day, and how it impacts poor countries like us,” Dominguez says. “If America gets a cold, the Philippines gets the flu. We’re very dependent on the U.S., so whatever happens here affects us too.”

The Philippines is the third largest ocean plastic polluter in the world—it also has the most persistent poverty rate in Southeast Asia. In 2017, the U.S. was the third largest plastic exporter in the world, exporting $6.8 billion worth of plastic items.

Single-use plastic products, such as straws and other utensils—and products packaged in plastic, including toiletries and food—are produced by transnational companies and marketed to people in places like the Philippines at low costs. The plastic waste from these products ends up in landfills or marine areas like Manila Bay.

Plastic manufacturers are not responsible for the disposal of their products, so the burden is placed on people in the Philippines, who do not have the resources to properly dispose of all the waste, Dominguez says.

“People have realized there’s no easy technological solution to the problem of ocean plastic waste, and the only way to stop ocean plastic is to stop plastic,” says Jennifer Krill. Krill is the executive director of Earthworks, an environmental and social justice organization dedicated to protecting communities and the environment from the impacts of mining and energy extraction.



#breakfreefromplastic activists in front of a petrochem facility in Pittsburgh. Photo courtesy of #breakfreefromplastic.

“If we were to somehow recover all that waste from the ocean, we would still have to put it in a landfill or in an incinerator, and there would be significant environmental impacts from those solutions. The better solution would be to not make so much of it to begin with.”

That’s why Dominguez and Narayan traveled to the U.S., where the women visited communities affected by fracking. In the U.S., a fracking boom is helping fuel plastic production worldwide by providing a necessary building block of plastic: ethane. Dominguez and Narayan visited communities experiencing the impacts of fracking in Texas, Louisiana, West Virginia, and Pennsylvania. They also visited Washington D.C.

In 2017, the U.S. consumed around 1.2 million barrels of ethane per day.

In Texas, for example, a major fracking boom is underway. A new report by IHS Markit shows the Permian Basin in West Texas is expecting a surge in oil production—more than double by 2023—in large part because of fracking, which has made trapped oil and gas accessible.

Fracking involves pumping water, sand, and chemicals underground to release gas and oil from rock. The shale formations used for extracting oil and gas in the U.S. are high in ethane, which is wasted in the extraction process unless the industry has a way to bring it to market.

“Currently what we’re seeing is a major build-out of new petrochemical manufacturing in order for the industry to recover that waste ethane and convert it into plastic, most of which is also going to become waste, but along the way they’ll make a lot of money manufacturing it into plastic,” Krill says.

In 2017, the U.S. consumed around 1.2 million barrels of ethane per day, and exported around 180,000 barrels per day to countries overseas.

Earthworks—one of the organizations that organized the tour—has recently introduced a Community Empowerment Project to provide communities near oil and gas facilities with data on methane and ethane pollution from nearby oil and gas extraction sites by using an optical gas imaging camera that makes invisible ethane—and methane—pollution from these sites visible.

Not only does methane and ethane pollution contribute to climate change, but it also causes health issues for people who live near oil and gas facilities—in the U.S., that’s more than 17 million people.

Residents who live near these facilities have reported experiencing respiratory problems such as asthma and coughing, eye, nose, and throat irritation, headaches, nausea, dizziness, trouble sleeping, and fatigue.

“If we are going to stop plastic we need to stop plastic where it starts.”

The organization has been taking the camera to oil and gas wells, pipelines, and compressor stations to show government regulators and companies that the methane and ethane pollution problem is real. Gas imaging videos are available on Earthworks’ YouTube channel for citizens to use as evidence when urging regulators in their states to require operators clean up the gas waste.

“It hasn’t stopped pollution—it hasn’t been as effective as we’d like it to be yet,” Krill says about the project. But she hopes it will be. “The industry likes to say ‘There’s no pollution, we’re very clean,’ and with this video evidence it’s hard to deny that there’s a serious problem with oil and gas extraction.”

On a global scale, the #Breakfreefromplastic movement, made up of 1,000 organizations worldwide, has been focused on creating “zero-waste cities” in Malaysia, India, and the Philippines—teaching communities about separating organic from inorganic waste, composting, and recycling.

Narayan, who represents the waste-pickers who collect and separate waste in Pune, India, says the process of recycling plastics into reusable materials is so expensive that the waste is often not recyclable at all.

#Breakfreefromplastic also focuses on making the public aware of their consumption habits in hopes of reducing the use of one-use plastic products, and pushing for “corporate accountability,” says Jed Alegado, the Asia Pacific communications officer for #Breakfreefromplastic.

“Corporations that have the money to come up with these products should invest in more sustainable and ecological distribution systems for their products,” Alegado says. “They shouldn’t pass the burden to consumers and governments for the plastic waste they are creating.”

Growing up in the Philippines, Dominguez recalls using coconut shells as plates, and eating food with her bare hands—before large companies had convinced the world that plastic products are a necessity, she says.

Dominguez is optimistic that change can occur by educating and inspiring people to reduce their use of plastic products and become vocal about how the government handles waste.

“If we are going to stop plastic we need to stop plastic where it starts,” Krill says. “We can’t let greed get in the way of common sense and sustainability.”

Isabelle Morrison is a solutions reporting intern for YES! where this article was originally published.

Why Women From Asia Are Confronting U.S. Fracking: Oil Extraction Equals Plastic Production by Isabelle Morrison is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

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57: How to Increase Your Chances of Sticking with Your Resolutions (Nonterah)

Camilla Nonterah

#health #advice



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The beginning of every new year comes with resolutions and plans for behavior change. Often the quest to improve health behaviors, such as losing weight, increasing physical activity or quitting tobacco is short-lived. Estimates vary, but by some accounts, as many as 80 percent of people fail to meet their resolution by mid-February. One study followed 200 people with New Year's resolutions and reported that 81 percent of them failed to maintain their health behaviors after two years.

The reasons vary. With the case of cigarettes, people are dealing with a highly addictive product. For example, about 95 percent of people relapse after six to 12 months of abstinence when they try to quit smoking on their own.

Regardless of the severity of your addiction or even if you do not have an addiction, change is very hard. People often have not explored their reasons for making the change or how ready they are. They also may not have come up with a plan. And, they may simply not realize how hard it is to change behavior.

I am a counseling psychologist who studies and works with people trying to change their behavior. Those who succeed have certain things in common. They are usually motivated to change, and they believe in their ability to engage in positive health behaviors. They also track their health behaviors and set goals.

What psychologists know about behavior change

Biological, psychological, social and environmental processes influence behavior change. One of the popular theories used to explain health behaviors is something called the transtheoretical model. This theory states that there are five stages of behavior change.

- Pre-contemplation. In this stage, the person is not thinking about making the change. Those who fall in this stage may be unwilling to admit they have a problem in the first place. They are unlikely to respond to nagging from others to stop smoking, for example. This could be attributed to the fact that the cons for changing their unhealthy behavior outweighs the pros.
- Contemplation. This happens when a person acknowledges that he or she has a problematic behavior but is not ready to adopt a healthier lifestyle. Successful behavior change even during this stage is unlikely. However, people in this stage are thinking about making a change within the next six months.
- Preparation. In this stage, an individual starts making plans for the change. For example, a person who wishes to quit smoking may set a quit date and plan to purchase their last pack of cigarettes the week before the quit date.
- Action. This is when behavior change starts to occur. In this stage, a person who wishes to stop smoking quits using cigarettes and may start using smoking cessation aids. Or someone who wants to lose weight will start eating fewer calories or start going to the gym. This stage requires the most effort and commitment.

- Maintenance. This usually occurs after six months of uninterrupted continuous efforts to sustain the changes they have made and to prevent a relapse. It is not uncommon for relapse to occur after a person has been successful with incorporating the new behavior. This usually happens during the action stage and can also happen after maintenance given that it is difficult to sustain behavior change. Most people are not successful with behavior change after a first attempt, especially when changing an addictive behavior. People with New Year's resolutions can make about five or more years of continuous attempts to change a behavior before they are successful. Unanticipated barriers such as stressful life events can cause a relapse.

While it is normal to experience negative emotions such as guilt and embarrassment after a failed attempt, these feelings can make a person lose hope in their ability to change if they persist for too long. The good news is that after a relapse you can learn from your mistakes and try again. Research shows that a person's odds of success with positive behavior change increase gradually with time, after unsuccessful attempts.

Why do you want to make a change?

It helps to start with a thorough understanding of why you want to change. Without that, it is hard to stay motivated, especially when barriers arise, such as getting stuck in traffic on the way to the gym, or a family member getting sick and needing your care. State of readiness also affects behavior change.

Part of your preparation stage should be developing a realistic plan. It should incorporate the reality that behavior change is hard. Studies have shown that just setting a goal does not lead to the desired results. Ambiguous goals, such as saying you want to lose weight in the coming year but not thinking of specific health goals are associated with unsuccessful results.

Setting goals that are too challenging, such as going from complete inactivity to trying to exercise seven times a week, often results in failure. Setting several goals also can be overwhelming and result in failure.

Factors that affect behavior change

Even with good goals in place, stress lowers a person's ability to achieve successful change. Stress lowers our inhibitions, making it more difficult to achieve one's goals. For example, the stress of the loss of a job would likely challenge a smoker's ability to abstain from cigarettes. Depression and anxiety, when unmanaged, can have a negative effect on a person's motivation and derail efforts to change. A lack of self-efficacy, a person's belief in their ability to exercise successful change, has been associated with unsuccessful behavior change.

Biological processes can also affect behavior change. One of the difficulties associated with weight loss is that we inherited traits from our ancestors that cause our bodies to store fat. This was good for our ancestors when food was scarce, but it is bad for our current well-being, given that food is easier to access.

Also, studies suggest that our bodies have a certain set-point at which they are most comfortable and have a natural weight thermostat that adjusts our metabolism and eating. This set-point keeps our weight within a certain genetically determined range. This makes initial weight loss easier given that the individual's metabolism is higher as a result of having more weight. However, it becomes harder to lose weight over time as one's metabolism decreases.

The environment in which we live also influences behavior change. The majority of our foods are highly processed and contain high fats and sugars. Without the appropriate nutritional knowledge and with limited access to healthy foods, successful weight loss becomes challenging. The food environment coupled with a sedentary lifestyle has a negative impact on a person's health.

People who live in neighborhoods without sidewalks, parks or those who reside in dangerous neighborhoods are less likely to be active. Certain cues in our environment also affect our ability to maintain change. For example, a person's attempts to stop smoking may be hindered by living with other smokers, especially if they have certain rituals around smoking, such as sitting on the porch together at night to chat and smoke.

How to improve your odds of success

While change is hard, there are things you can do to increase your chances of success.

- Change for the right reasons. Change for a desire to improve one's health, to be a better example for your family or to prolong your life, are more likely to motivate positive change.

- Set both short-term and long-term goals when executing change. Researchers have found that these goals should be specific, measurable, achievable, realistic and timely, or SMART. Weekly SMART goals help in making progressive steps towards a long-term goal.
- Track and monitor your behavior. This enhances positive behavior change. You can accomplish this by journaling and note-taking. Many people find that free fitness apps are helpful.
- Get help. In some cases, behavior change may be most successful with the help of a professional such as a licensed clinical health psychologist. Trained professionals can provide services such as motivational interviewing, cognitive-behavioral therapy, and acceptance and commitment therapy.

Camilla Nonterah is

Assistant Professor of Health Psychology, University of Richmond. Her essay was originally published in *The Conversation*.

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58: Minorities Face More Obstacles to a Lifesaving Organ Transplant (Nonterah)

Camilla Nonterah

#health #business #systemanalysis #research #science #sharedvalues #proposal



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Patients who experience organ failure need a transplant to improve their odds of survival and to achieve a better quality of life.

However, getting an organ transplant is often accompanied by several challenges, many of which can be attributed to factors like the state of an individual's living circumstances, their economic status and where they were born.

As a result, many racial and ethnic minorities, such as African Americans, Latinx individuals and Native Americans, must unjustly wait longer for a much-needed new organ – or never receive one at all because of these barriers to care.

Research shows that these disparities are avoidable, especially with changes at the institutional level.

Which groups are less likely to get a transplant?

Transplant trends from the United Network of Organ Sharing indicate that approximately 113,600 people are in need of a lifesaving solid organ as of June 2019. The majority have been diagnosed with kidney disease and liver disease.

The most recent data shows that, in 2016, the rate of kidney failure was highest among minority groups. For example, compared to whites, kidney failure was 9.5 times higher among Native Hawaiians and Pacific Islanders. Latinx individuals were over 50% more likely to be diagnosed with kidney failure than those who did not identify as Latinx.

Although minorities are more likely to be diagnosed with kidney failure, they are less likely to be transplanted. The majority of transplants in the U.S. go to whites.

These trends are also evident in groups suffering from liver disease. Asians and Latinx individuals are more likely to be diagnosed with liver failure, but less likely to receive a transplant.

What's causing these disparities?

A patient has to undergo several steps before they can receive a transplant.

These steps include a physician deciding that a transplant is medically suitable, the patient demonstrating interest in a transplant, a referral to a transplant center, completion of a pre-transplant evaluation and identification of a suitable living donor.

At each point of the transplant preparation process, there are opportunities for barriers to occur as a result of patient, provider, community and institutional factors. Together, these potentially create disparities in access.

Income level may play a role. Patients with organ failure who experience poverty, for instance, may face challenges covering the cost of their insurance co-payments, especially when they do not have comprehensive insurance or private insurance.

Literacy issues, such as gaps in formal education or English as a second language, may also impact a patient's ability to understand the medical terminology involved in their treatment. This would affect their ability to communicate effectively with their providers.

Limited knowledge of the benefits of transplantation can also affect patients' ability to access transplants. Patients who are unaware that transplantation is the preferred treatment may not complete the steps to transplant and instead remain on dialysis.

Providers can also play a role in limiting access. For example, doctors may not provide patients with the referral they need or wait longer to provide it.

Given negative historical experiences, such as the Tuskegee Syphilis Study, some patients, especially those who have been historically disadvantaged or are currently marginalized, mistrust medical providers. As a result, they are less likely to seek medical assistance or trust that their providers are giving them accurate information.

Also, patients who report experiences of discrimination by their medical providers are less likely to seek transplantation. They may be discouraged from seeking further medical care because they expect poor treatment by providers.

Low rates of organ donation also influence transplant rates. Although about 95% of Americans are in favor of organ donation, only 58% of them are registered as organ donors. These low donation rates are pronounced among racial/ethnic minorities. This could be attributed to factors such as not knowing other registered donors in one's community and mistrust of providers.

How can medical providers close the gap?

I am a counseling psychologist whose research examines health inequities and treatment. Given the enormity of these factors, I conducted a study with my colleague, Heather Gardiner, director of the Health Disparities Research Lab at Temple University.

We sought to identify barriers to the pre-transplant evaluation for African American kidney patients. Patients who complete this evaluation successfully become active on the waitlist.

We looked at barriers at several levels: individual barriers, such as limited income; health barriers, such as having multiple health conditions in addition to kidney disease; educational barriers, such as limited knowledge about the kidney transplant process; and systemic barriers, such as long wait times for medical appointments. We also asked people what motivated them to pursue a transplant.

Our research leads us to believe that changing systemic problems will help address problems at the other levels.

For example, medical providers could consider condensing the medical appointments and testing period for the pre-transplant evaluation. Patients who are motivated to get off dialysis will be more motivated to complete the pre-transplant evaluation if they are able to complete the majority of their medical testing at one place over a short period, rather than having to attend several medical appointments over a long period of time.



"Organ Donor" by Mika Marttila is licensed under CC BY-NC-SA 2.0

Policy changes also matter

In order to decide who gets an organ, medical providers give liver patients a MELD score that indicates the severity of their disease.

The introduction of the current liver allocation system in 2002 reduced the number of people from minority groups who died waiting for an organ.

Under the previous system, African Americans were more likely to die waiting for a liver transplant, because they generally had higher MELD scores, indicating that their disease was becoming worse. However, the current system prioritizes patients with high MELD scores, which has improved liver transplant rates for this group.

The 2014 policy change in kidney allocation allowed patients to count time spent on dialysis toward their total time spent on the waitlist, thereby reducing racial and ethnic disparities.

The success of these systemic changes illustrates the effectiveness of policy change. In my view, policies such as comprehensive Medicare coverage – with transportation assistance for all patients with kidney disease, for example – could potentially reduce many of the disparities along the steps to a successful transplant.

Countries such as Austria and Norway have seen significant improvements in their organ donation rates by using an opt-out system, which is based on the assumption that everyone consents unless an individual notes otherwise. Although this topic may be somewhat controversial in the U.S., I feel that the potential benefits of an opt-out policy are worth exploring.

Camilla Nonterah is Assistant Professor of Health Psychology, University of Richmond. Her essay was originally published in *The Conversation*.



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59: The Blue (Oomen)

Anne-Marie Oomen

#descriptive #analysis #cognitivebias #sharedvalues #pathos #kairos #ethos #selfdiscovery #nature #writinglife #artsandculture



"Yarn Tree!" by knittinandnoodlin is licensed under CC BY-NC-SA 4.0

In the end, the creatures found it. They were the ones who knew what to do.

A couple decades ago my dear friend Mimi gave me a blue sweater. Not just any blue sweater but one that had been knitted by her mother in Denmark. When her mother died, Mimi—who had gone to be with her—brought it back, and gave it to me. Open stitches, soft wool, equally soft shape—that loose pullover style meant for cuddling. And blue, a stunning, singing, deep song. Winter blue, dark sapphire blue, ah yes, Scandinavian blue.

I cherished the sweater. Each winter, I anticipated pulling it out of storage on the coldest mornings of our Michigan darkness. The warmth and color never faded; I could rely on it when things were unreliable. When I wore it, I always looked to the sky for a match, and found it finally in those clear-hued December evenings. That blue, strongest just before real dark fell.

The winter after I lost my father, I pulled the sweater off the shelf, shook it out, and was shocked and saddened to find moths had invaded. A handful of holes blinked in the weave. I mended it and wore it two more winters, but the yarn had weakened. More holes laced the knit. The sweater was done. Was that the spring I lost two more friends: one, heart attack; another, cerebral hemorrhage?

Finally, I took the blue into my arms, apologized to Mimi's mother, and threw it over the back clothesline hoping maybe the Waxwings would raid it; they like string and single strands of stuff. That sacre bleu hung all summer and early fall; no waxwings. The blue never faded, and with the first snows, it shone against the white of a thin new snow. I looked at it every morning I came to the porch, coffee in hand. Its shabby obstinacy drew my eyes.
I missed my father, my friends more than I could say.

One day, the sweater disappeared. Gone. I can't articulate the contradictions I felt. Relief—some thing had taken it at last, and loss—all over again. That swath of ultramarine had hung like a spirit friendship with a woman I never knew, but I did know because of her skill and her daughter's gift. It also stood for my lost friends. Their spirits, that blue. I studied the ground under the clothesline, scuffed through the garden, searching for the remnants. Nothing.

Later, while packing up the garden one rough-winded day, I caught sight of a blue strand. It led under the woodshed. When I dislodged an old clay pot, there, a blue tangle woven with dry leaves in a nest where a mouse or vole had kept warm. All through

late fall, I found traces, a strand hooked in the wood pile, a filament caught in the window box, and once, what might have been a clump in a tree. A squirrels' nest woven blue into the cross-hatch of high-tree debris?

They were using it, but I had not seen. Like grief I suppose, eventually we weave it in, but invisibly.

Around Thanksgiving, I found what remained of the sweater in the ravine below our house. Just tatters, but identifiable. It had finally faded to the tired blue after storm. What remained fell apart in my hands; those warm mornings frayed in my fingertips. I stood on the hillside, amazed. Here was a piece of sky, now of earth, scattered by chance winds and the choices of wild creatures. What was lost? Warmth, color, connection? What was gained? A nest, a coil of new meaning, some organic fiber woven into a home. I leave it there in the wild. I'm a fool for loss, but there's also beauty: sky on a partly sunny morning, light warming the winter garden, the ecology of being human with mouse, squirrel, sweater and winter.
That deep blue dusk as dark comes on.

It's not done yet. Nearing Solstice, as we move wood out of the woodshed, I discover a phoebe nest in the eaves. Left from summer. When I pull it down to check if the nest had been a success, there, a thin filament of blue looping in the grassy bowl of emptiness. All through our woods, that blue has been knitted a second time. This is how creatures do it, making useful those faded but enduring fibers. Here, just before the year turns, I tug a single-strand from spiraled grasses. I let it catch the wind. Here's what matters, the way this cast-off never fully decays, the way friendship lives on in memory, and then becomes sacred in its adaptive use—blue thread still linking an endless sky to a battered but vital earth.

Anne-Marie Oomen is author of *Lake Michigan Mermaid* with Linda Nemec Foster (Michigan Notable Book for 2018), *Love, Sex and 4-H* (Next Generation Indie Award for Memoir), *Pulling Down the Barn* (Michigan Notable Book); and *Uncoded Woman* (poetry), among others. She edited *ELEMENTAL: A Collection of Michigan Nonfiction*. She teaches at Solstice MFA at Pine Manor College (MA), Interlochen's College of Creative Arts (MI), and at conferences throughout the country.



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62: I Studied Buttons for 7 Years and Learned These 5 Lessons about How and Why People Push Them (Plotnick)

Rachel Plotnick

#systemanalysis, #reportinginformation, #research, #proposal, #descriptive, #logos, #science, #history

All day every day, throughout the United States, people push buttons – on coffee makers, TV remote controls and even social media posts they "like." For more than seven years, I've been trying to understand why, looking into where buttons came from, why people love them – and why people loathe them.

As I researched my recent book, "Power Button: A History of Pleasure, Panic, and the Politics of Pushing," about the origins of American push-button society, five main themes stood out, influencing how I understand buttons and button-pushing culture.

1. Buttons aren't actually easy to use



Just give it a try. George Eastman Museum/Wikimedia Commons Public Domain

In the late 19th century, the Eastman Kodak Company began selling button-pushing as a way to make taking photographs easy. The company's slogan, "You press the button, we do the rest," suggested it wouldn't be hard to use newfangled technological devices. This advertising campaign paved the way for the public to engage in amateur photography – a hobby best known today for selfies.

Yet in many contexts, both past and present, buttons are anything but easy. Have you ever stood in an elevator pushing the close-door button over and over, hoping and wondering if the door will ever shut? The same quandary presents itself at every crosswalk button. Programming a so-called "universal remote" is often an exercise in extreme frustration. Now think about the intensely complex dashboards used by pilots or DJs.

For more than a century, people have been complaining that buttons aren't easy: Like any technology, most buttons require training to understand how and when to use them.



Pilots need a lot of training and practice to know what to do with all those buttons. U.S. Air Force/Kelly White, Public Domain.

2. Buttons encourage consumerism

The earliest push buttons appeared on vending machines, as light switches and as bells for wealthy homeowners to summon servants.

At the turn of the 20th century, manufacturers and distributors of push-button products often tried to convince customers that their every whim and desire could be gratified at a push – without any of the mess, injury or effort of previous technologies like pulls, cranks or levers. As a form of consumption, button pushing remains pervasive: People push for candy bars and tap for streaming movies or Uber rides.



Just press here and get more detergent. Alexander Klink/Wikimedia Commons, CC BY

Amazon's "Dash" button takes push-button pleasure to the extreme. It's tempting to think about affixing single-purpose buttons around your house, ready to instantly reorder toilet paper or laundry detergent. But this convenience comes at a price: Germany recently outlawed Dash buttons, because they don't let customers know how much they'll pay when they place an order.

3. Button-pushers are often seen as abusive

Throughout my research, I discovered that people worry that buttons will fall into the wrong hands or be used in socially undesirable ways. My children will push just about any button within their reach – and sometimes those not within reach, too. The children of the late 19th and early 20th centuries were the same. People often complained about children honking automobile horns, ringing doorbells and otherwise taking advantage of buttons that looked fun to press.

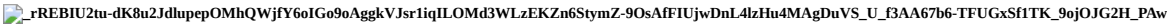
Adults, too, often received criticism for how they pushed. In the past, managers triggered ire for using push-button bells to keeping their employees at their beck and call, like servants. More recently there are stories in the news about disgraced figures like Matt Lauer using buttons to control the comings and goings of his staff, taking advantage of a powerful position.

4. Some of the most-feared buttons aren't real

Beginning in the late 1800s, one of the most common fears registered about buttons involved warfare and advanced weapons: Perhaps one push of a button could blow up the world.

Fortunately, starting a nuclear war is a bit harder than this. Image by Steve Watts from Pixabay

This anxiety has persisted from the Cold War to the present, playing prominently in movies like "Dr. Strangelove" and in news headlines. Although no such magic button exists, it's a potent icon for how society often thinks about push-button effects as swift and irrevocable. This concept is also useful in geopolitics. As recently as 2018, President Donald Trump bragged to North Korean leader Kim Jong Un over Twitter that "I too have a Nuclear Button, but it is a much bigger & more powerful one than his, and my Button works!"



5. Not a lot has changed in more than a century

As I completed my book, I was struck by how much voices of the past echoed those of the present when discussing buttons. Since the 1880s, American society has deliberated about whether button pushing is a desirable or dangerous form of interaction with the world.

Persistent concerns remain about whether buttons make life too easy, pleasurable or rote. Or, on the flip side, observers worry that buttons increase complexity, forcing users to fiddle unnecessary with "unnatural" interfaces.

Yet as much as people have complained about buttons over the years, they remain stubbornly present – an entrenched part of the design and interactivity of smartphones, computers, garage door openers, car dashboards and videogame controllers.

As I suggest in “Power Button,” one way to remedy this endless discussion about whether buttons are good or bad is to instead begin paying attention to power dynamics – and the ethics – of push buttons in everyday life. If people begin to examine who gets to push the button, and who doesn’t, in what contexts, under which conditions, and to whose benefit, they might begin to understand buttons’ complexity and importance.

Rachel Plotnick is Assistant Professor of Cinema and Media Studies at Indiana University and the author of *Power Button: A History of Pleasure, Panic and the Politics of Pushing.* Her essay first appeared in The Conversation.

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63: California Knew the Carr Wildfire Could Happen. It Failed to Prevent it. (Schneider)

Keith Schneider

#reportinginformation #research #nature #sharedvalues #descriptive #analysis #ethos #logos #kairos #currentevents #systemanalysis #environment #global



"180726-FS-Shasta-Trinity-CJ-EG-8079" by Forest Service Photography is licensed under CC PDM 1.0

On the afternoon of July 23, a tire on a recreational trailer blew apart on the pavement of State Route 299 about 15 miles northwest of Redding, California. The couple towing the Grey Wolf Select trailer couldn't immediately pull it out of traffic. As they dragged it to a safe turnout, sparks arced from the tire's steel rim. Three reached the nearby grass and shrubs; two along the highway's south shoulder, the third on the north. Each of the sparks ignited what at first seemed like commonplace brush fires.

But if the sparking of the brush fires was an unpredictable accident, what happened next was not. Fire jumped from the roadside into the Whiskeytown National Recreation Area, a 42,000-acre unit of the National Park Service. There, it gained size and velocity, and took off for the outskirts of Redding. The fire burned for 39 days and charred over 229,000 acres, and when the last embers died on Aug. 30, the fight to contain it had cost $162 million, an average of $4.15 million a day. Almost 1,100 homes were lost. Eight people died, four of them first responders.

Dozens of interviews and a review of local, state and federal records show that virtually every aspect of what came to be known as the Carr Fire — where it ignited; how and where it exploded in dimension and ferocity; the toll in private property — had been forecast and worried over for years. Every level of government understood the dangers and took few, if any, of the steps needed to prevent catastrophe. This account of how much was left undone, and why, comes at a moment of serious reassessment in California about how to protect millions of people living in vulnerable areas from a new phenomenon: Firestorms whose speed and ferocity surpass any feasible evacuation plans.

The government failure that gave the Carr Fire its first, crucial foothold traces to differences in how California and the federal National Park Service manage brush along state highways. Transportation officials responsible for upgrading Route 299 had appealed to Whiskeytown officials to clear the grass, shrubs and trees lining the often superheated roadway, but to no avail.

At the federal level, the park service official responsible for fire prevention across Whiskeytown's 39,000 acres of forest had been left to work with a fraction of the money and staffing he knew he needed to safeguard against an epic fire. What steps the local parks team managed to undertake — setting controlled fires as a hedge against uncontrollable ones — were severely limited by state and local air pollution regulations.

And both the residents and elected officials of Redding had chosen not to adopt or enforce the kind of development regulations other municipalities had in their efforts to keep homes and businesses safe even in the face of a monstrous wildfire.

The inaction in and around Redding took place as the specter of unprecedented fires grew ever more ominous, with climate change worsening droughts and heating the California landscape into a vast tinderbox.

The story of the Carr Fire — how it happened and what might have been done to limit the scope of its damage — is, of course, just one chapter in a larger narrative of peril for California. It was the third of four immense and deadly fires that ignited over a 13-month period that started in October 2017. Altogether they killed 118 people, destroyed nearly 27,000 properties and torched 700,000 acres. The Camp Fire, the last of those horrific fires, was the deadliest in California history. It roared through the Sierra foothill town of Paradise, killing 86 people.

More than a century ago, cities confronted the risk of huge fires by reimaging how they would be built: substituting brick, concrete and steel for wood. Conditions are more complicated today, to say the least. But it does seem that the latest spasm of spectacular fires has prompted some direct steps for protecting the state into the future.

In September, California lawmakers added $200 million annually to the California Department of Forestry and Fire Protection, or Cal Fire, budget over the next five years for fire prevention, up from $84.5 million in the current fiscal year. It's enough to finance bush clearing and lighting deliberate fires — so-called "fuels reduction" and "prescribed fire" — on 500,000 acres of open space, wildlands and forest.

The U.S. Forest Service and the U.S. Department of the Interior also are putting more emphasis and money into prevention. This year, federal and state agencies set prescribed fires to 85,000 acres of open lands, an increase of 35,000 acres over previous years and likely a record, said Barnie Gyant, the Forest Service's deputy regional forester in California.

In Redding, city officials have agreed to rethink how they will manage the several thousand acres of open land within the city limits.

But if these sorts of solutions are well understood, they have yet to attain widespread acceptance. An examination of the Carr Fire, including interviews with climate scientists, firefighters, policymakers and residents, makes clear that the task of adequately combating the real and present danger of fires in California is immense. And it's a task made only more urgent by a novel feature of the Carr Fire: its explosion into a rampaging tornado of heat and flames. The blaze is further evidence that the decisions made at every level of government to address the fire threat are not only not working, but they have turned wildfires into an ongoing statewide emergency.

Success will require government agencies at every level to better coordinate their resources and efforts, and to reconcile often competing missions. It will require both a strategic and budgetary shift to invest adequately in fire prevention methods, even as the cost of fighting fires that are all but inevitable in the coming years continues to soar. And it will require residents to temper their desires for their dream homes with their responsibility to the safety of their neighbors and communities.

"We repeatedly have this discussion," said Stephen Pyne, a fire historian at Arizona State University and the author of well-regarded books on wildfires in the West. "It has more relevance now. California has wildfire fighting capability unlike any place in the world. The fact they can't control the fires suggests that continuing that model will not produce different results. It's not working. It hasn't worked for a long time."

A Thin Strip of Land, but a Matchstick for Mayhem

State Route 299, where the Carr Fire began outside Redding, is owned and managed by the California Department of Transportation, or Caltrans. For two decades, it has been working to straighten and widen the mountain highway where it slips past 1,000-foot ridges and curves by the Whiskeytown National Recreation Area.

In 2016, Caltrans spent a week on Route 299 pruning trees and clearing vegetation along the narrow state right of way. And as they typically do with highways that cross national forest and parkland, Caltrans vegetation managers let the Whiskeytown leadership know they would like to do the same thing on federal land outside the right of way. The idea was to prevent fires by removing trees that could fall onto the highway, stabilizing hillsides and building new drainage capacity to slow erosion.

"The preferred practices are a clear fire strip from the edge of the pavement to 4 feet," said Lance Brown, a senior Caltrans engineer in Redding who oversees emergency operations, "and an aggressive brush and tree pruning, cutting and clearing from 4 feet to 30 feet."

But the transportation agency's proposal to clear fire fuel from a strip of federal land along the highway ran into some of the numerous environmental hurdles that complicate fire prevention in California and other states.

Whiskeytown's mission is to protect natural resources and "scenic values," including the natural corridor along Route 299. Clearing the roadside would have been classified as a "major federal action" subject to a lengthy review under the National Environmental Policy Act. Whiskeytown would have been obligated to conduct a thorough environmental assessment of risks, benefits and alternatives.

Public hearings also are mandated by law, and such a proposal almost certainly would have prompted opposition from residents devoted to protecting trees and natural beauty. And so the basic fire prevention strategy of clearing brush and trees along a state highway never got traction with Whiskeytown's supervisors.

Brown said the risks of leaving the trees and brush were clear. But he said Caltrans had no way to force the park to do anything.

Whiskeytown officials are "very restrictive," Brown said. "They don't want us to cut anything. They like that brush. They like that beauty. Our right of way is basically in their right of way."



USDA Forest Service officials and land owners discuss sharing stewardship of forests and future forest treatment strategies to recover lands. "Fire" by Pacific Southwest Region 5 is licensed under CC BY 4.0

Tom Garcia, the recreation area's fire manager, disputed the view that Whiskeytown opposed any kind of brush and tree clearing. "We most likely would not agree with a clear-cut type of fuel treatment," he said, "but most certainly would have very likely supported a thin-from-below type of treatment activity that reduced the shrub and brush undergrowth and thinned some of trees as opposed to mowing everything down to the ground level."

The threat posed by issues such as brush along the highway had drawn the worry of a local conservation group, as well.

The Western Shasta Resource Conservation District, devoted since the 1950s to safeguarding the region's land and water, prepared a report in 2016 that called for more than 150 urgent fire prevention projects around Redding. They included clearing roadsides of trees and flammable grass and brush, constructing wide clearings in the forest, and scrubbing brush from public and private lands.

Just two of the projects were funded, neither of them in the Carr Fire's path.

Rich in Fire Fuel; Starved for Money

The fire fed greedily on the dry roadside fuel left along Route 299 that day in late July. In minutes, it jumped from the state right of way into the federal park's thick stands of brush and small trees, and then up the steep ridge of chaparral, pine and oak.

It was the sort of scenario Garcia had been worrying about for years. A 28-year firefighting veteran, Garcia was known in California for being an aggressive member of the school of fire prevention. He advocated brush and tree clearing and lighting deliberate fires to keep small burns from turning into uncontrollable wildfires.

What he lacked was money. Garcia's budget for clearing, set by senior federal officials, provided just $500,000 a year for clearing brush and small trees, enough for about 600 acres annually. It was far, far less than needed. Garcia estimated that he should be clearing 5,000 acres a year. Given the budget constraints, he decided to focus on what he viewed as the highest risk area: the park's eastern boundary closest to Redding's expanding subdivisions and outlying communities. Garcia took a chance; he left Whiskeytown's northern region, the forest farthest from Redding, largely untouched.

The risk was significant. A decade earlier, a fire had burned 9,000 acres in much the same area. By July 2018, the land had recovered and supported a new fire feast: Manzanita, oak, small conifers and decaying timber, a dry mass of fuel ready to burn.

Garcia was deeply frustrated. Clearing fuels works, he said. The 600 acres of Whiskeytown that Garcia had treated on a rotating schedule easily survived the Carr Fire. Clearly visible lines ran up the ridges, like a photograph divided into black-and-white and full-color panels. On one side stood tree skeletons charred by the blaze. On the other, healthy groves of green trees.

But despite such proven effectiveness, fuels reduction has never attained mainstream acceptance or funding in Sacramento, the state capital, or in Washington, D.C. Half of Garcia's annual $1 million fire management budget pays for a crew of firefighters and a garage full of equipment to respond to and put out fires. The other half is devoted to clearing brush and small trees.

Garcia said it would cost about $3.5 million to treat 5,000 to 6,000 acres annually. A seven-year rotation would treat the entire park, he said. The risk of fires bounding out of Whiskeytown would be substantially reduced, Garcia said, because they would be much easier to control.

In Garcia's mind, the price paid for starving his budget was enormous: The Carr Fire incurred $120 million in federal disaster relief, $788 million in property insurance claims, $130 million in cleanup costs, $50 million in timber industry damage, $31 million in highway repair and erosion control costs, $2 million annually in lost property tax revenue and millions more in lost business revenue.

"For $3.5 million a year, you could buy a lot more opportunity to prevent a lot of heartache and a lot of destruction," Garcia said. "You'd make inroads, that's for sure. Prevention is absolutely where our program needs to go. It's where California needs to go."

Stoked by the land Garcia had been unable to clear, the Carr Fire raged, despite the grueling work of almost 1,400 firefighters, supported by 100 fire engines, 10 helicopters, 22 bulldozers and six air tankers. The firefighters were trying to set a perimeter around the angry fire, which was heading north. In two days it burned over 6,000 acres and incinerated homes in French Gulch, a Gold Rush mining town set between two steep ridges.

Late on July 25, the fire changed course. The hot Central Valley began sucking cold air from the Pacific Coast. By evening, strong gusts were pushing the fire east toward Redding at astonishing speed. By midnight, the Carr Fire, now 60 hours old, had charged across 10 miles and 20,000 acres of largely unsettled ground.

The fire raced across southwest Shasta County. By early evening on July 26, it burned through 20,000 more acres of brush and trees and reached the Sacramento River, which flows through Redding. From a rise at the edge of his Land Park subdivision, Charley Fitch saw flames 30 feet tall. A diabolical rain of red embers was pelting the brush below him, sparking new fires. He jumped into his vehicle, drove back to the house and alerted his wife, Susan, it was time to leave.

"Do You Like the Brush or Do You Want Your Home to Burn?"

On the outskirts of Redding, the Carr Fire encountered even more prodigious quantities of fuel: the homes and plastic furniture, fences, shrub and trees of exurban Shasta County.

Two hours past midnight on July 26, Jeff Coon was startled awake by his dogs. Through the curtain he saw the flashing blue lights of a passing county sheriff cruiser. He heard evacuation orders sternly issued over bullhorns. Coon, a retired investment adviser,

smelled smoke. The sky east of his home on Walker Terrace, in the brush and woodlands 5 miles west of Redding, was red with wildfire.

Almost every other wildfire Coon experienced in Redding started far from the city and headed away from town. The Carr Fire was behaving in surprising ways. It was bearing down on Walker Terrace, which is where the ring of thickly settled development in the brush and woods outside Redding begins. Coon's Spanish tile ranch home at the end of the street would be the first to encounter the flames.

"I jumped into my truck and caught up with the sheriff down the road," Coon recalled. He said: 'Evacuate immediately! Like now!' My wife and I didn't pack much. She grabbed the dogs and some food. I grabbed some shirts."

In the terrible and deadly attack over the next 20 hours, the Carr Fire killed six people — four residents and two firefighters — and turned nearly 1,100 houses into smoking rubble, including all but two of the more than 100 homes in Keswick, a 19th-century mining-era town outside Redding. Two more first responders died after the fire burned through Redding.

The horrific consequences were entirely anticipated by city and county authorities. Both local governments prepared comprehensive emergency planning reports that identified wildfire as the highest public safety threat in their jurisdictions. Redding sits at the eastern edge of thousands of acres of brushy woodlands, known as the wildland urban interface, now thick with homes built over the past two decades and classified by the state and county as a "very high fire hazard severity zone." Nearly 40 percent of the city is a very high hazard severity zone.

To reduce the threat, the county plan calls for a "commitment of resources" to initiate "an aggressive hazardous fuels management program," and "property standards that provide defensible space." In effect, keeping residents safe demands that residents and authorities starve fires.

The Redding emergency plan noted that from 1999 to 2015, nine big fires had burned in the forests surrounding Redding and 150 small vegetation fires ignited annually in the city. The city plan called for measures nearly identical to the county's to reduce fuel loads. And it predicted what would happen if those measures weren't taken. "The City of Redding recently ran a fire scenario on the west side, which was derived from an actual fire occurrence in the area," wrote the report's authors. "As a result of the fire-scenario information, it was discovered that 17 percent of all structures in the city could be affected by this fire."

The planning reports were mostly greeted by a big civic yawn. City and county building departments are enforcing state regulations that require contractors to "harden" homes in new subdivisions with fireproof roofs, fire-resistant siding, sprinkler systems and fire-resistant windows and eaves. But the other safety recommendations achieved scant attention. The reason is not bureaucratic mismanagement. It's civic indifference to fire risk. In interview after interview, Redding residents expressed an astonishing tolerance to the threat of wildfires.

Despite numerous fires that regularly ignite outside the city, including one that touched Redding's boundary in 1999, residents never expected a catastrophe like the Carr Fire. In public opinion polls and election results, county and city residents expressed a clear consensus that other issues — crime, rising housing prices, homelessness and vagrancy — were much higher priorities.

Given such attitudes, fire authorities in and outside the city treated the fire prevention rules for private homeowners as voluntary. State regulations require homeowners in the fire hazard zones to establish "defensible spaces." The rules call for homeowners to reduce fuels within 100 feet of their houses or face fines of up to $500. Cal Fire managers say they conduct 5,000 defensible space inspections annually in Shasta County and neighboring Trinity County. Craig Wittner, Redding's fire marshal, said he and his team also conduct regular inspections.

State records show not a single citation for violators was issued in Shasta County in 2017 or this year.

Wittner explained how public indifference works in his city. Each year his budget for brush clearing amounts to about $15,000. Yet even with his small program, residents complain when crews cut small trees and brush. "They like living close to nature," he said. "They like the privacy. I put it to them this way: Do you like the brush or do you want your home to burn down?"

Redding owns and manages more than 2,000 acres of public open space, about a quarter of the heavily vegetated land within city boundaries. The city's program to clear brush from public lands averages 50 acres annually. Brush and clearing on private land is virtually nonexistent. Whether or not that changes could hinge on a lawsuit filed in mid-September and a new property tax program being prepared by city officials.

Jaxon Baker, the developer of Land Park and Stanford Hills, two major residential complexes, filed the suit. In it he argued that the city anticipated the deadly consequences of a big fire in west Redding, but did not adequately follow its own directives to clear brush from city-owned open spaces. Redding's Open Space Master Plan, completed in August, sets out goals for future land and recreational investments. It does not mention fire as a potential threat. Baker's suit called for rescinding that plan and writing a new one that identifies fire as a higher priority in municipal open space management. "It makes sense," Baker said. "We have a lot of city-owned land that burns. We just learned that."

On Nov. 6, the Redding City Council acknowledged that Baker was right and rescinded the Open Space Master Plan, thereby resolving the lawsuit. Preparations for writing a new one have not yet been addressed by the council. Barry Tippin, Redding's city manager, said that city officials are preparing a proposal to establish a citywide defensible space district and a new property tax to sharply increase public spending for fuels reduction on public and private land. "This is a city that is leery of new taxes," Tippin said. "But after what happened here in the summer, people may be ready for this kind of program."

Coon, who had evacuated his neighborhood as fire engulfed it, returned to find his home standing. He wasn't surprised. Prevention, he said, works, and he invested in it, even without any local requirements that he do so.

Though his home was built in 1973 and remodeled in 1993, it met almost all of the requirements of Shasta County's latest fire safe building codes. The mansard roof was fire resistant, as were the brick walls. Coon paid attention, too, to the eaves, which he kept protected from blowing leaves. And he didn't have a wooden fence.

Prompted by his son, a firefighter with Cal Fire, and his own understanding of fire risk, Coon had also established a big perimeter of light vegetation around his house, a safe zone of defensible space. He worked with the Bureau of Land Management to gain a permit to clear a 100-foot zone of thick brush and small trees from the federal land that surrounded his house. He trimmed his shrubs, kept the yard clear of leaves and branches, cleaned out the gutters and discarded plastic items that could serve as fuel. On days designated for burning, he incinerated debris piles.

The project took two summers to complete. When he was finished, his home stood amid a big open space of closely cut grass, rock and small shrubs. In effect, Coon had set his home in a savanna, a fire-safe setting that looked much different from the shaded, grassy, shrub and leafy yards of neighbors who clearly liked mimicking the federal woodlands that surrounded them.

When Coon returned to Walker Terrace days after the fire passed through Redding, his yard was covered in ash and charred tree limbs. But his house remained. So did the garage where he kept his prized 1968 Camaro.

"How Do You Want Your Smoke?"

A warming planet, conflicting government aims, human indifference or indolence — all are serious impediments to controlling the threat of wildfires in California. But they are not the only ones.

Add worries about air pollution and carbon emissions.

The California air quality law, enforced by county districts, requires fire managers interested in conducting controlled burns as a way of managing fire risk to submit their plans for review in order to gain the required permits. County air quality boards also set out specific temperature, moisture, wind, land, barometric, personnel and emergency response conditions for lighting prescribed fires.

The limits are so specific that Tom Garcia in the Whiskeytown National Recreation Area said only about six to 10 days a year are suitable for managed burns in Shasta County.

John Waldrop, the manager of the Shasta County Air Quality District, said he's sympathetic to Garcia's frustration but determined to meet his obligations to protect the public's health. Waldrop said that federal and state agencies and private timber operators lit prescribed burns on an average of 3,600 acres annually in Shasta County over the last decade. Most burns are less than 100 acres, which fits his agency's goal of keeping the air clean and fine particulate levels below 35 micrograms per cubic meter, the limit that safeguards public health.

Waldrop said it would take 50,000 acres of prescribed fire annually to clear sufficient amounts of brush from the county's timberlands to reduce the threat of big wildfires. That means approving burns that span thousands of acres and pour thousands of tons of smoke into the air.

“From an air quality standpoint, that is a harder pill for us to swallow,” Waldrop said.

Balancing the threat of wildfires against the risk of more smoke is a choice that Shasta residents may be more prepared to make. During and after the Carr Fire, Redding residents breathed air for almost a month with particulate concentrations over 150 micrograms per cubic meter. That is comparable to the air in Beijing.

“We’re at a point where society has to decide,” Waldrop said, “how do you want your smoke? Do you want it at 150 micrograms per cubic meter from big fires all summer long, or a little bit every now and again from prescribed burning?”

Another air pollution challenge Californians face is the troubling connection between wildfires and carbon emissions. Two years ago, California passed legislation to reduce carbon dioxide and other greenhouse gases to 258.6 million metric tons annually by 2030. That is a 40 percent reduction from levels today of about 429 million metric tons a year.

Reaching that goal, a stretch already, will be far more difficult because of runaway wildfires. Last year, wildfires poured 37 million metric tons of carbon dioxide into California’s atmosphere, according to a state report made public this year. Even higher totals are anticipated for 2018.

Efforts to quell the fires with more prescribed burns will add, at least for a number of years, more carbon dioxide. Prescribed fires produce an average of 6 tons of carbon per acre, according to scientific studies. Burning half a million acres annually would produce 3 million more metric tons of greenhouse gases.

A Matter of Priorities and Focus

For now, California can seem locked in a vicious and unwinnable cycle: Surprised anew every year by the number and severity of its wildfires, the state winds up pouring escalating amounts of money into fighting them. It’s all for a good, if exhausting, cause: saving lives and property.

But such effort and expenditure drains the state’s ability to do what almost everyone agrees is required for its long-term survival: investing way more money in prevention policies and tactics.

“It’s the law of diminishing returns,” Garcia said. “The more money we put into suppression is not buying a lot more safety. We are putting our money in the wrong place. There has to be a better investment strategy.”

Just as drying Southwest conditions forced Las Vegas homeowners to switch from green lawns to desert landscaping to conserve water, fire specialists insist that Californians must quickly embrace a different landscaping aesthetic to respond to the state’s fire emergency. Defensible spaces need to become the norm for the millions of residents who live in the 40 percent of California classified as a high fire-threat zone.

Residents need to reacquaint themselves with how wicked a wildfire can be. Counties need to much more vigorously enforce defensive space regulations. Sierra foothill towns need to establish belts of heavily thinned woodland and forest 1,000 feet wide or more, where big fires can be knocked down and extinguished. Property values that now are predicated on proximity to sylvan settings need to be reset by how safe they are from wildfire as they are in San Diego and a select group of other cities.

“We solved this problem in the urban environment,” said Timothy Ingalsbee, executive director of Firefighters United for Safety, Ethics, and Ecology, a national wildfire research and policy group in Oregon. “Towns were all once made of wood. The Great Chicago Fire. The San Francisco fire. We figured out they can’t make cities out of flammable materials. They hardened them with brick and mortar and building codes and ordinances for maintaining properties.

“This is a really solvable problem with the technology we have today. Making homes and communities that don’t burn up is very solvable. It’s a matter of priorities and focus.”

In a select group of towns in and outside California, residents have gotten that message. Boulder, Colorado, invested in an expansive ring of open space that surrounds the city. It doubles as a popular recreation area and as a fuel break for runaway fires that head to the city.

San Diego is another example. After big and deadly fires burned in San Diego in 2003 and 2007, residents, local authorities and San Diego Electric and Gas sharply raised their fire prevention efforts. Thirty-eight volunteer community fire prevention councils were formed and now educate residents, provide yard-clearing services and hold regular drives to clear brush and trees. SDE&G

has spent $1 billion over the last decade to bury 10,000 miles of transmission lines, replace wooden poles with steel poles, clear brush along its transmission corridors and establish a systemwide digital network of 177 weather stations and 15 cameras.

The system pinpoints weather and moisture conditions that lead to fire outbreaks. Firefighting agencies have been considerably quicker to respond to ignitions than a decade ago. SDE&G also operates an Erickson air tanker helicopter to assist fire agencies in quickly extinguishing blazes.

The area's experience with wildfire improved significantly.

"We haven't gone through anything like what we had here in 2003 and 2007," said Sheryl Landrum, the vice president of the Fire Safe Council of San Diego County, a nonprofit fire prevention and public education group. "We've had to work hard here to educate people and to convince people to be proactive and clear defensible spaces. People are aware of what they need to do. Our firefighting capabilities are much more coordinated and much stronger."

Keith Schneider, a former national correspondent and a contributor to the *New York Times*, is the senior editor and producer at Circle of Blue, which covers the global freshwater crisis from its newsroom in Traverse City, Michigan. This article was originally published by ProPublica.

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64: Ending the Secrecy of the Student Debt Crisis (Schorin)

Gerald Schorin

#causalargument, #kairos, #ethos, #sharedvalues, #argument, #reportinginformation, #currentevents, #cognitivebias, #logos



"7th Ford F-150" by IFCAR is in the Public Domain, CC0

No one who has ever worked in Detroit's auto manufacturing sector could possibly be surprised by General Motors bringing Cadillac back home after a four-year foray in trendy Manhattan.

In fact, it's much the same dynamic that prompted Ford under Jacques Nasser to move Lincoln to Irvine, Calif., and then bring the luxury Premier Automotive Group — Aston Martin, Jaguar, Land Rover, Volvo and Lincoln — together in that same venue. That was 1999. Lincoln announced its return to Dearborn in 2002, and in 2009, with Ford then under Alan Mulally's leadership, the Premier Auto Group was dissolved.

Management failure? No doubt. But it's not difficult to understand their thinking in wanting to bring younger buyers, a more Euro luxury image and trendiness to aging brands mostly purchased and leased by aging customers. After all, as the famous Detroit maxim goes: "You can sell an old man a young man's car, but you can't sell a young man an old man's car."

But while wanting to transform a vehicle preferred by older buyers into one desired by younger ones is understandable, success is rare, and both companies made it near impossible. Cadillac's and Lincoln's coastal relocations consisted of small staff numbers — 110 for Cadillac and 90 for Lincoln — most of whom were marketing, sales and communications specialists.

What remained in Detroit were the real power functions: design, engineering, finance and, most importantly, the executive decision-making group. And any trendy cachet the companies hoped to earn by the moves was largely illusory, fueled by purchased advertising and sponsored events but rarely if ever yielding spontaneous brand- or consumer-generated response.

Castigating domestic automaker leadership is a time-honored Detroit sport, but in this case, that's overly simplistic because what the domestics do well, they do really well — trucks, for example, and more often than not, sedans. That's because trucks and sedans are heart-of-the-market mass-production products. They speak to Detroit and middle-American values. They're driven and understood by all of us, including GM and Ford executives and employees who were born, went to school and reside in Michigan.

And the intuitive understanding we have about a Ford F-150 or Chevy Silverado doesn't quite extend to a small car or a true sports car or a luxury sedan that might appeal to someone in his or her 30s or 40s. Those just aren't a core part of our vehicular DNA.

Gerry Schorin has worked in advertising and marketing and taught advertising at Michigan State University. He currently consults with the Traverse Bay Strategy Group. gschorin@gmail.com

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65: Ending the Secrecy of the Student Debt Crisis (Senderowicz)

Daniela Senderowicz

#proposal, #systemanalysis, #sharedvalues, #finances, #currentevents, #logos, #ethos, #kairos, #reportinginformation #policy



Fear of facing society's ostracism for failure to pay them back has left borrowers alienated and trapped in a lending system that is engulfing them in debt bondage. "Face in the Dark" by Elijah Hiett via Unsplash

Gamblers and reality TV stars can claim bankruptcy protections when in financial trouble, but 44 million student loan borrowers can't. Unemployed, underpaid, destitute, sick, or struggling borrowers simply aren't able to start anew.

With a default rate approaching 40 percent, one would expect armies of distressed borrowers marching in the streets demanding relief from a system that has singled out their financial anguish. Distressed student debtors, however, seem to be terror-struck about coming forward to a society that, they say, ostracizes them for their inability to keep up with their finances.

When we spoke to several student borrowers, almost none were willing to share their names. "I can't tell anyone how much I'm struggling," says a 39-year-old Oregon physician who went into student loan default after his wife's illness drained their finances. He is terrified of losing his patients and reputation if he speaks out about his financial problems.

"If I shared this with anyone they will look down upon me as some kind of fool," explains a North Carolina psychologist who is now beyond retirement age. He explains that his student debt balance soared after losing a well-paying position during the financial crisis, and that he is struggling to pay it back.

Financial shame alienates struggling borrowers. Debtors blame themselves and self-loathe when they can't make their payments, explains Colette Simone, a Michigan psychologist. "There is so much fear of sharing the reality of their financial situation and the devastation it is causing in every facet of their lives," she says. "The consequences of coming forward can result in social pushback and possible job–related complications, which only deepen their suffering."

Debtors are isolated, anxious, and in the worst cases have taken their own lives. Simone confirms that she has "worked with debtors who were suicidal or had psychological breakdowns requiring psychiatric hospitalization."

With an average debt of just over $37,000 per borrower for the class of 2016, and given that incomes have been flat since the 1970s, it's not surprising that borrowers are struggling to pay. Student loans have a squeaky-clean reputation, and society tends to view them as a noble symbol of the taxpayers' generosity to the working poor. Fear of facing society's ostracism for failure to pay them back has left borrowers alienated and trapped in a lending system that is engulfing them in debt bondage.

"Alienation impacts mental health issues," says New York mental health counselor Harriet Fraad. "As long as they blame themselves within the system, they're lost."

Student debtors can counter despair by fighting back through activism and political engagement, she says. "Connection is the antidote to alienation, and engaging in activism, along with therapy, is a way to recovery."

Despite the fear of coming forward, some activists are building a social movement in which meaningful connections among borrowers can counter the taboo of openly admitting financial ruin.

Student Loan Justice, a national grassroots lobby group, is attempting to build this movement by pushing for robust legislation to return bankruptcy protections to borrowers. The group has active chapters in almost every state, with members directly lobbying their local representatives to sign on as co-sponsors to HR 2366. Activists are building a supportive community for struggling borrowers through political agitation, local engagement, storytelling, and by spreading a courageous message of hope that may embolden traumatized borrowers to come forward and unite.

Julie Margetaa Morgan, a fellow at The Roosevelt Institute, recently noted that student debt servicers like Navient have a powerful influence on lawmakers. “Student loan borrowers may not have millions to spend on lobbying, but they have something equally, if not more, powerful: millions of voices,” she says.

A recent manifesto by activist and recent graduate Eli Campbell calls for radical unity among borrowers. “Young people live in constant fear that they’ll never be able to pay off their debt. We’re not buying houses or able to afford the hallmarks of the American dream,” he explains.

In his call for a unified national boycott of student loan payments, inevitably leading to a mass default on this debt, Campbell hopes to expose this crisis and instigate radical change. In a recent interview he explained that the conditions for borrowers are so bad already that debtors may not join the boycott willingly. Instead, participation may simply happen by default given the lack of proper work opportunities that lead to borrowers’ inability to pay.

While a large-scale default may not happen through willful and supportive collective action, ending the secrecy of the crisis through massive national attention may destigmatize the shame of financial defeat and finally bring debtors out of the isolation that causes them so much despair.

Activists are calling for a significant conversation about the commodification of educating our youth, shifting our focus toward investing into the promise of the young and able, rather than the guarantee of their perpetual debt bondage. In calling for collective action they soothe the hurt of so many alienated debtors, breaking the taboos that allow them to say, “Me, too” and admit openly that in this financial climate we all need each other to move forward.

Daniela Senderowicz is a Northwest activist and writer. This essay is reprinted from Yes! Magazine.

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66: Education in the (Dis)Information Age (Shaffer)

Education in the (Dis)Information Age

Kris Shaffer

#education #analysis #argument #technology #advice #logos #disinformation #cognitivebias



"Cause I'd Rather Pretend I'll Still Be There At The End" by Bethan Phillips on Flickr; CC BY-NC-ND 2.0

We are all on the front lines in the war against disinformation.

I recently visited a seminar course for history majors at University of Mary Washington. In that course, students are digging into the differences between primary and secondary sources (a letter written *by* someone vs. a book written *about* them), learning the different means of evaluating each, and exploring ways to filter through the bias inherent in *every* source. I was there specifically to help them as they work through how to communicate their findings to a public, non-academic audience on the open web.

As we worked through some of the technical details, we also talked about the importance of what they were doing in that course in terms of the modern information landscape. After all, "fake news" has everyone talking about the reliability and bias of all kinds of information sources. Of all the things we could have talked about, though — Twitter bots, AI-generated video, memes, mainstream vs. partisan news media, Wikipedia, Wikileaks… — we spent most of our time on the hyperlink.

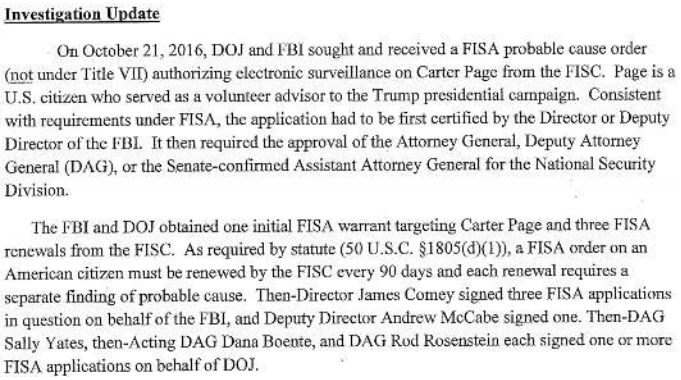
The hyperlink.

The oldest and simplest of internet technologies, the hyperlink and the "new" kind of text it affords — hypertext — is the foundational language of the internet, HyperText Markup Language (HTML). Hypertext connects all the disparate pieces of the web together. And it's Sci-Fi name isn't an accident. It's hyperdrive for the internet, bending information space so that any user can travel galaxy-scale information distances with a small movement of a finger. The hyperlink still remains one of the most powerful elements of the web. In fact, I'd argue that *the hyperlink is our most potent weapon in the fight against disinformation*.

Now, I'm not talking about URLs, or "web addresses." Yes, I can go anywhere on the internet if I know, and type, the right URL into the box at the top of my web browser. But a hyperlink is more than that. My site's URL is pushpullfork.com, and colloquially many of us would call that the "link" to my site. But this is a hyperlink to my site — a tiny bit of colorful, underlined text that has the power to bend space and move information. That simple idea of text "marked up" with hyperlinks is the revolutionary idea of the internet. And it's not just "marked up" as in highlighted, underlined, or even digitally annotated — it's more than just what we'd write in the margins of our physical books. Clicking (or, most likely these days, tapping) on a link can take you to a whole other dimension of the internet. With one pull of the muscles in your finger, you can transform an artifact that looks very much like the artifacts we engaged in our pre-internet world of *information poverty* — a body of text that we can hold in our hands — into a portal to the world of *information abundance*.

But what does this have to do with history majors and evaluating information sources?

Think about what a digital historian (or musicologist or journalist or physicist or lawyer) can do with the hyperlink. Let's take a primary source — an original document produced by people we are studying in the course of events we want to know more about — and see just what it can do.



Investigation Update

On October 21, 2016, DOJ and FBI sought and received a FISA probable cause order (not under Title VII) authorizing electronic surveillance on Carter Page from the FISC. Page is a U.S. citizen who served as a volunteer advisor to the Trump presidential campaign. Consistent with requirements under FISA, the application had to be first certified by the Director or Deputy Director of the FBI. It then required the approval of the Attorney General, Deputy Attorney General (DAG), or the Senate-confirmed Assistant Attorney General for the National Security Division.

The FBI and DOJ obtained one initial FISA warrant targeting Carter Page and three FISA renewals from the FISC. As required by statute (50 U.S.C. §1805(d)(1)), a FISA order on an American citizen must be renewed by the FISC every 90 days and each renewal requires a separate finding of probable cause. Then-Director James Comey signed three FISA applications in question on behalf of the FBI, and Deputy Director Andrew McCabe signed one. Then-DAG Sally Yates, then-Acting DAG Dana Boente, and DAG Rod Rosenstein each signed one or more FISA applications on behalf of DOJ.

This is an excerpt from the recently declassified and publicized memo about the FBI investigation into possible collusion between the Trump U.S. presidential campaign and the Russian government. This memo is presented in its original form: a scanned image of a typed and printed paper document. (To be fair, the "original" memo was printed, and before that lived on someone's computer. But the scanned image is the form it was in when first released to the public as a declassified document.) Here's the text of that excerpt:

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By selecting and retyping that excerpt, I've already done some significant things. First, I've honed in on a particular passage for a particular reason — in this case, one I can use to illustrate my point about hyperlinks. This choice leaves things out, though, and readers who engage it for different purposes may be (mis)led in certain directions because of what was included and what was left out. More digital-specific, I've made the text searchable and accessible — the original PDF from which I extracted that image had no embedded text, it was just a scan of a printed document. That means it was inaccessible to people with visual impairments, and was not able to be indexed by search engines. (No doubt there are searchable-text versions floating around by now, but for the sake of our discussion, it is important to note that most primary sources *are* simple images/scans like this one, which is, after all, the version linked by the New York Times.)

I've also added some structure, based on my interpretation. The heading "Investigation Update" was simply underlined in the original, but I know that is an older, typrewriter-based practice that denotes a section heading. So I replaced the underline with an HTML tag (<h3>) that gives it a place in the hierarchy that every web app understands and renders consistently — including screen readers and other text-to-speech apps. (I've similarly converted the typewriter-based underlined text to the *italics* that we're more used to seeing in books and on the web. Some purists may balk at both of these changes, but based on my expertise in publishing and the web, I'm considering the typewriter and book/web versions equivalent, and "translating" the document from one domain into another.)

But let's do something a little more dynamic:

Investigation Update

On October 21, 2016, DOJ and FBI sought and received a FISA probable cause order (*not* under Title VII) authorizing electronic surveillance on Carter Page from the FISC. Page is a U.S. citizen who served as a volunteer advisor to the Trump presidential campaign. Consistent with requirements under FISA, the application had to be first certified by the Director or Deputy Director of the FBI. It then required the approval of the Attorney General, Deputy Attorney General (DAG), or the Senate-confirmed Assistant Attorney General for the National Security Division.

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I've added links, obviously. But look more closely at what I've added. In the first paragraph, I've added links to Wikipedia — a generally reliable source with active checks against overt bias and disinformation, and with its own curated links to other sources. Likewise, the first link in the second paragraph is to the referenced legal code on an informational site hosted by Cornell University. By adding these links, I can provide context that provides balanced, in-depth information to help someone reading this memo for the first time to understand the background and make more informed, nuanced judgments about its content.

But look at the last two links. One is to FoxNews, and the other to FiveThirtyEight. The FoxNews link isn't *really* about Andrew McCabe. But it does mention him in the context of a discussion of the top brass at Comey's FBI … now leaving, and in McCabe's case "stepping down amid questions about his handling of the Clinton email case," according to Fox. The FiveThirtyEight piece is about the impact of the release of the Comey letter, and its negative impact on Clinton's campaign.

While both of these articles present facts, there are clear biases presented as well. Fox's article attempts to discredit McCabe, where the presence of a link to FiveThirtyEight can betray, or invoke, pro-Clinton and anti-Trump-administration emotions. By linking to either, I can trigger memories and emotions that exert some influence over the reader's interpretation of what follows in the memo.

And that's where the history major (or, really, any individual whose mind is tuned to think critically about sources in context) comes in. With experience in evaluating and distinguishing various kinds of sources, the critically minded student can parse these links and filter bias to pull nuanced meaning from these various texts. More importantly in our current information landscape, the student/professor/researcher-as-public-scholar/educated-graduate-as-mindful-citizen can curate the best primary and secondary sources as links, and use the opportunity not simply to prove their credentials and bolster their argument, but to educate the public, bringing more light than heat to whatever issue they are unpacking.

Think about it this way. If I'm the first person to take a primary source, transcribe (or translate) it, and annotate it with hyperlinks, and my public, digital writing gains traction, it will fast become the go-to source at the top of the search results. My hyperlinks and commentary will become the portal to the resources that people engage to gain context, background, and nuance. It's a tremendous responsibility, but also a tremendous opportunity, to connect my skills as an academic and a humanist to the issues of the day, in an attempt to bring nuance and truth to the public consciousness.

On the flip side, if no one does this, or if they wait too long, the clickbait and conspiracy theories will win out.

Now, some might think that all of this would go without saying. This is the twenty-first century, digital natives, and all that. But there are two huge barriers to this kind of action being the default for educated users of the web.

First, academic work — both for students and faculty — still tends to be centered around traditional, pre-web conventions of writing. The printed book/article/essay, with footnotes and a bibliography, does not speak the language of the web, and footnotes/endnotes on a website do not encourage an audience to engage with more material more deeply. Putting an academic paper *on the web* is nothing like writing *for the web*. Until more faculty help their students learn to do the latter (and until faculty promotion and retention policies encourage faculty *themselves* to be fluent in writing for a public audience on the web), we'll continue to raise up future generations of graduates (including the next generation of professors) who aren't ready for their role in the fight against disinformation.

Second, *social-media platforms have worked hard to kill the hyperlink*. Sure, there are plenty of links to click on, but *they aren't generated by users*. Remember the difference between a link and a URL. I can paste a URL into a tweet or a Facebook post and it becomes clickable, but *I cannot write in hypertext*. I cannot *annotate* and *link* my writing with that of others. And including

multiple URLs confuses the platforms! (It would be ironic that platforms whose financial well being is determined by clicks would have this problem — if we didn't know better.) Social media are designed to share text, images, video, and articles, but not to write in hypertext — the language of the web. After all, if I actually click on all those links, I leave the platform… and take my ad-revenue-generating clicks with me. And so I notice more and more that while the students and faculty I work with know what it means to *read* the language of the web (including clicking on links), they have been conditioned against *writing* the language of the web (including inserting properly functioning links into their text). It takes a conscious effort to resist this conditioning — conditioning which, in many ways, feels very similar to and is reinforced by traditional, hyperlink-less academic writing.

The internet was created by and for universities and government researchers. It's not surprising that when researchers first started networking together digitally, they created a language based around a digital form of citation — hypertext. It's also not surprising that as the internet has become commercialized, the language of open information discovery and sharing has been supplanted by platforms that limit the forms our discourse may take, in order to serve their own profit-driven agendas. As propagandists and perpetrators of (dis)information operations find those social-media limitations amenable to their aims, we need to resist. And we resist not only with better information, and better interpretation, but in recovering the language of the internet — the language of (digital) scholarship.

It's time we brought back the hyperlink and learned how to really use it. It's time we used information abundance to our advantage. And it's time we disentangled our communications from platforms tuned for the spread of disinformation. The health of our democracies just might depend on it.

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67: What the US Could Learn about Vaccination from Nigeria (Shankar)

By Shobana Shankar



Two women sell roadside refreshments in rural Kano in 2011. Shobana Shankar, CC BY-SA

To consider that Nigeria, infamous for anti-vaxx campaigns leading to polio outbreaks, has any lessons for Americans may be shocking.

But as measles cases in the U.S. climb to an all-time high after the disease was declared eliminated in 2000, U.S. public health officials have been looking for ways to address the problem.

As a researcher on religious politics and health, I believe that Nigeria's highly mobilized efforts to eliminate polio can teach America how to reverse the increase in measles cases and shore up its public health infrastructure. Working with international partners, Nigerians have combated misinformation, suspicion of vaccine science and religion-based boycotts to go from ground zero for polio on the African continent in 2003 to nearly polio-free in 2019.

Comparing Nigeria and the US

When the Global Polio Eradication Initiative (GPEI) was established in 1988 with the goal of complete eradication by 2000, several countries could not meet the target.

India needed another 14 years, while Nigeria, Pakistan and Afghanistan faced stiff internal opposition to immunization. GPEI's big 2003 push came shortly after Nigeria's northern states implemented Sharia (Islamic law). Some clerics and political leaders encouraged boycotting immunization, citing contaminants that could reduce the Muslim population and mistrust of the government.

The U.S. is facing similar resistance now. Under scrutiny are anti-vaxx Orthodox and Hasidic Jews in New York City and Rockland County, but The New York Times has also uncovered resistance among Muslims, Catholics, Waldorf school parents and other cultural dissenters.

Anti-vaxxers in Clark County, Washington, are not religious opponents but rather Russian-speaking immigrants who, according to a report, harbor "mistrust of government that built up after being exposed to years of propaganda and oppression in the Soviet Union." A doctor in their community blames tribalism for suspicion of "people coming from outside."

Tackling tribalism

Nigerians understood that simply ostracizing religious communities would not work. Anti-vaxx politics tapped into mistrust of government and "others" that ran deep in a diverse but divided society, where religious, regional and ethnic loyalties took priority over national unity.

Nigerians know the ravages of tribalism better than most Americans. By conservative estimates, their nation is home to more than 250 ethnolinguistic groups. The civil war, lasting from 1966 to 1970 after anti-Igbo pogroms in the Hausa-majority north, was a

terrifying manifestation of the hatred of difference and a total lack of faith in the government.

To foster reconciliation, Nigerians engaged in efforts to break down tribalism. One experiment, started in 1973 and still going, is compulsory service of college graduates in the National Youth Service Corps in "states other than their own and outside their cultural boundaries to learn the ways of life of other Nigerians." Notwithstanding problems, the program has instilled in Nigerians a sense that education alone is not enough to build a healthy society. Sometimes it is the source of social separation.



A mother and her children outside their home in rural Nigeria. Shobana Shankar, CC BY-SA

Using this logic to combat polio, Nigerian public health officials took themselves to anti-vaxxers, leaving behind their offices in the city to visit villages with reported polio cases. Their mobility built the "polio infrastructure" that "intensified political and managerial support from all levels of the Nigerian government," according to a Gates Foundation white paper that analyzed global polio eradication. Traditional leaders like the Sultan of Sokoto also invested time and energy into immunization campaigns and social engagement.

Intensive socialization across class, education and other divisions were as important as traditional public health measures such as scale-up of local technical capabilities and independent monitoring.

Nigerian physicians in the field

I accompanied a team to a village outside Kano city in 2011, after years of public health interventions had reduced reported cases of polio to 20 in all of Nigeria for a 13-month period. The doctor leading the team leader had met four chiefs regularly; the eldest was the most supportive, the youngest the least.

The doctor asked the young man to roll up his left sleeve and pointed to a round scar on his upper arm, remarking, "Your parents had you vaccinated against smallpox. This campaign, though for a different disease, is the same. What's the problem?" The young chief shrugged, ashamed at direct confrontation and unwilling to insult his parents. They bantered for a bit before we left in the Ministry of Health truck, having accomplished seemingly nothing but a social visit.

"Some may never vaccinate," the doctor told me, "but I feel better equipped than you or another stranger to talk to them about this issue."

Between mass immunization campaigns, he visited the villagers. "I know them now, their excuses, habits. Some men say the women are unreasonable. Others don't care. I know their different personalities. And they know I know them."

The polio infrastructure in Nigeria immerses experts and local communities in an ongoing relationship. It is an elaborate multilayered surveillance system, with many strategies and functions, from mundane visits to weekly record reviews at health centers in polio-affected areas.

Good strategies matter more than good stories

The media in the West tend to talk about anti-vaxxers as weird and foreign, because they "make a good story," writes researcher Amanda Vanderslott. She describes common hidden problems like vaccine delays and equipment shortage that sometimes prevent

full immunization coverage, but these reasons are less sexy than anti-vaxxers, who are themselves a tribe sharing false beliefs peddled online by discredited doctors like Andrew Wakefield.

Criticism of parents not vaccinating their children may now be commingling with broader mistrust of, say, Facebook. Propaganda and tribal isolation have always existed but now are proliferating with social media that is, paradoxically, fostering anti-social tendencies.

Fearing negative attention would isolate anti-vaxxers and drive them underground, Nigeria fostered greater social engagement in the public health system. The nation's polio infrastructure was tested in 2017 by new cases in the Lake Chad basin where Boko Haram's violence reigned. Although international political observers feared the public health effects of Islamist-inspired terrorism, a common element in the remaining polio-affected countries, Nigeria's disease surveillance capabilities held strong and surpassed those of Pakistan and Afghanistan in its polio surveillance capabilities in 2018.

One clear lesson for the U.S. from Nigeria's experience with expanding vaccinations is that we should work to depoliticize public health. Scapegoating religious communities evokes ugly histories of anti-Semitism and Islamophobia.

Tribalism and insularity affect many communities, even the educated and political classes. Nigerians have rarely held back criticism of the elites who blame the masses for their own poverty and illnesses. Ordinary Nigerians, in turn, blame elite corruption for destroying the public sector including public health. Nigeria's postwar efforts to reduce social stigma and scapegoating are unfinished business, but the polio eradication campaign is continuing the good fight.

Few American college grads will spend years immersed in a social experiment, but public health officials can prioritize resocialization around measles. For America to strengthen its measles infrastructure, trust to discuss and debate vaccine science needs to develop.

GPEI had to rejigger its own understanding of the interactions between monovalent oral polio vaccine and wild polio behavior. Like it or not, American public health officials must answer American advocacy groups like Informed Choice that highlight "the messy conundrum" of exposure to wild measles versus the existing measles-mumps-rubella vaccination strain. A disease infrastructure built on human capacity can handle disagreement.

It can also adapt. Nigeria spent over US$8 million on surveillance alone and expanded polio capabilities to fight other diseases like measles and rubella. While the system puts a heavy workload on health officials, it points the way for how the American public health system can reshape existing structures for the current era. America led international health partnerships for decades, but the time has come to follow other countries' lead.

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68: Book Review - The End of Ownership (Sheehan)

By Kerry Sheehan



In *The End of Ownership: Personal Property in the Digital Age*, Aaron Perzanowski and Jason Schultz walk us through a detailed and highly readable explanation of exactly how we're losing our rights to own and control our media and devices, and what's at stake for us individually and as a society. The authors carefully trace the technological changes and legal changes that have, they argue, eroded our rights to do as we please with our stuff. Among these changes are the shift towards cloud distribution and subscription models, expanding copyright and patent laws, Digital Rights Management (DRM), and use of End User License Agreements (EULAs) to assert all content is "licensed" rather than "owned." And Perzanowski and Schultz present compelling evidence that many of us are unaware of what we're giving up when we "buy" digital goods.

Ownership, as the authors explain, provides a lot of benefits. Most importantly, ownership of our stuff supports our individual autonomy, defined by the authors as our "sense of self-direction, that our behavior reflects our own preferences and choices rather than the dictates of some external authority." It lets us choose what we do with the stuff that we buy – we can keep it, lend it, resell it, repair it, give it away, or modify it, without seeking anyone's permission. Those rights have broader implications for society as a whole – when we can resell our stuff, we enable secondary and resale markets that help disseminate knowledge and technology, support intellectual privacy, and promote competition and user innovation. And they're critical to the ability of libraries and archives to serve their missions – when a library owns the books or media in its collection, it can lend those books and media almost without restriction, and it generally will do so in a way that safeguards the intellectual privacy of its users.

These rights, long established for personal property, are safeguarded in part by copyright law's "exhaustion doctrine." As the authors make clear, that doctrine, which holds that some of a copyright holders' rights to control what happens to a copy are "exhausted" when they sell the copy, is a necessary feature in copyright law's effort to limit the powers granted to copyright holders so that overbroad copyright restrictions do not undermine the intended benefit to the public as a whole.

Throughout the book, Perzanowski and Schultz present a historical account of rights holder attempts to overcome exhaustion and exert more control over what people do with their media and devices. The authors describe book publishers' hostile, "fearful" response to lending libraries in the 1930's:

…a group of publishers hired PR pioneer Edward Bernays….to fight against used "dollar books" and the practice of book lending. Bernays decided to run a contest to "look for a pejorative word for the book borrower, the wretch who raised hell with book sales

and deprived authors of earned royalties."…Suggested names included "bookweevil,"…"libracide," "booklooter," "bookbum," "culture vulture," … with the winning entry being "booksneak."

Publishers weren't alone, the authors show that both record labels and Hollywood studios fought against the rise of secondary markets for music and home video rental, respectively. Hollywood fought a particularly aggressive battle against the VCR. In the end, the authors note, Hollywood continued to "resist[] the home video market," at least until they gained more control over the distribution technology.

But while historically, overzealous rights holders may have been stymied to some extent by the law's limitation of their rights, recent technological changes have made their quest a lot easier.

"In a little more than a decade," the authors explain, we've seen dramatic changes in content distribution, from tangible copies, to digital downloads, to the cloud, and now, increasingly, to subscription services. These technological changes have precipitated corresponding changes in our abilities to own the works in our libraries. While, as the authors explain, copyright law has long relied on the existence of a physical copy to draw the lines between rights holders' and copy owners' respective rights, "[e]ach of these shifts in distribution technology has taken us another step away from the copy-centric vision at the heart of copyright law." Unfortunately, the law hasn't kept up: **"**Even as copies escape our possession and disappear from our experience, copyright law continues to insist that without them, we only have the rights copyright holders are kind enough to grant us."

Perzanowski and Schultz point to End User License Agreements (EULAs), with their excessive length, one-sided, take-it-or-leave-it nature, complicated legalese, and relentless insistence that what you buy is only "licensed" to you (not "owned"), as a main culprit behind the decline of ownership. They provide some pretty standout examples – including EULAs that exceed the lengths of classic works of literature, and those that claim to prevent a startling array of activity. For the authors, these EULAs

. . . create private regulatory schemes that impose all manner of obligations and restrictions, often without meaningful notice, much less assent. And in the process, licenses effectively rewrite the balance between creators and the public that our IP laws are meant to maintain. They are an effort to redefine sales, which transfer ownership to the buyer, as something more like conditional grants of access.

And unfortunately, despite their departure from some of contract law's core principles, some courts have permitted their enforcement, "so long as the license recites the proper incantations."

The authors are at their most poetic in their criticism of Digital Rights Management (DRM) and Section 1201 of the DMCA, perhaps the worst scourges of ownership in the book. As they point out, even in the absence of restrictive EULA terms, DRM embeds rights holders' control directly into our technologies themselves – in our cars, our toys, our insulin pumps and heart monitors. Comparing it to Ray Bradbury's *Farenheit 451*, they explain:

While not nearly as dramatic as flamethrowers and fighting robot dogs, the unilateral right to enforce such restrictions through DRM exerts many of the types of social control Bradbury feared. Reading, listening, and watching become contingent and surveilled. That system dramatically shifts power and autonomy away from individuals in favor of retailers and rights holders, allowing for enforcement without anything approaching due process.

As Perzanowski and Schultz explain, these shifts aren't just about our relationship to our stuff. They recalibrate the relationship between rights holders and consumers on a broad scale:

When we say that personal property rights are being eroded or eliminated in the digital marketplace, we mean that rights to use, to control, to keep, and to transfer purchases – physical and digital – are being plucked from the bundle of rights purchasers have historically enjoyed and given instead to IP rights holders. That in turn means that those rights holders are given greater control over how each of us consume media, use our devices, interact with our friends and family, spend our money, and live our lives. Cast in these terms, it is clear that there is a looming conflict between the respective rights of consumers and IP rights holders.

The authors repeatedly remind us that who makes the decision between what is owned and what is licensed is crucial – both on the individual and societal scale. When we allow companies to define when we can own our stuff, through EULAs or Digital Rights Management, we shift crucially important decisions about how our society should work away from legislatures, courts, and public processes, to private entities with little incentive to serve our interests. And, when we don't know exactly what we give up when we "buy" digital goods, we're not making an informed choice. Further, when we opt for mere access over ownership, our choices have broader societal effects. The more we shift to licensing and subscription models, the more it may become harder for those who

would rather own their stuff to exercise that option – stores close, companies shift distribution models, and some works disappear from the market.

In the end, Perzanowski and Schultz leave us with a thread of hope that we still might see a future for ownership of digital goods. They believe that at least some courts and policy makers, and "[p]erhaps more importantly, readers, listeners, and tinkerers – ordinary people – are expressing their own reluctance to accept ownership as an artifact of some bygone predigital era." And they provide a set of arguments and reform proposals to martial in the fight to save ownership before it's too late. They lay out an array of technological and legal strategies to reduce deceptive practices, curb abusive EULAs, and, reform copyright law. The most thoroughly developed of these proposes a legislative restructuring of copyright exhaustion in a flexible, multi-factor format, in part modeled on the United States' fair use doctrine. It's a good idea, and it would probably work. But (and the authors acknowledge this) even modest attempts at reform have failed to garner the necessary support in Congress to move forward. A more ambitious proposal, like this one, seems at least unlikely in the near term.

Overall, the *End of Ownership* is a deeply concerning exposition of how we're losing valuable rights. The questions it raises about whether and how we can preserve the benefits of ownership in the digital age will likely continue to be relevant even as technology, and the law, evolve. Most critically, it asks us to rethink who we want making the decisions that shape how we live our lives. While the book tackles complex issues in law and technology, it does so in a way that's accessible and interesting both for lawyers and laypersons alike. The book's ample real world examples of everything from disappearing e-book libraries, to tractors, dolls, and medical devices resistant to their owners' control bring home both the impact of abstract legal doctrines and the urgency of their reform.

Thanks to Electronic Frontier Foundation.

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69: A Syrian Asks Herself: Am I Capable of Killing? (Shehwaro)

By Marcell Shehwaro



"Photo" by Freedom House is licensed under CC BY 2.0

Am I capable of killing?

If somebody had asked me this question five years ago, being a person who used to decorate her desk with Jesus' advice to Peter —"Put your sword back into its place. For all who take the sword will perish by the sword"—I would probably have swiftly, and naively, answered: "Impossible! I neither have the ability nor the desire to end someone's life." Without much further thought I would probably have added: "—whoever this person is, and no matter what atrocities they have committed."

We always like to think we are pretty; we aim not to smell like death; we believe we are messengers of life. We like to think that we are on this planet to make it a better place. That we are here for a higher purpose. That we are alive in order to chant others' lives and be enriched by them, not to demean those lives and take them away. Five years ago I did not believe in abortion or the death penalty. I hated weapons and violence and I believed that change is made by love.

Today, I don't know what I believe in anymore. It's the war. Living perched on the verge between life and death all the time. You would either need a survival instinct always steering you toward the inevitable death of the enemy, or you'd surrender. One of you must die for the other to triumph. It's the violence which redefined everything: our hopes, our beliefs, and our trust in the world. At a very early stage I had to rethink the answers to many violent questions: Am I a murderer? Am I capable of killing? Do I want to kill?

The first shock came when they shot at us, a group of completely peaceful protesters. There they stood; they resembled us in everything but the dream. They spoke our language, some of them were even from the same city. I had to accept that the murderer is a person who's like me. Maybe up until yesterday we went to the same places and danced to the same songs. Maybe this murderer was in love with the Aleppo Citadel, like I was. Maybe he had a girlfriend he'd met in a café or in university. How did he suddenly become, upon orders from the Sultan, a murderer? Where did this readiness to kill come from? How can a person, who doesn't seem to have made any personal gains from the system, turn into such a killing machine? I wanted to think that I was better than that monster. That no one, and no ideology, would ever make me do something like this.

The question arose again when my mother was shot, and again when I was under investigation. Then I wished the investigator would die, especially after he threatened to hurt my family. I couldn't really judge whether the world would be a better place if this person were gone. I wished for his death and I was ashamed of this wish. Does the new me believe that the death of certain people might actually be a benefit to the rest of humanity? And that not every single life is "sacred"? And that killing someone might save thousands of lives? Of course, I hoped over and over again for the death of Bashar Al Assad—I even dreamt it many times. Was I subconsciously playing God deciding who had the right to live and who didn't? Definitely! I was surrounded by beautiful heroes who were falling dead because of the violence of people who I was supposed to believe had a right to live. The equation was very difficult. Oh, how much I've changed! And how much has maturity changed this naïve, romantic idea of changing the world with love.

All this was less pressing than living in the line of fire. From there we could see the army, only steps away from our houses. We chose those locations because they were less likely to be targeted by air strikes. This army that bombs us day and night. There was a check-point close by where we could see them drinking tea and hear them swearing at us through their walkie-talkies, in Aleppo we call them “fists”. The regular black humor in our house was about what we would do if the army broke in. As with every terrifying thing, we needed to face it with humor to silence the fear. One of our friends asked us not to wake him if the army broke in, and another said he’d jump off the balcony if it happened, while I joked that I would claim that I was kidnapped by my friends.

A friend said he would use a weapon and fight them to death; another said he’d rather blow himself up than be captured alive. This is what the images of death under torture do to us. I said, whispering: *I don’t think I am capable of committing the act of killing*. There was silence, then they all laughed at my “articulate phrasing”. One of them said in a deep Aleppean accent: *What, sister?* I repeated the answer with the confidence of someone who believed in the morality of her decision: *I will not kill!*

And so began conversation that was to last for hours, until one of them asked me: *What if the soldier was going to kill you?* I answered: *Then I would die. I’d rather be the victim than the murderer*. He continued: *What if the soldier was going to kill me? What if you could save me? What if this soldier heads to the neighbors’ house to kill Aiisha?* Aiisha was the neighbors’ daughter who used to knock on our door every day to collect plastic bottles. She was too small to be seen through the door’s peephole.

I couldn’t know whether I was actually capable of stealing another life, and I was not sure that this inability is not, by itself, another form of killing. I have changed, I am disfigured now. This is probably a logical explanation, or maybe I simply matured.

The violence escalated. Scuds, barrel bombs, rockets, shells, friends dying under torture. And with every story I remembered—or don’t because my brain prevents me and suppresses these memories—the certainty that I was a person who neither kills nor wants to kill was gradually shrinking. ISIS was spreading in the liberated areas and started kidnapping journalists one by one. We ran then to our armed friends asking for protection, which was an important, fundamental contradiction: we wanted to hold on to our moral supremacy, which depended largely on others’ violence, not the nonviolence itself.

I still, to this day, don’t understand this war and its killing equations. This war, which I don’t know whether brings out the worst in you or changes you. The person who robbed his neighbor’s house after his neighbor fled: he doesn’t think he would have done that if it weren’t for the war. The person who wishes the death of everyone who doesn’t share his religious beliefs: he didn’t realise he had this much hatred inside.

My questions and uncertainties might not interest you. You might be completely confident, like I used to be, that you are incapable, or capable, of committing an act of killing. But my question remains: is every life “sacred”? Even the life of an ISIS militant who tortures others to death? Is passive surrender to your murderer another type of killing? Killing yourself? Ending your life or the lives of others whom you were supposed to protect? Did living constantly with death to the point of familiarity, and all the anxiety and uncertainty one experiences as a result, cause the answer to my initial question to become *Truthfully, I don’t know*?

Marcell Shehwaro is an activist and blogger from Aleppo and the executive manager of the organization Kesh Malek. She works to promote children’s rights in the seven schools that the organization ran in Aleppo. Her essay first appeared in The Seattle Star.

A Syrian Asks Herself: Am I Capable of Killing? by Marcell Shehwaro is licensed under a Creative Commons Attribution 4.0 International License.

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70: Visiting First Place School: Reflections on Other-Centric Education, Private Education, & Identity (Shepard)

By Shari Shepard



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During my visit to First Place School I am distracted. Dawn Mason, a former WA State Representative, leads me through the halls on an informal tour. Her flowing skirt brushes against the walls as she walks. This place is another kind of home to her.

I am here to find myself some sense of purpose so that I can stay grounded while my father battles his tenth year of cancer back in California. I'm not sure what I'll find.

It's July. I've just moved 900 miles. I don't have a job.

The brick building has an intimacy. Everything is within arm's reach. The classrooms, the cafeteria, the front desk, the offices are all close at hand. The school itself embodies the chaos that defines most schools on the cusp of their ritual new beginning. In that way alone, First Place is like every other school.

I wonder, in the midst of my own personal chaos, what the students are doing during their summer? This is an elementary school for children who are, or are at risk of becoming homeless. The school has managed to stay open and under the radar for twenty-five years. running entirely off of private donations. After nearly shutting down ten years ago, with Dawn's guidance it has flourished.

Why am I here? Because I'm trying to un-lose myself.

I think, *M*aybe I want to be a teacher. We sit across from each other in one of the counseling rooms. Dawn tells me about the different kinds of trauma the children cope with, shows me the anatomically correct dolls. I can't seem to focus. Again, I wonder what the students are doing in the middle of July without school to hold them steady. Maybe I should become a school counselor instead. Somewhat randomly I ask, "But where do the students sleep? Where do they go after school?"

"Well…" And Dawn opens her hands in front of me as if in offering: "The school bus takes 'em back. Some of 'em live in transitional housing with their folks and some in the shelters. A lot just move around from house to house, you know, with different relatives, while their parents get their act together…" and she clasps her hands together again.

I wait for her to continue and she easily picks up from where she left off. Her words cascade over me and for a moment I let myself get lost in her comforting Mama Bear presence. Over Dawn's shoulder I notice a large pane of reflective glass that almost looks silver in the room.

"It's an observation window," Dawn says, pointing her finger at the inset frame.

I study the details of the room through its reflection and find myself seated among plastic miniature chairs, dolls, blocks, stuffed toys and coloring books. We leave the playroom behind. Dawn leads me to the office of the head teacher, Miriam Reed, and disappears. For a brief second I feel abandoned.

Miriam is direct but warm. I can tell she is thinking of a dozen things when she very immediately, very succinctly, starts a conversation with me about preparing the students for entry into Seattle's top schools: Lakeside, Seattle Prep, SAAS… She describes her proposed plan to implement a core multicultural curriculum, one in which the students learn the philosophies, arts,

technologies, spiritualism and histories of non-western cultures beyond the context of European imperialism. A history of Africa before the Middle Passage. Religious studies of Native American animism before the missions. Latin American indigenous cultures before they were Latin.

As she speaks, things steadily start to come into focus. I start asking questions and Miriam begins pulling books off of shelves and hands them to me. Some are about Native American spirit animals, others have creation myths from different indigenous groups of the Americas.

“Start with this,” she tells me, “and make a lesson plan.”

I hungrily accept the challenge and walk to catch the 48 bus loaded down with books. For the next six weeks, I only see Dawn in passing while I come up with new and creative projects focused on Native American and African history.

All during this time, I am reminded of my own experience. Being handpicked by Mrs. Turner, a language arts teacher at my junior high school, to shadow at Menlo School, I like to think that it was the way I wrote essays and played the violin that drew her to me. Maybe. Really though, I was a kid that was lucky enough to test well under stress. At the beginning of the eighth grade I did particularly well on the STAR, California’s standardized test for elementary and junior high students. Mrs. Turner noticed. She interrupted one of my classes to talk to me, to gauge my interest in going to a prestigious high school in Atherton, CA.

At 13 I didn’t know there were public and private schools let alone that there was a difference between the two. I had never heard of Atherton or Menlo even though I had probably passed through and by it several times during my childhood. As an adult I remember that to my adolescent senses Menlo was collegiate, statuesque and exclusive. Teachers had resources and time. The students were brilliant not only in intellect but in appearance. I remember that the girls bathrooms had marble countertops and the walls were free of graffiti. Everything seemed to shine. Facilities staff drove around in electrically-powered golf carts, with students calmly mingling.

All at once I grasped the profound difference between public and private school education: experience. And something else: improved chances, for everything. Going to Menlo quickly went from being an intriguing option to an absolute necessity. But I had to get accepted first. I had to interview and take a placement test. I had to prove myself in an applicant pool full of kids who’d been going to private school since kindergarten. But I succeeded and the next fall, after a long application process and fully funded by a whopping $24,000 scholarship, I became part of Menlo’s class of 2005.

During our meetings at First Place, Miriam keeps telling me how smart the kids are. That they are capable and bright and inquisitive. She tells me about one student meeting President Obama the year before. She tells me they can make it to Lakeside.

I can’t stop thinking about Menlo. There were three others from my junior high that were accepted at Menlo. We were all scholarship kids and, with the exception of one, we were all some shade of brown. After our first year acculturating to Menlo’s culture of competitive over-achievement, none of us performed well enough in math or physics to continue into our sophomore year without summer school.

I had been built up by my teachers to believe that I was bright and I never doubted it until Menlo. My desire to resonate with my new classmates was quashed by the stigma of remedial education. I became silent in most of my classes where I was often the only black student. There I was: the black representative for the freshman class of Menlo School. But something in me held on to that truth, that betrayal, through summer school and my remaining years there, I held onto the possibility that I deserved to be where I was, even when some of my peers told me my only purpose was to fulfill a quota.

There is a school in the US that has successfully implemented an Afrocentric curriculum for their predominantly black students. In 2010, Marcus Garvey Academy in Detroit, MI outperformed the other schools in its district and in the state of Michigan on the MEAP (Michigan Educational Assessment Program). Their curriculum focuses on African and African American history based on principles of Kwanzaa and an Egyptian values system. In Canada, the Africentric Alternative School in Toronto surpassed other schools in the area and in the entire province of Ontario in reading, writing, and math. Yet school districts, parents, and politics continue to scrutinize and cancel classes that give students a more culturally well-rounded education that shows them how to look beyond the reaches of slavery and imperialism. Just this year in Seattle, Center High School was forced to suspend its 10 year long-running race and social justice section of humanities after one parent complained.

Imagine learning that your race was enslaved for hundreds of years before a controversial war that killed more people than all of the American wars in the 20th century combined freed them, only to be beaten down for a hundred more years by Jim Crow,

terrorism and chronic discrimination. You learn about the Harlem Renaissance and celebrate the Civil Rights Movement during Black History Month, but for the most part you learn about a history fraught with struggle. It begins with slavery. It begins with pain.

So you go to college and attend classes about multicultural awareness and the legacy of slavery. You learn about white privilege and attend your university's Race and Pedagogy conference. You talk the politics of affirmative action to death, but it doesn't seem to fill the emptiness that you're becoming more and more aware of. Even though you've risen above the world's expectations of who you would become, you still don't know how to address that void. You get used to the world telling you who you are. You read statistics that say African American women are still one of the lowest performing demographic groups in education and receive less pay in the work place than any other group with the exception of undocumented immigrants. You learn to push yourself harder than anyone else because you must outperform your white counterparts to be recognized as equal. And when you do outperform, when you tell people where you got your education, when you dazzle them with your articulate speech, you'll still be asked to explain to the world your merits for the privilege of earning a private school education. And one day, as you explain your merits with confidence, you'll realize you aren't that confident in your merits at all because you decided to check the box specifying your identity on the Common Application: "Female, Black, Native American, Other…"



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Confronting the disparities created by continued systemic discrimination never seemed to leave the academic arena in my undergraduate experience. My professors gave me a lot to think about but not a lot to do about it, and as my awareness expanded so did my frustration.

For the first time since graduating from college, First Place School gave me a medium through which I could work through my frustration. It gave me focus in the limbo of unemployment. If the students of First Place get a glimpse of history before slavery and the missions and Columbus Day; if they have something that's more positive about their heritage than Thanksgiving, then they will see in themselves what others haven't. They will see beyond who the world tells them they are. They will know better. They will be prepared.

Shari Shepard earned her BA in Creative Writing from the University of Puget Sound. where in 2008 she won the Esther Wagner Prize in fiction and later that year was awarded an interdisciplinary grant to write a collection of short stories centered around the impact that her father figures had on her life. She's written play reviews for Seattle-based Drama in the Hood and contributed to the Seattle Star. She is currently working in central South Korea teaching English to elementary schoolers. Her essay is reprinted from *The Seattle Star.*

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71: A Feminist's Guide to Rom-Coms and How to Watch Them (Sutriasa)

By Ayu Sutriasa



"Love's Messenger" by Marie Spartali Stillman, Delaware Art Museum is in the Public Domain

Valentine's Day is right around the corner, which means lots of chocolate, teddy bears, and single ladies being made to feel especially inadequate. Some might celebrate Galentine's Day instead, some might skip on acknowledging the holiday at all, and some, myself included, will be holed up watching romantic comedies.

The internet is filled with lists of which rom-coms will "get you through" Valentine's Day—the assumption seems to be that, otherwise, we singles would be festering alone in our living rooms, drinking vodka and singing "All By Myself" à la Bridget Jones. I enjoy the genre, but as a feminist I have some qualms.

Romantic comedies, particularly "the classics" of the genre, can be problematic by today's standards of feminism. Movies like Pretty Woman and Princess Bride tend to perpetuate harmful gender stereotypes and romanticize men's predatory behavior. Not to mention they are usually limited to depicting heterosexual relationships between an attractive cis man and an equally, perhaps even more, attractive cis woman. (LGBTQ folks: Here's a list of rom-coms that drown out the heteronormative noise.) Lastly, if rom-coms are marketed to single women, then why are they mostly written and directed by men? (That's a rhetorical question.)

Despite all this, rom-coms are stunningly popular. How do you reconcile your love of rom-coms with your staunch feminism?

Monique Jones, a pop culture critic and entertainment journalist, says that it's OK if you like problematic rom-coms. "That doesn't make us any less of an activist, it doesn't make us any less down for the cause. It's just being a human—and being part of a culture that has indoctrinated us to believe certain things, whether or not they're true," she says.

However, as feminists we do have to hold ourselves accountable, Jones says. Here are three tips on how to be a responsible rom-com consumer.

1. Be aware of how you're internalizing the underlying messages

One of the biggest problems with the genre is that it tends to reinforce problematic ideas of romance. Contrary to rom-com plots, it's actually not an outrageous notion for a man to love you "just as you are" (*Bridget Jones's Diary, Trainwreck, Pretty Woman, Grease*), but it actually is outrageous for a man to consistently ignore your rejections and relentlessly pursue you (*The Notebook, 10 Things I Hate About You, 50 First Dates, Breakfast at Tiffany's*).

"There are a lot of patriarchal things in society that we've grown up with that we've just assumed are normal. And those same ideals get stuck in these movies. That's why so many of them don't get called out as being problematic, even though they are indicative of larger problems in society," Jones says.

Once you're aware of the patriarchal underpinnings of these movies, you can more objectively decide what you believe is romantic. For example, maybe you don't think it's romantic to pretend to be someone's fiancée while they are in a coma and have no idea who you are. It's creepy, Sandra Bullock.

2. Be conscious of what/who you are supporting

This takes some research, but it's worth it (IMDB will be your new best friend). Jones suggests learning what you can about the movie: Who's the director? Who wrote it? Who acts in it? What's the premise? "If you don't feel offended, then I think it's fine to watch," Jones says.

And for the movies we don't feel good about—like anything involving Woody Allen—consider skipping it. "I can't justify having my head in the sand just to support somebody like Woody Allen," Jones says. She skips anything with his name attached to it.

"I never liked his movies anyway. They don't speak to me, first of all, as a woman, and second of all, as an African-American woman," she says. "I know all the film critics and film students that I have been in contact with say that Woody Allen is a master at doing this and that. But I don't align with anything that he does or is. And that's how I go about it. If what the person does doesn't align with my core values, then I just can't do it."

There are funnier, more romantic movies than *Annie Hall*, anyway.

3. Opt for rom-coms with fewer or zero problems

I know the classics are, well, classics, but why not watch a movie that takes a healthier approach to romance? "There are always movies that are smaller productions, and they might not have the big box-office dollars, but they're still well-crafted, well-made movies," Jones says.

Here's a list of five from Thought Catalog to get you started: *Warm Bodies*, *She's Out of My League*, *Celeste and Jesse Forever*, *My Best Friend's Wedding*,and *Kate and Leopold* (sarcasm).

So, my fellow feminist rom-comphiles, don't be discouraged.

There are still a lot of things people can enjoy about romantic comedies, Jones says. "With as much choice as there is out there, a person doesn't have to give up their romantic comedy love altogether."

Ayu Sutriasa is the digital editor for YES! Magazine. Her article is reprinted from YES!.

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72: Fix the Machine, Not the Person (Swartz)

by Aaron Swartz

#systemanalysis, #proposal, #technology, #automotiveindustry, #logos, #research, #sharedvalues #cognitivebias



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This post is part seven of the series Raw Nerve.

The General Motors plant in Fremont was a disaster. “Everything was a fight,” the head of the union admits. “They spent more time on grievances and on things like that than they did on producing cars. They had strikes all the time. It was just chaos constantly. … It was considered the worst workforce in the automobile industry in the United States.”

“One of the expressions was, you can buy anything you want in the GM plant in Fremont,” adds Jeffrey Liker, a professor who studied the plant. “If you want sex, if you want drugs, if you want alcohol, it’s there. During breaks, during lunch time, if you want to gamble illegally—any illegal activity was available for the asking within that plant.” Absenteeism was so bad that some mornings they didn’t have enough employees to start the assembly line; they had to go across the street and drag people out of the bar.

When management tried to punish workers, workers tried to punish them right back: scratching cars, loosening parts in hard-to-reach places, filing union grievances, sometimes even building cars unsafely. It was war.

In 1982, GM finally closed the plant. But the very next year, when Toyota was planning to start its first plant in the US, it decided to partner with GM to reopen it, hiring back the same old disastrous workers into the very same jobs. And so began the most fascinating experiment in management history.

Toyota flew this rowdy crew to Japan, to see an entirely different way of working: The Toyota Way. At Toyota, labor and management considered themselves on the same team; when workers got stuck, managers didn’t yell at them, but asked how they could help and solicited suggestions. It was a revelation. “You had union workers—grizzled old folks that had worked on the plant floor for 30 years, and they were hugging their Japanese counterparts, just absolutely in tears,” recalls their Toyota trainer. “And it might sound flowery to say 25 years later, but they had had such a powerful emotional experience of learning a new way of working, a way that people could actually work together collaboratively—as a team.”

Three months after they got back to the US and reopened the plant, everything had changed. Grievances and absenteeism fell away and workers started saying they actually enjoyed coming to work. The Fremont factory, once one of the worst in the US, had skyrocketed to become the best. The cars they made got near-perfect quality ratings. And the cost to make them had plummeted. It wasn’t the workers who were the problem; it was the system.1

An organization is not just a pile of people, it’s also a set of structures. It’s almost like a machine made of men and women. Think of an assembly line. If you just took a bunch of people and threw them in a warehouse with a bunch of car parts and a manual, it’d probably be a disaster. Instead, a careful structure has been built: car parts roll down on a conveyor belt, each worker does one step of the process, everything is carefully designed and routinized. Order out of chaos.

And when the system isn't working, it doesn't make sense to just yell at the people in it — any more than you'd try to fix a machine by yelling at the gears. True, sometimes you have the wrong gears and need to replace them, but more often you're just using them in the wrong way. When there's a problem, you shouldn't get angry with the gears — you should fix the machine.

If you have goals in life, you're probably going to need some sort of organization. Even if it's an organization of just you, it's still helpful to think of it as a kind of machine. You don't need to do every part of the process yourself — you just need to set up the machine so that the right outcomes happen.

For example, let's say you want to build a treehouse in the backyard. You're great at sawing and hammering, but architecture is not your forte. You build and build, but the treehouses keep falling down. Sure, you can try to get better at architecture, develop a better design, but you can also step back, look at the machine as a whole, and decide to fire yourself as the architect. Instead, you find a friend who loves that sort of thing to design the treehouse for you and you stick to actually building it. After all, your goal was to build a treehouse whose design you like — does it really matter whether you're the one who actually designed it?2

Or let's say you really want to get in shape, but never remember to exercise. You can keep beating yourself up for your forgetfulness, or you can put a system in place. Maybe you have your roommate check to see that you exercise before you leave your house in the morning or you set a regular time to consistently go to the gym together. Life isn't a high school exam; you don't have to solve your problems on your own.

In 1967, Edward Jones and Victor Harris gathered a group of college students and asked them to judge another student's exam (the student was a fictional character, but let's call him Jim). The exam always had one question, asking Jim to write an essay on Fidel Castro "as if [he] were giving the opening statement in a debate." But what sort of essay Jim was supposed to write varied: some of them required Jim to write a defense of Castro, others required Jim to write a critique of Castro, the rest left the choice up to Jim. The kids in the experiment were asked to read Jim's essay and then were asked whether they thought Jim himself was pro- or anti-Castro.

Jones and Harris weren't expecting any shocking results here; their goal was just to show the obvious: that people would conclude Jim was pro-Castro when he voluntarily chose to write a pro-Castro essay, but not when he was forced to by the teacher. But what they found surprised them: even when the students could easily see the question required Jim to write a pro-Castro essay, they still rated Jim as significantly more pro-Castro. It seemed hard to believe. "Perhaps some of the subjects were inattentive and did not clearly understand the context," they suspected.

So they tried again. This time they explained the essay was written for a debate tournament, where the student had been randomly assigned to either the for or against side of the debate. They wrote it in big letters on the blackboard, just to make this perfectly clear. But again they got the same results — even more clearly this time. They still couldn't believe it. Maybe, they figured, students thought Jim's arguments were so compelling he must really believe them to be able to come up with them.

So they tried a third time — this time recording Jim on tape along with the experimenter giving him the arguments to use. Surely no one would think Jim came up with them on his own now. Again, the same striking results: students were persuaded Jim believed the arguments he said, even when they knew he had no choice in making them.3

This was an extreme case, but we make the same mistake all the time. We see a sloppily-parked car and we think "what a terrible driver," not "he must have been in a real hurry." Someone keeps bumping into you at a concert and you think "what a jerk," not "poor guy, people must keep bumping into him." A policeman beats up a protestor and we think "what an awful person," not "what terrible training." The mistake is so common that in 1977 Lee Ross decided to name it the "fundamental attribution error": we attribute people's behavior to their personality, not their situation.4

Our natural reaction when someone screws up is to get mad at them. This is what happened at the old GM plant: workers would make a mistake and management would yell and scream. If asked to explain the yelling, they'd probably say that since people don't like getting yelled at, it'd teach them be more careful next time.

But this explanation doesn't really add up. Do you think the workers liked screwing up? Do you think they enjoyed making crappy cars? Well, we don't have to speculate: we know the very same workers, when given the chance to do good work, took pride in it and started actually enjoying their jobs.

They're just like you, when you're trying to exercise but failing. Would it have helped to have your friend just yell and scream at you for being such a lazy loser? Probably not — it probably would have just made you feel worse. What worked wasn't yelling, but

changing the system around you so that it was easier to do what you already wanted to do.

The same is true for other people. Chances are, they don't want to annoy you, they don't like screwing up. So what's going to work isn't yelling at them, but figuring out how to change the situation. Sometimes that means changing how you behave. Sometimes that means bringing another person into the mix. And sometimes it just means simple stuff, like changing the way things are laid out or putting up reminders.

At the old GM plant, in Fremont, workers were constantly screwing things up: "cars with engines put in backwards, cars without steering wheels or brakes. Some were so messed up they wouldn't start, and had to be towed off the line." Management would yell at the workers, but what could you do? Things were moving so fast. "A car a minute don't seem like it's moving that fast," noted one worker, "but when you don't get it, you're in the hole. There's nobody to pull you out at General Motors, so you're going to let something go."

At the Toyota plant, they didn't just let things go. There was a red cord running above the assembly line, known as an andon cord, and if you ever found yourself in the hole, all you had to do was pull it, and the whole line would stop. Management would come over and ask you how they could help, if there was a way they could fix the problem. And they'd actually listen — and do it!

You saw the results all over the factory: mats and cushions for the workers to kneel on; hanging shelves traveling along with the cars, carrying parts; special tools invented specifically to solve problems the workers had identified. Those little things added up to make a big difference.

When you're upset with someone, all you want to do is change the way they're acting. But you can't control what's inside a person's head. Yelling at them isn't going to make them come around, it's just going to make them more defiant, like the GM workers who keyed the cars they made.

No, you can't force other people to change. You can, however, change just about everything else. And usually, that's enough.

Notes:

1. This story has been told several places, but the quotes here are from Frank Langfitt with Brian Reed, "NUMMI," This American Life 403 (26 March 2010; visited 2012-09-23). Quotes are taken from the show's transcript which sometimes differ slightly from the aired version.
2. Some of the concepts and terms here were inspired by Ray Dalio, Principles (2001), part 2 (visited 2012-09-01).
3. Edward E. Jones and Victor A. Harris, "The Attribution of Attitudes," *Journal of Experimental Social Psychology* 3:1 (January 1967), 1–24.
4. Lee Ross, "The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process," *Advances in Experimental Social Psychology* 10 (1977), 173–220.

Aaron Swartz was an American computer programmer, entrepreneur, writer, political organizer, and Internet hacktivist. He was involved in the development of the web feed format RSS and the Markdown publishing format, the organization Creative Commons, and the website framework web.py, and was a co-founder of the social news site Reddit. He died in 2013. His writings can be found on his blog, aaronsw.com.

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73: Catwoman's Hyde: A Comparative Reading of the 2002 Catwoman Relaunch and Stevenson's Novella (Syn)

By Lesa Syn

#heroes #review #academic #analysis #artsandculture #descriptive #scholarly



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Abstract

This article advocates that the comic character of Catwoman is a comic incarnation of Robert Louis Stevenson's Edward Hyde. It does this first by problematizing Andreas Reichstein's reading of Batman as Hyde (1998). While the similarity between Bruce Wayne and Dr. Henry Jekyll is considerable (such as both being accomplished and affluent men of science who have nocturnal alter egos), Hyde embodies hedonistic desire and loss of control while Batman is the incarnation of discipline and control. This work then goes on to offer the numerous and stark similarities between Hyde and Catwoman, such as offering their counterparts animalistic freedom and the ability to achieve unification through embracing their darker halves. Because of her desire to embrace her dual human experience, the hero/villain Catwoman encapsulates the most human of comic characters.

Keywords: Catwoman , Batman , Hulk , Henry Jekyll , Edward Hyde , Ed Brubaker , Darwin Cooke , Robert Louis Stevenson , Andreas Reichstein , Identity Split , Hero/Villain , animalistic

Who is stronger, Catwoman or Hulk? In stark contrast to the Hulk, who is arguably the strongest comic-book character ever, Catwoman—like her beloved Batman—is one of the few comic-book characters that is "not super-powered, an alien, or a mutant," but rather entirely human (Orr 1984: 176–177). Well, almost entirely human. Therefore, comparing Catwoman to Hulk may as well be comparing a person to a natural disaster; however, Jason Ranker (2008) discusses a comparison of these dissimilar comic characters… and, believe it or not, the comparison is apt.

In his research, Ranker highlights how Catwoman and Hulk represent stereotypical versions of strength constructed along gender lines; however, there is a better reason to place these two in a category of their own. Unlike almost every other character in the comic book multiverse, these two characters are both heroes and villains, often at the same time. Hulk continues to be one of the greatest threats to Earth but he is also a founding member of The Avengers. Similarly, Catwoman is a villain on par with the rest of Forever Evil, but she is also a founding member of the new Justice League of America (see Figure 1): "Unfortunately, being a fence-sitter on the thin line separating good and evil doesn't make her a neutral party" (Beatty 2004: 36). These are ambivalent

characters that are neither absolute good nor evil, but are constantly torn between both aspects—they are both modern and powerful Edward Hydes.



Figure 1: In 2013, Geoff Johns and David Finch offered Catwoman as both a Superhero and a Supervillain: Johns, G and Finch D (2013): Justice League of America 1 (New York: DC Comics) and Johns, G Finch D, and Friend R (2013): Forever Evil 1 (New York: DC Comics). Copyright © 2013 DC Comics.

Perhaps it can be argued that several villains have aspects similar to Robert Louis Stevenson's iconic Edward Hyde. Two-Face is a literal Janus figure and often physically depicts both good and evil, and Clayface's inability to fully control his transformation often results in Hyde-like horror in those around him. However, Two-Face does not suffer from his ambivalence, but simply relegates his dual nature to the fate of a coin flip. Clayface is not noble, like Jekyll, but rather is a disguised monster. Catwoman and her alter ego Selina Kyle, torn between both evil and good, are the only true Hyde and Jekyll of Gotham.

Adam Capitainio (2010) has thoroughly compared Marvel's Bruce Banner and the Incredible Hulk to Stevenson's Dr. Jekyll and Mr. Hyde, so this paper will move the discussion to the similar intellectual and emotional torment of DC's Kyle and Catwoman. To accomplish this task, this paper will first problematize Andreas Reichstein's (1988) reading of Batman as Mr. Hyde and then it will offer tangible evidence—especially from Brubaker, Cooke, and Allard's 2002 Catwoman relaunch—that, despite the physical dissimilarities of Kyle to Jekyll, Catwoman is a more complete version of a modern day Mr. Hyde.

Is Batman an American Mr. Hyde?

Reichstein (1998) makes a compelling argument that Batman's alter ego Bruce Wayne is an American Jekyll. Beyond the obvious comparisons of the successful, popular, and affluent bachelors, these are men of prominence and success who only transform into their alter egos at night. Reichstein highlights that despite both men being childless, Wayne and Jekyll have paternal affection for others: Wayne cares for his various wards and "Jekyll confesses how he had a father's concern for Hyde" (Reichstein 1998: 340). Reichstein also discusses how both Wayne and Jekyll spend the vast majority of their free time in their secret laboratories, conducting various chemical experiments.

However, the staunchest similarity between these two characters is their double lives. Reichstein explains, "Besides all these formal similarities between Wayne and Jekyll, the essential link between these characters lies in their basic trait: their double identity, their double personality" (Reichstein 1998: 343). As Philip Orr discusses, "[When] Bruce Wayne refers to the Batman, he is not referring to himself in the third person; rather he is referring to the other" (Orr 1995: 174). Rather than just one person with two aspects, Wayne and Batman are two distinct individuals who just happen to exist within a common body. Wayne even confesses this idea to a psychologist: "I guess, we're all two people—one in daylight and one we keep in shadow" (Batman Returns). Similarly, in his final confession, Dr. Jekyll writes, "With every day, and from both sides of my intelligence, the moral and the intellectual, I thus drew steadily nearer to that truth … that man is not truly one, but truly two" (Stevenson 1886: 77). Clearly, both of these men of science are all too intimately familiar with the dual nature of humanity, and their polarizing personalities. However, it is worth highlighting that the parallels between these two characters lie almost exclusively along the similarities of Wayne and Jekyll.

As such, while Wayne is an American Jekyll, what is the answer to Reichstein's (1998) titular question "Batman—an American Mr. Hyde?" Both Batman and Hyde are empowered shadows of their other selves, and are able to accomplish what neither Wayne nor Jekyll ever could. They achieve this power by embracing animalistic aspects of their personalities. Jekyll describes his other self as

playing “ape-like tricks” (Stevenson 1886: 91) and possessing “ape-like spite” (93). Capitainio explains, “This suggests that Hyde, as the hidden side of Jekyll’s personality, is representative of the animal past and behavior that human beings have necessarily repressed in their quest for ‘civilization’” (Capitainio 2010: 250).

While Jekyll is an accomplished pinnacle of human evolution—generous, brilliant, scientific, attractive, and affluent—Hyde returns this character to his evolutionary ape-like past, which was a common theme in the Gothic novels of the 1890s (Reichstein 1998: 346). Regarding the newfound freedom and anonymity of becoming Hyde, Jekyll writes, “And thus fortified, as I supposed, on every side, I began to profit by the strange immunities of my position” (Stevenson 1886: 86). Batman too is able to tap into his primal animal form—in this case a bat—and uses this animal aspect to achieve his deepest desire for vengeance against the criminal element that orphaned him as a child. Batman also allowed Wayne to safely fulfill his desires for vigilantism.

While such similarities exist between Hyde and Batman, one of the most interesting parallels between these two characters is that both of them murder adversaries in their initial appearances. Mr. Hyde brutally assaults Sir Danvers Carew after a perceived insult: “And next moment, with ape-like fury, he was trampling his victim under foot and hailing down a storm of blows, under which the bones were audibly shattered and the body jumped upon the roadway” (Stevenson 1886: 27). Similarly, in Batman’s first appearance, he is holding the villainous Stryker when “… suddenly, Stryker, with the strength of a madman, tears himself free from the grasp of the Bat-Man…” (Finger and Kane 1939: 6). Stryker then pulls out a gun and shoots at Batman, but Batman punches Stryker, knocking him over the rail and into an acid tank, to which Batman comments, “A fitting end for his kind” (Finger and Kane 1939: 6). While both men have murdered an adversary, Hyde has killed an upstanding gentleman and must pay for his action with his life, while Batman has killed a murderer and deserves an accolade. Hyde must hide behind Jekyll or face the gallows, whereas Batman can continue crime-fighting, and be a vigilante without repercussion. Despite the consequences of these actions, Hyde only longs to kill, while Batman resolves to never take a life.

While *surface* similarities—such as the stark similarities between their alter egos, empowerment through animalistic disguise, and both having taken a life—exist between Hyde and Batman these characters are as dissimilar from each other as they are from their better halves. For Jekyll, becoming Hyde was embracing and savoring his dark side, “I knew myself, at the first breath of this new life, to be more wicked, tenfold more wicked, sold a slave to my original evil; and the thought, in that moment, braced and delighted me like wine” (Stevenson 1886: 79). Jekyll seems to use Hyde to indulge his baser desires. This is completely different from Batman whose “armor/costume harnesses the evil inside and outside of him, as well as protects against repressed sexual desires” (Reichstein 1998: 348). While Hyde is allowed to run rampant, participating in any debauchery that he comes upon, Batman focuses only on punishing criminals.

Most of all, Hyde embodies Jekyll’s willing loss of control, while “Wayne/Batman is control” (Reichstein 1998: 347). After Hyde has killed Carew, Jekyll abandons the potion that unleashed his sinister self, but Hyde continued to reassert himself. Hyde manifests himself at first in dreams and then in reality by forcing the transformation unaided by any chemical concoction. Jekyll could not stop Hyde from taking over their body more and more. Batman, on the other hand, could be taken off at any time, cast aside. Reichstein explains, “He can don the costume/armor whenever he wants and drop it again to become Bruce Wayne” (Reichstein 1998: 348). Reichstein ultimately concludes, “Thus, Batman really is an American cousin of Edward Hyde” (Reichstein 1998: 350). However, this paper suggests that by Reichstein’s definition, Hyde’s familial relationship might as well just as easily include comic book characters such Green Arrow or Iron Man, both of whom are—beneath their masks—affluent playboy bachelor inventors who don costumes/armors to combat evil. While the similarities between Jekyll and Wayne are notable, Batman is not a complete Hyde.

No, but Catwoman Is

However, Catwoman, on the other hand, shares many similarities with Hyde. Jekyll describes the initial transformation into like this: “I felt younger, lighter, happier in body; within I was conscious of a heady recklessness, a current of disordered sensual images running like a millrace in my fancy, a solution of the bonds of obligation, an unknown but not an innocent freedom of the soul” (Stevenson 1886: 78). Kyle too feels the strength and freedom of her alter ego: “That had been one of the reasons for the mask, initially. To help provide. That and the excitement… the adventure. Don’t kid yourself that they weren’t a big part of it, too” (Brubaker, Cooke, and Allred 2002: 48). There is a youthful vibrancy and hedonistic abandonment to both Hyde and Catwoman. Catwoman is unbridled. Throughout Catwoman’s history, she is known as thief, and she ultimately ignores societal rules while

helping herself to whatever she desires. Ed Brubaker explains, “She was like Robin Hood, except she forgot to the money to the poor” (Beatty 2004: 6). Catwoman, like Hyde, is in it for the freedom and youthful thrill.

Jekyll and Hyde, Kyle and Catwoman are completely different people from their counterpart selves. Hyde has his own apartment and his own companions that exist in totally different circles than Jekyll. Similarly, as Beatty explains, “Aside from a few friends and lovers, Selina and Catwoman are two different women moving in different worlds. And that suits them both just fine” (Beatty 2004: 19). Jekyll/Hyde and Catwoman/Kyle are in actuality two individuals who share one common body and one common memory, but share little else.

Hyde and Catwoman are impervious shields for their more noble halves. No matter the potential atrocities that Hyde could ever commit, Jekyll believes that at any moment he could dispense Hyde instantly and permanently:

> *Think of it—I did not even exist! Let me escape into my laboratory door, give me but a second or two to mix and swallow the draught that I had always standing ready; and whatever he had done, Edward Hyde would pass away like the stain of breath upon a mirror; and there in his stead, quietly at home, trimming the midnight lamp in his study, a man who could afford to laugh at suspicion, would be Henry Jekyll. (Stevenson 1886: 82).*

Through his potion, Jekyll could transform into his shadow self and fulfill his most monstrous desires. In the same vein, in The Dark End of The Street, Kyle embraces her bestial aspect, throwing off all moral, legal, and earthly limitations by transforming herself into a Cat-Woman. In this comic, The Cat-side is able to beat up her (masculine) enemies, climb tall buildings, and seemingly fly through the air (via her whip).

It is important to note in Catwoman history, she was known as “The Cat” and first appeared in the first issue of Batman in 1940. However, in 1950, ten years after “The Cat’s” inception, the mild-mannered alter ego Kyle was named. It is a common misconception that Kyle came first—not a decade later—but this idea of the villainous side appearing before the sociality acceptable persona parallel’s Stevenson’s novella in which the story of Hyde accosting the young girl appears pages before the discussion of Jekyll. This argument will now go back to a previous quote from Jekyll, “I knew myself, at the first breath of this new life, to be more wicked, tenfold more wicked, sold a slave to my original evil; and the thought, in that moment, braced and delighted me like wine” (Stevenson 1886: 79). Jekyll seems to use Hyde to indulge his baser desires, but in reality the reverse is true—Hyde uses Jekyll for his own desires.

The problem is that these shielding personas eventually took on a life all their own. Hyde lashed out at his alter ego, punishing him through the destruction of Jekyll’s belongings: “Hence the ape-like tricks that he would play me, scrawling in my own hand blasphemies on the pages of my books, burning the letters and destroying the portrait of my father” (Stevenson 1886: 91). In Brubaker, Cooke, and Allread’s comic, Catwoman too began to have a life outside of Kyle, who says, “The mask is part of who I am now. But it’s also part of the problem, too… because it became a person all on its own” (Brubaker, Cooke, and Allred 2002: 54). Thus, while Hyde and Catwoman were created to liberate their alter egos and allowed them to achieve humanly-impossible, animalistic acts, these personas became whole persons in and of themselves. The animal-side uncontrollable and often exhibits behaviors that are outside of normative human roles. Catwoman is wild, something that Kyle struggles to understand (Figure 1). Furthermore, in Figure 1, this Cat-self bides for ownership of the body she cohabitates and eventually becomes intricately integrated and a fully realized being.

Ultimately, Hyde asserts himself and begins replacing Jekyll. The problem is that, with Carew’s murder on his head, Hyde’s only salvation lies in being Jekyll, but he could not condemn himself to perpetual torpor; as such, “Unable to compound the remedy that turns him into Dr. Jekyll again one day, Jekyll/Hyde kills himself” (Reichstein 1998: 339). Similarly, in this comic, Catwoman killed off both Kyle and then herself (Brubaker, Cooke, and Allred 2002: 16)… or at least Catwoman went through a lot of trouble to make it appear that way. Hired to find out if Catwoman truly was dead, Detective Slam Bradley asks the-very-much-alive Kyle, “But a while back, you killed off Selina Kyle… and a few months ago, you killed Catwoman, too… so, the question is—who’s left to find?” (Brubaker, Cooke, and Allred 2002: 33). Kyle reemerges and tries to live again, believing that Catwoman is dead and buried; however, Catwoman too refuses to stay dead. As Orr says, “[Catwoman] won’t be killed” (Orr 1994: 181). Catwoman’s immortality is in fact the sole attribute that Ranker’s (2008) work offers as to why she is stronger than the Hulk. Beatty too notes, “Selina definitely has nine lives considering the number of times she has survived near-fatal catastrophes” (Beatty 2004: 25). While most often the nine lives of the Catwoman are seen in response to her battle with others, this immortality applies to her battle with Kyle as well.

The immortal Catwoman torments Kyle, much as Hyde tortures Jekyll: “And this again, that the insurgent horror was knit to him closer than a wife, closer than an eye; lay caged in his flesh, where he heard it mutter and felt it struggle to be born” (Stevenson 1863: 91). Kyle struggles to control the beast within her, but unlike Jekyll who does not seek to understand Hyde—Kyle grapples with accepting Catwoman as a part of herself. Kyle waits a moment and then answers Bradley’s question: “I don’t know. Hopefully someone who can look in the mirror without any pain” (Brubaker, Cooke, and Allred 2002: 16). In the mirror here, Kyle sees all the pain that she has caused and that she has endured. Jekyll has a similar mirror experience, but his is all the more tragic because of the loss of control that it represents: “[and] bounding from my bed I rushed to the mirror. At the sight that met my eyes, my blood was changed into something exquisitely thin and icy. Yes, I had gone to bed Henry Jekyll, I had awakened Edward Hyde” (Stevenson 1886: 83).

It is important to highlight that mirrors denote the true representation of self. Christian Metz explains how it is only through a mirror that people can understand themselves and construct their egos: “Thus the child’s ego is formed by identification with its like, and this in two senses simultaneously, metonymically and metaphorically: the other human being who is in the glass, the own reflection which is not the body, which is like it” (Metz 1975: 48–49). Metz underscores the duality of co-existence of each individual’s two selves—the rational ego and the primal id. Thus, by a proverbial mirror, Kyle is able to be a full self, and it is in this mirror, that she understands the Cat’s self. Another way to put it is that the animal-self allows Kyle the only way for her survive and to be a full and actualized person. Whereas the rest of humanity strives to deny the animalistic id inside them, Kyle realizes that she ultimately needs to embrace her Cat self into her life.

Whereas Jekyll embraced the concept of humanity’s dual nature, he theorized that each person was in reality a conglomeration of individuals forced confined in uncomfortable cohabitation: “I hazard the guess that man will be ultimately known for a mere polity of multifarious, incongruous and independent denizens” (Stevenson 1886: 78). In her nightmares, Kyle wrestles, not with Catwoman, but with the vast multitude of individuals that exist inside her: “Like everything I’ve ever been is struggling inside me… trying to find some place to fit themselves” (Brubaker, Cooke, and Allred 2002: 44). On the surface, it is easy to focus simply on the duality, but for both Jekyll and Kyle, the double personalities that they battle are just the beginning, as if both these two—and everyone of us for that matter—could just as easily say, “My name is Legion; for we are many” (Mark 5: 9).

While Kyle and Catwoman embody just two persons that inhabit their body, there are multitudes of others. Ignoring the staunch differences in attitude and mannerisms between Kyle and Catwoman, both characters pronouncedly vacillate in skin tone and costume within themselves—even just within this single comic book. For instance, while the panels within the comic showcase a Catwoman who is very overtly a pale Caucasian brunette, the various covers from this same comic depict a darker complected Kyle that is clearly mulatto, Hispanic, or even Italian (see Figure 3, left side). However, even this ethnic alteration pales to the disguises that Kyle dons that make her unrecognizable, the staunchest of which is when Kyle goes undercover as a blond bombshell (see Figure 3, right side). Thus comic’s art work is indicative of Kyle and Catwoman’s personality and multiplicity. Despite all of her various incarnations, Kyle and Catwoman are always at their cores women: “She was a ‘woman,’ and all woman at that” (Madrid 2009: 248). Kyle summons up her female alter egos, uses them as tools, and discards them just as quickly. Kyle can control all these incarnations of herself—other than Catwoman.

Figure 2: In her dreams, Catwoman is separated from Kyle; Catwomen surround the helpless Kyle and burn away her humanity, leaving just Catwoman in her place: Brubaker, E Cooke, D, and Allred, M (2002: 43–44) Catwoman: The Dark End of the Street. (New York: DC Comics). Copyright © 2001, 2002 DC Comics.

Kyle's therapist asks her, "How long has it been now since you put on the [Catwoman] outfit?" to which Kyle replies, "The outfit? Oh, yeah… that. Almost six months" (Brubaker, Cooke, and Allred 2002: 45). Like Jekyll, Kyle has tried to repress her own Hyde by abandoning the hide of Catwoman. Also like Jekyll, Hyde (i.e.: Catwoman) fought back: "[But] I was still cursed with my duality of purpose; and as the first edge of my penitence wore off, the lower side of me, so long indulged, so recently chained down, began to growl for license" (Stevenson 1886: 87). Catwoman plagues Kyle with

Figure 3: The Many Faces of Catwoman, from darkly-completed brunette to blond bombshell: Brubaker, E Cooke, D, and Allred, M (2002: 39 & 103, panel 1) Catwoman: The Dark End of the Street. (New York: DC Comics). Copyright © 2001, 2002 DC Comics.

hellish dreams in which she is surrounded by Catwomen who set Kyle on fire, burning away her humanity and leaving only the silhouette of the Catwoman (see Figure 2). In this suffering, Kyle is like Jekyll: "I began to be tortured with throes and longings, as of Hyde struggling after freedom" (Stevenson 1886: 85). Kyle feels the Cat personality struggling for freedom. However, Kyle tries to avoid the temptation of becoming Catwoman—which is why she is seeing a therapist—but Catwoman refuses to let her get a moment's peace until Kyle acquiesces. Catwoman refuses to let Kyle be complete until Kyle fully embraces all of her aspects.

Conclusion

Reichstein tries to reduce Catwoman to little more than one of the "mostly bizarre array of villains in the Batman comics, like the Joker, the Penguin, the Catwoman … [who] reflect the purely bad side of Batman—like counterparts, or mirrors showing him what would happen to him if he lost control" (Reichstein 1998: 346–347). However, Catwoman should not be reduced to simply reflect the bad side of Batman. While Bruce Wayne is similar to a Dr. Henry Jekyll, Batman is not a complete Mr. Edward Hyde… but Catwoman is.

This argument suggests that Catwoman is such an integral part of Kyle and that her life is shattered—without her "other." While other critics have studied Batman and Hulk—no one has considered Catwoman as Hyde. It is interesting to note that Kyle logically and consciously puts on Catwoman and both co-habitat the same space. Again, this is very akin to Jekyll and Hyde, who—although different in body and manner—share the same memory (Stevenson 1886: 85) and handwriting (89). These are two parts of a cohesive whole, both vying for control over their life while staunchly rebelling against being controlled by any man (even a Batman) and any law.

Reichstein succeeds at linking Jekyll with Wayne, but she ignores the complexity of comparing Hyde to Batman. Thus, this work corrected that oversight by advocating Jekyll and Hyde story is about identity structure: the socially acceptable personality versus the uncontrollable and often intolerable. A close examination of Dark End of the Street reveals the identity problems in Stevenson's novella also manifest in Kyle and Catwoman. This comic reinforced the Jekyll side is about social conformity, whereas the Hyde represents the uncontainable and unacceptable. Thus, this paper argues that offering a critical approach to Catwoman as Hyde is the only way for freedom from social norms and offers independence from social conformity.

It is noteworthy that Kyle's Hyde self is not about a tortured individual who seeks to redeem herself from her alter ego, but about accepting that separate self and releasing it from the confines of societal rules. In other words, Catwoman is the ability for humankind to negotiate life with a wild animalistic side. Catwoman's fictional personality offers readers a chance to enter a new sphere of identity understanding. However, instead of untamed mayhem or total anarchy, Catwoman tests the limits of what life would be like without the rules and limitations of social rules. The tragedy of Stevenson's novella is not the fall of a celebrity, but rather the fall of one of us. Jekyll is a friend and peer, not an estranged and obsessive recluse like Wayne. As such, Kyle is more like Jekyll—like all of us—in that she is a complex character torn between manifestations of good and evil. Catwoman, the Hyde-like heroic villain and villainous hero, and is one of the most humanistic comic characters of all.

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74: How a Green New Deal Could Exploit Developing Countries (Táíwò)

Olúfẹ́mi O. Táíwò

#science #environment #climatechange #politics #global



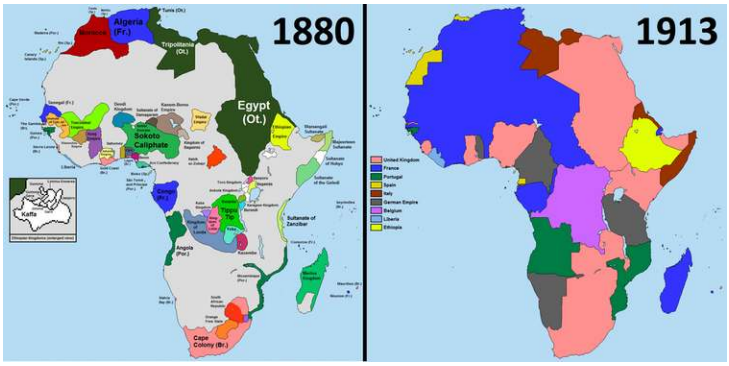
"Chicago Sunrise Movement Rallies for a Green New Deal Chicago Illinois" by Charles Edward Miller is licensed under CC BY-SA 2.0

The Green New Deal has changed the conversation among progressive Democrats about how to deal with climate change, from simply managing a disaster to how to take advantage of an existential threat to build a more just society.

However, should this legislative concept be transformed from the hypothetical framework it is today into actual policies, some of the solutions it engenders could make global inequality worse. As a scholar of colonialism, I am concerned that the Green New Deal could exacerbate what scholars like sociologist Doreen Martinez call climate colonialism – the domination of less powerful countries and peoples through initiatives meant to slow the pace of global warming.

Colonialism, explained

The clearest cases of colonialism involve the unmistakable signifiers of foreign control: planted flags, and the formal and institutionally recognized assertion of authority over foreign lands. Only five countries in the world were not colonized by European empires in one way or other after the 15th century.



The U.K., France and other European powers carved Africa up among themselves in the late 19th century. davidjl123 / Somebody500, CC BY-SA

The history of colonialism has many clear milestones, including the 1494 Treaty of Tordesillas between Spain, Portugal and the Vatican that divided the world outside Europe between the two Iberian empires. At the Berlin Conference of 1884, European powers divvied the African continent among themselves.

U.S. colonialism has often been less stark. But the United States does occupy land that belonged to people who lived in North America before European settlers arrived. Following the realization of its "Manifest Destiny," it also went beyond its coastal borders by taking over many islands, including those in Hawaii, the Philippines, Puerto Rico and Guam.

Likewise, overt foreign influence and control has become the exception rather than the rule, even for the original colonial powers. Throughout much of Africa and Asia, global empires like the British preferred a strategy of "indirect rule," with chieftaincies, monarchies and other power structures that let them delegate their domination to local elites.

Neocolonialism and climate colonialism

In 1946, there were only 35 member-states of the United Nations. Once most former colonies had become independent countries by 1970, that number had swelled to 127. Amid this wave of independence, rich countries continued to exert control over former colonies through a system Ghana's first prime minister, Kwame Nkrumah, first called "neocolonialism."

Rather than directly running other countries, neocolonial domination is accomplished through levers of political and economic leverage.

Green New Deal policies could empower communities on both sides of U.S. borders, and could expand the powers of poor nations to determine their own destinies. Or they could promote climate colonialism, a term that can mean different things to different people.

To me, it's the deepening or expansion of foreign domination through climate initiatives that exploit poorer nations' resources or otherwise compromises their sovereignty. Others focus more on how formerly colonized countries are paying the price for a crisis caused disproportionately by the emissions from more industrialized nations – their current and past colonizers.

Land-grabbing and exporting solar power

But the Green New Deal will not meet any definition of climate justice if it becomes the next chapter in a long history of U.S. industrial policies that have oppressed people.

During the 19th century, when the transcontinental railway system arose, the U.S. gave land to rail companies it had taken it from Native Americans in a series of coerced treaties and wars. Similarly, responding to global warming may require vast tracts of land to grow food and carry out new policies as the climate changes. A global land rush is already underway around the globe.

Take, for example, carbon offsets: a form of investment in greenhouse gas emissions reduction that lets the buyer "offset" the effects of their emissions-producing activity.

But much of the available land is in poor countries, and inhabited by people who are those countries' least politically powerful. This can put them in competition for the land that provides their basic needs with powerful private interests from the world's most powerful countries.

For instance, a research institute reported in 2014 that Norwegian companies' quest to buy and conserve forest land in East Africa to use as carbon offsets came at the cost of forced evictions and food scarcity for thousands of Ugandans, Mozambicans and Tanzanians. The Green New Deal could encourage exactly this kind of political trade-off.

Efforts to boost energy security can also drive climate colonialism. The African continent is, paradoxically, both home to the world's largest solar power plant – the Noor Ouarzazate complex in Morocco – and people who are the least connected to grid.

Solar power may end up giving more Africans access to electricity but at the same time, many large renewable energy projects in North Africa could soon boost the European electric grid, bolstering European energy security with a climate-friendly source of power while millions of sub-Saharan Africans have none of their own.

Daniel A.M. Egbe, the coordinator of the African Network for Solar Energy, calls this linkage of large-scale solar farms with foreign power grids "a new form of resource exploitation."

The Green New Deal's stated goal of meeting all of America's considerable and potentially increasing energy demand with renewable or zero-emission sources could create an incentive to go this route too, with Mexico. California already imports electricity from Baja California state and business interests stand ready to expand cross-border grid links throughout Central America if that proves feasible.

I see a serious risk that connecting the U.S. grid to Mexico and Central America could drain power out of the isthmus into the U.S. at the expense of Central Americans.

Justice without borders

To be clear, I do not believe the Green New Deal will necessarily lead to climate colonialism and I see its emphasis on climate justice as a good start. Technologies and policies are tools, and how they function depends on how they are designed and how they are used.

The U.S. could, for instance, do more to subsidize renewable-energy technologies, because American innovation can expedite their adoption everywhere.

The U.S. could also follow the lead of the federal government's National Academy of Sciences and fund a "substantial research initiative" on negative emissions, which the Intergovernmental Panel on Climate Change identifies as necessary to prevent the worst climate change scenarios.

The Green New Deal, in its current draft form, is just as compatible with this path as it is with climate colonialism. But I do believe that achieving a version of climate justice that doesn't end at U.S. borders will require the right vision, values and strategies.

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75: Capturing Carbon to Fight Climate Change is Dividing Environmentalists (Táíwò and Buck)

Olúfẹ́mi O. Táíwò and Holly Jean Buck

#science #environment #climatechange #global #nature #technology



"Carbon capture" by SaskPower - Powering the Future is licensed under CC BY-NC-SA 2.0

Environmental activists are teaming up with fresh faces in Congress to advocate for a Green New Deal, a bundle of policies that would fight climate change while creating new jobs and reducing inequality. Not all of the activists agree on what those policies ought to be.

Some 626 environmental groups, including Greenpeace, the Center for Biological Diversity and 350, recently laid out their vision in a letter they sent to U.S. lawmakers. They warned that they "vigorously oppose" several strategies, including the use of carbon capture and storage – a process that can trap excess carbon pollution that's already warming the Earth, and lock it away.

In our view, as a political philosopher who studies global justice and an environmental social scientist, this blanket opposition is an unfortunate mistake. Based on the need to remove carbon from the atmosphere, and the risks in relying on land sinks like forests and soils alone to take up the excess carbon, we believe that carbon capture and storage could be a powerful tool for making the climate safer and even rectifying historical climate injustices.

Global inequality

We think the U.S. and other rich countries should accelerate negative emissions research for two reasons.

First, they can afford it. Second, they have a historical responsibility as they burned a disproportionate amount of the carbon causing climate change today. Global warming is poised to hit the least-developed countries, including dozens that were colonized by these wealthier nations, the hardest.

Consider this: The entire African continent emits less carbon than the U.S., Russia or Japan.

Yet Africa is likely to experience climate change impacts sooner and more intensely than any other region. Some African regions are already experiencing warming increases at more than twice the global rate. Coastal and island nations like Bangladesh, Madagascar and the Marshall Islands face near or total destruction.

But the world's richest nations have been slow to endorse and support the necessary research, development and governance for negative emissions technologies.

Bad track record with coal

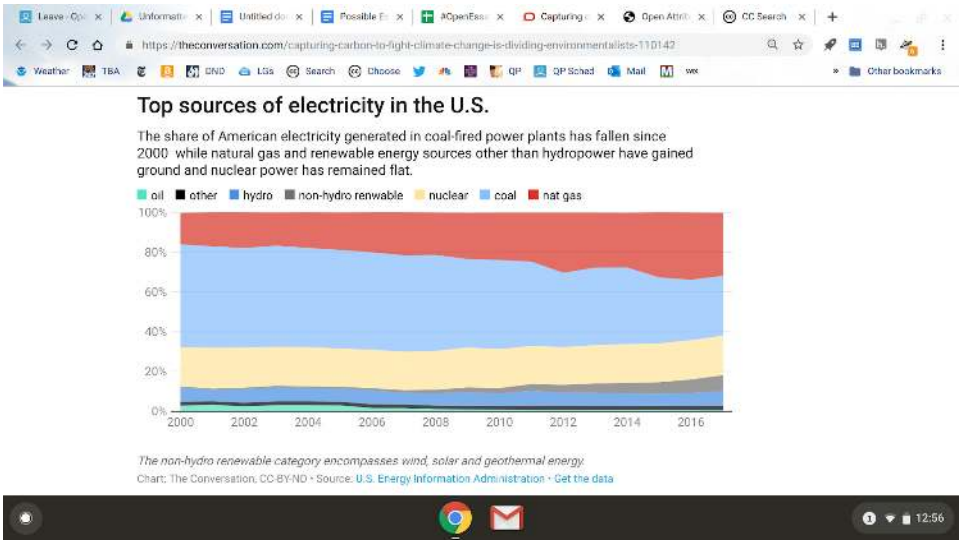
What explains the objections from climate justice advocates?

The U.S. has heavily funded experiments with carbon capture and storage to drastically reduce greenhouse gas emissions from new coal-fired power plants since George W. Bush's presidency.

Those efforts have not paid off, partly because of economics. Natural gas and renewable energy have become cheaper and more popular than coal for generating electricity.

Only a handful of coal-fired power plants are under construction in the U.S., where closures are routine. The industry is in trouble everywhere, with few exceptions.

In addition, carbon capture with coal has a bad track record. The biggest U.S. experiment is the US$7.5 billion Kemper power plant in Mississippi. It ended in failure in 2017 when state power authorities ordered the plant operator to give up on this technology and rely on natural gas instead.



Other uses

Carbon capture and storage, however, isn't just for fossil-fuel-burning power plants. It can work with industrial carbon dioxide sources, such as steel, cement and chemical plants and incinerators.

Then, one of two things can happen. The carbon can be turned into new products, such as fuels, cement, soft drinks or even shoes.

Carbon can also be stored permanently if it is injected underground, where geologists believe it can stay put for centuries.

Until now, a common use for captured carbon is extracting oil out of old wells. Burning that petroleum, however, can make climate change worse.



Captured carbon has a variety of industrial uses, including oil extraction and fire extinguisher manufacturing. U.S. Energy Department's National Energy Technology Laboratory, Public Domain.

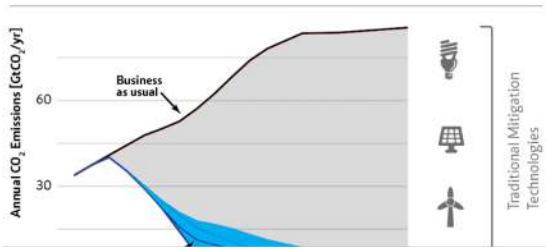
Going carbon negative

This technology may potentially also remove more carbon than gets emitted – as long as it's designed right.

One example is what's called bioenergy with carbon capture and storage, where farm residues or crops like trees or grasses are grown to be burned to generate electricity. Carbon is separated out and stored at the power plants where this happens.

If the supply chain is sustainable, with cultivation, harvesting and transport done in low-carbon or carbon-neutral ways, this process can produce what scientists call negative emissions, with more carbon removed than released. Another possibility involves directly capturing carbon from the air.

Scientists point out that bioenergy with carbon capture and storage could require vast amounts of land for growing biofuels to burn. And climate advocates are concerned that both approaches could pave the way for oil, gas and coal companies and big industries to simply continue with business as usual instead of phasing out fossil fuels.



Many experts agree that limiting global warming to 1.5 or 2 degrees Celsius will require reducing the volume of carbon emissions through energy efficiency and renewable-energy generation and CO_2 removal. MCC, CC BY-SA

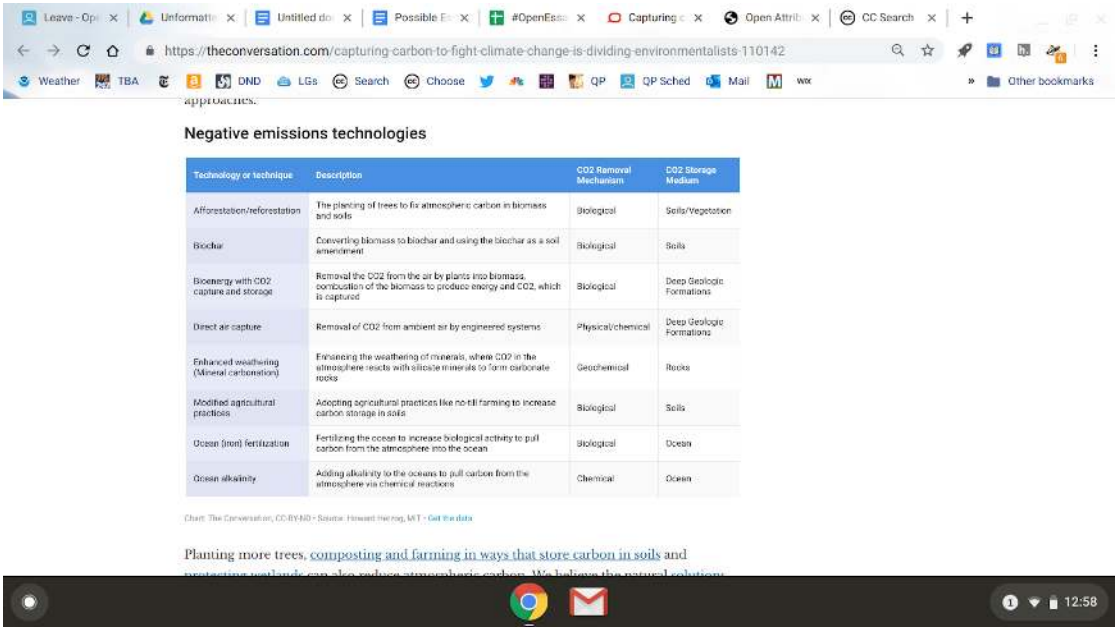
Natural solutions

Every pathway to limiting global warming to 1.5 degrees Celsius in the most recent U.N. Intergovernmental Panel on Climate Change report projected the use of carbon removal approaches.

Planting more trees, composting and farming in ways that store carbon in soils and protecting wetlands can also reduce atmospheric carbon. We believe the natural solutions many environmentalists might prefer are crucial. But soaking up excess carbon through afforestation on a massive scale could encroach on farmland.

To be sure, not all environmentalists are writing off carbon capture and storage.

The Sierra Club, Environmental Defense Fund and Natural Resources Defense Council, along with many other big green organizations, did not sign the letter, which objected not just to carbon capture and storage but also to nuclear power, emissions trading and converting trash into energy through incineration.



https://theconversation.com/capturing-carbon-to-fight-climate-change-is-dividing-environmentalists-110142

Negative emissions technologies

Technology or technique	Description	CO2 Removal Mechanism	CO2 Storage Medium
Afforestation/reforestation	The planting of trees to fix atmospheric carbon in biomass and soils	Biological	Soils/Vegetation
Biochar	Converting biomass to biochar and using the biochar as a soil amendment	Biological	Soils
Bioenergy with CO2 capture and storage	Removal the CO2 from the air by plants into biomass, combustion of the biomass to produce energy and CO2, which is captured	Biological	Deep Geologic Formations
Direct air capture	Removal of CO2 from ambient air by engineered systems	Physical/chemical	Deep Geologic Formations
Enhanced weathering (Mineral carbonation)	Enhancing the weathering of minerals, where CO2 in the atmosphere reacts with silicate minerals to form carbonate rocks	Geochemical	Rocks
Modified agricultural practices	Adopting agricultural practices like no-till farming to increase carbon storage in soils	Biological	Soils
Ocean (iron) fertilization	Fertilizing the ocean to increase biological activity to pull carbon from the atmosphere into the ocean	Biological	Ocean
Ocean alkalinity	Adding alkalinity to the oceans to pull carbon from the atmosphere via chemical reactions	Chemical	Ocean

Planting more trees, composting and farming in ways that store carbon in soils and

12:58

Rather than leave carbon removal technologies out of the Green New Deal, we suggest that more environmentalists consider their potential for removing carbon that has already been emitted. We believe these approaches could potentially create jobs, foster economic development and reduce inequality on a global scale – as long as they are meaningfully accountable to people in the world's poorest nations.

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Capturing Carbon to Fight Climate Change Is Dividing Environmentalistsby Olúfẹmi O. Táíwò and Holly Jean Buck is licensed under a Creative Commons Attribution-NoDerivatives 4.0 International License.

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76: Time Wasn't Always Money: Decolonizing Time in Diaspora (Villaseñor)

Irene Villaseñor

#education #technology #selfdiscovery #language #systemanalysis #sharedvalues #global



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As Indigenous people living in diaspora, my family participates in capitalist institutions instilled with European values, such as punctuality and discipline, that dictate our experience of time. When I adhere to the schedule of my graduate program in New York, for instance, time is compressed and accelerated. I long for more time to savor readings, conduct research, and compose multiple drafts of assignments, regardless of how much I accomplish each week. When I am in creative flow, on the other hand, time expands, decelerates. I can spend hours at home working on creative projects with no awareness that time has passed at all. The dissonance I feel as I shift between these two time worlds echoes the internal split felt by all of my family members as they navigate life in the West.

I'm Tornatrás Mestizx. That's the simplest way to acknowledge my multiracial heritage: Indigenous Filipinx, East Asian, Native North American, African, and European. But I'm full of disclaimers about this identity; "mestizx" is a loaded term. For thousands of years (and into the present) it has implied a position of superiority legitimized by proximity to whiteness. It also underlies the utopian vision of La Raza Cósmica, 20th century Mexican philosopher José Vasconcelos' term for the belief that an increasingly multiracial population would eradicate racial divisions, unify humanity, and produce harmonious new civilizations—a far cry from the racial hierarchies, nationalized borders, and fascistic violence we see around the world today.

But I continue to call myself "Tornatrás Mestizx" because the term, like my background, reflects how colonial legacies insinuate themselves throughout the world. My heritage also complicates the question of whether I should rebel against or conform to the temporal orientation of capitalist institutions by which I am marginalized by my gender, sexual orientation, and racial identities. Most often, conforming would entail short-term, self-involved thinking at the expense of long-standing communal practices and ways of being. Anthropologist Michael French Smith summarizes this dilemma when he describes the case of Papua New Guineans adjusting to life after colonization: "Succeeding in such institutions as schools, government service, or private business in an urban setting [...] [requires] adapting to the Yuropian time world, and long immersion in such institutions is likely to lead people to internalise the habits and values of that time world." Papua New Guineans, Smith explains, experienced intense anxiety in the 1970s while becoming an independent nation after being a colony of Australia. Many still organized themselves by concrete events (like the amount of daylight available or cycles of the moon) or the type and quantity of work to be accomplished in a day. The process of incorporation into a capitalist political economy entailed the adoption of a new belief in the scarcity of time; framed as a finite resource, time was imbued with "magico-religious significance." As a result, Papua Villaseñor-1 New Guineans began to berate themselves and others for failing to live up to capitalist time values, accusing those who did not schedule their activities by a clock of "wasting time."

I'm often overwhelmed by how fast time moves, especially when it's infinitesimally measured. I felt it even as a child, groomed to serve as an intermediary between my parents and the white world. I had to help relatives fill out forms, draft business correspondence, pay taxes, and confront others at work, school, the hospital, or offices in the town hall if they treated any of my family members unfairly. These duties exposed me to the costly consequences of absent documentation, late payments, and acquiescence to abusive behavior. I learned early that capitalist time, like nearly everything else in Western culture, is curt and adversarial, especially to outsiders.

Adapting to capitalist time is largely a question of adapting to speed. French philosopher Paul Virilio devised the term 'dromology' to describe the logic, science, and impact of speed, and applied it to his examination of the pace of modern culture, from images and technology to politics and war. Virilio describes dromology as "a question of rhythm, of the variety of rhythms, of chronodiversity," concluding that "our societies have become arrhythmic. Or they only know one rhythm: constant acceleration. Until the crash and systemic failure." Virilio's interest in speed began as a child of World War II, which led him to realize that "the determining element in violence, of whatever kind, was speed." Virilio sees the violence of speed in the ongoing dispersal of news in the 21st century, which he calls an "informational bomb" resulting from instantaneous means of communication:

"[Instantaneous communication] plays a prominent role in establishing fear as a global environment, because it allows the synchronization of emotion on a global scale. Because of the absolute speed of electromagnetic waves, the same feeling of terror can be felt in all corners of the world at the same time. It is not a localized bomb: it explodes each second, with the news of an attack, a natural disaster, a health scare, a malicious rumor."

As one of the first children in my family to be raised with access to the internet, I try to shield myself from the "informational bomb" Virilio describes by going online specifically to study traumas that have bedeviled my family for generations, such as violence against women, homophobia, the devaluing of artistic activity, and, of course, shifting experiences of time in different cultures and epochs. Studying Western capitalist and Indigenous time worlds, past and present, has helped me negotiate my own experiences of time. When I need to manage myself and others by completing tasks as efficiently as possible, which reminds me of the role plantation overseers undertook in Papua New Guinea, I schedule my day in hour-long intervals. But when I need to create something of lasting value, I focus on the one task at hand by measuring time like Papua New Guineans in the Kragur village often do, in units of half a day at least. My father Villaseñor-2 engaged with Western institutions to accrue financial capital for our family and community, ensuring a degree of stability for the next generation; the question of how I will balance Western capitalist and Indigenous modes of being in time depends on the degree to which I do the same.

Irene Villaseñor is a multidisciplinary artist and writer based in New York. Her essay is reprinted from PLEXUS, a project of the Los Angeles Review of Books.

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77: Why Good People Turn Bad Online (Vince)

Gaia Vince

#technology #analysis #causalargument #systemanalysis #sharedvalues #research

Link to audio



"No Trolls wanted here" by *John Pons* is licensed under *CC BY-SA 3.0*

On the evening of 17 February 2018, Professor Mary Beard posted on Twitter a photograph of herself crying. The eminent University of Cambridge classicist, who has almost 200,000 Twitter followers, was distraught after receiving a storm of abuse online. This was the reaction to a comment she had made about Haiti. She also tweeted: “I speak from the heart (and of cource I may be wrong). But the crap I get in response just isnt on; really it isnt.”

In the days that followed, Beard received support from several high-profile people. Greg Jenner, a fellow celebrity historian, tweeted about his own experience of a Twitterstorm: “I’ll always remember how traumatic it was to suddenly be hated by strangers. Regardless of morality – I may have been wrong or right in my opinion – I was amazed (later, when I recovered) at how psychologically destabilising it was to me.”

Those tweeting support for Beard – irrespective of whether they agreed with her initial tweet that had triggered the abusive responses – were themselves then targeted. And when one of Beard’s critics, fellow Cambridge academic Priyamvada Gopal, a woman of Asian heritage, set out her response to Beard’s original tweet in an online article, she received her own torrent of abuse.

There is overwhelming evidence that women and members of ethnic minority groups are disproportionately the target of Twitter abuse. Where these identity markers intersect, the bullying can become particularly intense, as experienced by black female MP Diane Abbott, who alone received nearly half of all the abusive tweets sent to female MPs during the run-up to the 2017 UK general election. Black and Asian female MPs received on average 35 per cent more abusive tweets than their white female colleagues even when Abbott was excluded from the total.

The constant barrage of abuse, including death threats and threats of sexual violence, is silencing people, pushing them off online platforms and further reducing the diversity of online voices and opinion. And it shows no sign of abating. A survey last year found that 40 percent of American adults had personally experienced online abuse, with almost half of them receiving severe forms of harassment, including physical threats and stalking. 70 percent of women described online harassment as a “major problem”.

The business models of social media platforms, such as YouTube and Facebook, promote content that is more likely to get a response from other users because more engagement means better opportunities for advertising. But this has a consequence of favouring divisive and strongly emotive or extreme content, which can in turn nurture online “bubbles” of groups who reflect and reinforce each other’s opinions, helping propel the spread of more extreme content and providing a niche for “fake news”. In recent months, researchers have revealed many ways that various vested interests, including Russian operatives, have sought to manipulate public opinion by infiltrating social media bubbles.



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Our human ability to communicate ideas across networks of people enabled us to build the modern world. The internet offers unparalleled promise of cooperation and communication between all of humanity. But instead of embracing a massive extension of our social circles online, we seem to be reverting to tribalism and conflict, and belief in the potential of the internet to bring humanity together in a glorious collaborating network now begins to seem naive. While we generally conduct our real-life interactions with strangers politely and respectfully, online we can be horrible. How can we relearn the collaborative techniques that enabled us to find common ground and thrive as a species?

“Don’t overthink it, just press the button!”

I click an amount, impoverishing myself in an instant, and quickly move on to the next question, aware that we’re all playing against the clock. My teammates are far away and unknown to me. I have no idea if we’re all in it together or whether I’m being played for a fool, but I press on, knowing that the others are depending on me.

I’m playing in a so-called public goods game at Yale University’s Human Cooperation Lab. The researchers here use it as a tool to help understand how and why we cooperate, and whether we can enhance our prosocial behaviour.

Over the years, scientists have proposed various theories about why humans cooperate so well that we form strong societies. The evolutionary roots of our general niceness, most researchers now believe, can be found in the individual survival advantage humans experience when we cooperate as a group. I’ve come to New Haven, Connecticut, in a snowy February, to visit a cluster of labs where researchers are using experiments to explore further our extraordinary impulse to be nice to others even at our own expense.

The game I’m playing, on Amazon’s Mechanical Turk online platform, is one of the lab’s ongoing experiments. I’m in a team of four people in different locations, and each of us is given the same amount of money to play with. We are asked to choose how much money we will contribute to a group pot, on the understanding that this pot will then be doubled and split equally among us.

This sort of social dilemma, like all cooperation, relies on a certain level of trust that the others in your group will be nice. If everybody in the group contributes all of their money, all the money gets doubled, redistributed four ways, and everyone doubles their money. Win–win!

“But if you think about it from the perspective of an individual,” says lab director David Rand, “for each dollar that you contribute, it gets doubled to two dollars and then split four ways – which means each person only gets 50 cents back for the dollar they contributed.”

Even though everyone is better off collectively by contributing to a group project that no one could manage alone – in real life, this could be paying towards a hospital building, or digging a community irrigation ditch – there is a cost at the individual level. Financially, you make more money by being more selfish.

Rand’s team has run this game with thousands of players. Half of them are asked, as I was, to decide their contribution rapidly – within 10 seconds – whereas the other half are asked to take their time and carefully consider their decision. It turns out that when people go with their gut, they are much more generous than when they spend time deliberating.

“There is a lot of evidence that cooperation is a central feature of human evolution,” says Rand. Individuals benefit, and are more likely to survive, by cooperating with the group. And being allowed to stay in the group and benefit from it is reliant on our reputation for behaving cooperatively.

“In the small-scale societies that our ancestors were living in, all our interactions were with people that you were going to see again and interact with in the immediate future,” Rand says. That kept in check any temptation to act aggressively or take advantage and free-ride off other people’s contributions. “It makes sense, in a self-interested way, to be cooperative.”

Cooperation breeds more cooperation in a mutually beneficial cycle. Rather than work out every time whether it’s in our long-term interests to be nice, it’s more efficient and less effort to have the basic rule: be nice to other people. That’s why our unthinking response in the experiment is a generous one.

Throughout our lives, we learn from the society around us how cooperative to be. But our learned behaviours can also change quickly.

Those in Rand’s experiment who play the quickfire round are mostly generous and receive generous dividends, reinforcing their generous outlook. Whereas those who consider their decisions are more selfish, resulting in a meagre group pot, reinforcing an idea that it doesn’t pay to rely on the group. So, in a further experiment, Rand gave some money to people who had played a round of the game. They were then asked how much they wanted to give to an anonymous stranger. This time, there was no incentive to give; they would be acting entirely charitably.

It turned out there were big differences. The people who had got used to cooperating in the first stage gave twice as much money in the second stage as the people who had got used to being selfish did. “So we’re affecting people’s internal lives and behaviour,” Rand says. “The way they behave even when no one’s watching and when there’s no institution in place to punish or reward them.”

Rand’s team have tested how people in different countries play the game, to see how the strength of social institutions – such as government, family, education and legal systems – influences behaviour. In Kenya, where public sector corruption is high, players initially gave less generously to the stranger than players in the US, which has less corruption. This suggests that people who can rely on relatively fair social institutions behave in a more public-spirited way; those whose institutions are less reliable are more protectionist. However, after playing just one round of the cooperation-promoting version of the public goods game, the Kenyans’ generosity equalled the Americans’. And it cut both ways: Americans who were trained to be selfish gave a lot less.

So is there something about online social media culture that makes some people behave meanly? Unlike ancient hunter-gatherer societies, which rely on cooperation and sharing to survive and often have rules for when to offer food to whom across their social network, social media have weak institutions. They offer physical distance, relative anonymity and little reputational or punitive risk for bad behaviour: if you’re mean, no one you know is going to see.

I trudge a couple of blocks through driving snow to find Molly Crockett’s Psychology Lab, where researchers are investigating moral decision-making in society. One area they focus on is how social emotions are transformed online, in particular moral outrage. Brain-imaging studies show that when people act on their moral outrage, their brain’s reward centre is activated – they feel good about it. This reinforces their behaviour, so they are more likely to intervene in a similar way again. So, if they see somebody acting in a way that violates a social norm, by allowing their dog to foul a playground, for instance, and they publicly confront the perpetrator about it, they feel good afterwards. And while challenging a violator of your community’s social norms has its risks – you may get attacked – it also boosts your reputation.

In our relatively peaceful lives, we are rarely faced with outrageous behaviour, so we rarely see moral outrage expressed. Open up Twitter or Facebook and you get a very different picture. Recent research shows that messages with both moral and emotional words are more likely to spread on social media – each moral or emotional word in a tweet increases the likelihood of it being retweeted by 20 per cent.

“Content that triggers outrage and that expresses outrage is much more likely to be shared,” Crockett says. What we’ve created online is “an ecosystem that selects for the most outrageous content, paired with a platform where it’s easier than ever before to express outrage”.

Unlike in the offline world, there is no personal risk in confronting and exposing someone. It only takes a few clicks of a button and you don’t have to be physically nearby, so there is a lot more outrage expressed online. And it feeds itself. “If you punish somebody for violating a norm, that makes you seem more trustworthy to others, so you can broadcast your moral character by expressing outrage and punishing social norm violations,” Crockett says. “And people believe that they are spreading good by expressing outrage – that it comes from a place of morality and righteousness.

“When you go from offline – where you might boost your reputation for whoever happens to be standing around at the moment – to online, where you broadcast it to your entire social network, then that dramatically amplifies the personal rewards of expressing outrage.”

This is compounded by the feedback people get on social media, in the form of likes and retweets and so on. “Our hypothesis is that the design of these platforms could make expressing outrage into a habit, and a habit is something that’s done without regard to its consequences – it’s insensitive to what happens next, it’s just a blind response to a stimulus,” Crockett explains.

“I think it’s worth having a conversation as a society as to whether we want our morality to be under the control of algorithms whose purpose is to make money for giant tech companies,” she adds. “I think we would all like to believe and feel that our moral emotions, thoughts and behaviours are intentional and not knee-jerk reactions to whatever is placed in front of us that our smartphone designer thinks will bring them the most profit.”

On the upside, the lower costs of expressing outrage online have allowed marginalised, less-empowered groups to promote causes that have traditionally been harder to advance. Moral outrage on social media played an important role in focusing attention on the sexual abuse of women by high-status men. And in February 2018, Florida teens railing on social media against yet another high-school shooting in their state helped to shift public opinion, as well as shaming a number of big corporations into dropping their discount schemes for National Rifle Association members.

“I think that there must be ways to maintain the benefits of the online world,” says Crockett, “while thinking more carefully about redesigning these interactions to do away with some of the more costly bits.”

Someone who’s thought a great deal about the design of our interactions in social networks is Nicholas Christakis, director of Yale’s Human Nature Lab, located just a few more snowy blocks away. His team studies how our position in a social network influences our behaviour, and even how certain influential individuals can dramatically alter the culture of a whole network.

The team is exploring ways to identify these individuals and enlist them in public health programmes that could benefit the community. In Honduras, they are using this approach to influence vaccination enrolment and maternal care, for example. Online, such people have the potential to turn a bullying culture into a supportive one.

Corporations already use a crude system of identifying so-called Instagram influencers to advertise their brands for them. But Christakis is looking not just at how popular an individual is, but also their position in the network and the shape of that network. In some networks, like a small isolated village, everyone is closely connected and you’re likely to know everyone at a party; in a city, by contrast, people may be living more closely by as a whole, but you are less likely to know everyone at a party there. How thoroughly interconnected a network is affects how behaviours and information spread around it, he explains.

“If you take carbon atoms and you assemble them one way, they become graphite, which is soft and dark. Take the same carbon atoms and assemble them a different way, and it becomes diamond, which is hard and clear. These properties of hardness and clearness aren’t properties of the carbon atoms – they’re properties of the collection of carbon atoms and depend on how you connect the carbon atoms to each other,” he says. “And it’s the same with human groups.”

Christakis has designed software to explore this by creating temporary artificial societies online. “We drop people in and then we let them interact with each other and see how they play a public goods game, for example, to assess how kind they are to other people.”

Then he manipulates the network. “By engineering their interactions one way, I can make them really sweet to each other, work well together, and they are healthy and happy and they cooperate. Or you take the same people and connect them a different way and they’re mean jerks to each other and they don’t cooperate and they don’t share information and they are not kind to each other.”

In one experiment, he randomly assigned strangers to play the public goods game with each other. In the beginning, he says, about two-thirds of people were cooperative. “But some of the people they interact with will take advantage of them and, because their only option is either to be kind and cooperative or to be a defector, they choose to defect because they’re stuck with these people taking advantage of them. And by the end of the experiment everyone is a jerk to everyone else.”

Christakis turned this around simply by giving each person a little bit of control over who they were connected to after each round. “They had to make two decisions: am I kind to my neighbours or am I not; and do I stick with this neighbour or do I not.” The only thing each player knew about their neighbours was whether each had cooperated or defected in the round before. “What we were able to show is that people cut ties to defectors and form ties to cooperators, and the network rewired itself and converted itself into a diamond-like structure instead of a graphite-like structure.” In other words, a cooperative prosocial structure instead of an uncooperative structure.

In an attempt to generate more cooperative online communities, Christakis’s team have started adding bots to their temporary societies. He takes me over to a laptop and sets me up on a different game. In this game, anonymous players have to work together as a team to solve a dilemma that tilers will be familiar with: each of us has to pick from one of three colours, but the colours of players directly connected to each other must be different. If we solve the puzzle within a time limit, we all get a share of the prize money; if we fail, no one gets anything. I’m playing with at least 30 other people. None of us can see the whole network of connections, only the people we are directly connected to – nevertheless, we have to cooperate to win.

I’m connected to two neighbours, whose colours are green and blue, so I pick red. My left neighbour then changes to red so I quickly change to blue. The game continues and I become increasingly tense, cursing my slow reaction times. I frequently have to switch my colour, responding to unseen changes elsewhere in the network, which send a cascade of changes along the connections. Time’s up before we solve the puzzle, prompting irate responses in the game’s comments box from remote players condemning everyone else’s stupidity. Personally, I’m relieved it’s over and there’s no longer anyone depending on my cackhanded gaming skills to earn money.

Christakis tells me that some of the networks are so complex that the puzzle is impossible to solve in the timeframe. My relief is shortlived, however: the one I played was solvable. He rewinds the game, revealing for the first time the whole network to me. I see now that I was on a lower branch off the main hub of the network. Some of the players were connected to just one other person, but most were connected to three or more. Thousands of people from around the world play these games on Amazon Mechanical Turk, drawn by the small fee they earn per round. But as I’m watching the game I just played unfold, Christakis reveals that three of these players are actually planted bots. “We call them ‘dumb AI’,” he says.

His team is not interested in inventing super-smart AI to replace human cognition. Instead, the plan is to infiltrate a population of smart humans with dumb-bots to help the humans help themselves.

“We wanted to see if we could use the dumb-bots to get the people unstuck so they can cooperate and coordinate a little bit more – so that their native capacity to perform well can be revealed by a little assistance,” Christakis says. He found that if the bots played perfectly, that didn’t help the humans. But if the bots made some mistakes, they unlocked the potential of the group to find a solution.

“Some of these bots made counter-intuitive choices. Even though their neighbours all had green and they should have picked orange, instead they also picked green.” When they did that, it allowed one of the green neighbours to pick orange, “which unlocks the next guy over, he can pick a different colour and, wow, now we solve the problem”. Without the bot, those human players would probably all have stuck with green, not realising that was the problem. “Increasing the conflicts temporarily allows their neighbours to make better choices.”

By adding a little noise into the system, the bots helped the network to function more efficiently. Perhaps a version of this model could involve infiltrating the newsfeeds of partisan people with occasional items offering a different perspective, helping to shift people out of their social media comfort-bubbles and allow society as a whole to cooperate more.

Much antisocial behaviour online stems from the anonymity of internet interactions – the reputational costs of being mean are much lower than offline. Here, bots may also offer a solution. One experiment found that the level of racist abuse tweeted at black users could be dramatically slashed by using bot accounts with white profile images to respond to racist tweeters. A typical bot response to a racist tweet would be: "Hey man, just remember that there are real people who are hurt when you harass them with that kind of language." Simply cultivating a little empathy in such tweeters reduced their racist tweets almost to zero for weeks afterwards.

Another way of addressing the low reputational cost for bad behaviour online is to engineer in some form of social punishment. One game company, League of Legends, did that by introducing a "Tribunal" feature, in which negative play is punished by other players. The company reported that 280,000 players were "reformed" in one year, meaning that after being punished by the Tribunal they had changed their behaviour and then achieved a positive standing in the community. Developers could also build in social rewards for good behaviour, encouraging more cooperative elements that help build relationships.

Researchers are already starting to learn how to predict when an exchange is about to turn bad – the moment at which it could benefit from pre-emptive intervention. "You might think that there is a minority of sociopaths online, which we call trolls, who are doing all this harm," says Cristian Danescu-Niculescu-Mizil, at Cornell University's Department of Information Science. "What we actually find in our work is that ordinary people, just like you and me, can engage in such antisocial behaviour. For a specific period of time, you can actually become a troll. And that's surprising."

It's also alarming. I mentally flick back through my own recent tweets, hoping I haven't veered into bullying in some awkward attempt to appear funny or cool to my online followers. After all, it can be very tempting to be abusive to someone far away, who you don't know, if you think it will impress your social group.

Danescu-Niculescu-Mizil has been investigating the comments sections below online articles. He identifies two main triggers for trolling: the context of the exchange – how other users are behaving – and your mood. "If you're having a bad day, or if it happens to be Monday, for example, you're much more likely to troll in the same situation," he says. "You're nicer on a Saturday morning."

After collecting data, including from people who had engaged in trolling behaviour in the past, Danescu-Niculescu-Mizil built an algorithm that predicts with 80 per cent accuracy when someone is about to become abusive online. This provides an opportunity to, for example, introduce a delay in how fast they can post their response. If people have to think twice before they write something, that improves the context of the exchange for everyone: you're less likely to witness people misbehaving, and so less likely to misbehave yourself.

The good news is that, in spite of the horrible behaviour many of us have experienced online, the majority of interactions are nice and cooperative. Justified moral outrage is usefully employed in challenging hateful tweets. A recent British study looking at anti-Semitism on Twitter found that posts challenging anti-Semitic tweets are shared far more widely than the anti-Semitic tweets themselves. Most hateful posts were ignored or only shared within a small echo chamber of similar accounts. Perhaps we're already starting to do the work of the bots ourselves.

As Danescu-Niculescu-Mizil points out, we've had thousands of years to hone our person-to-person interactions, but only 20 years of social media. "Offline, we have all these cues from facial expressions to body language to pitch… whereas online we discuss things only through text. I think we shouldn't be surprised that we're having so much difficulty in finding the right way to discuss and cooperate online."

As our online behaviour develops, we may well introduce subtle signals, digital equivalents of facial cues, to help smooth online discussions. In the meantime, the advice for dealing with online abuse is to stay calm, it's not your fault. Don't retaliate but block and ignore bullies, or if you feel up to it, tell them to stop. Talk to family or friends about what's happening and ask them to help you. Take screenshots and report online harassment to the social media service where it's happening, and if it includes physical threats, report it to the police.

If social media as we know it is going to survive, the companies running these platforms are going to have to keep steering their algorithms, perhaps informed by behavioural science, to encourage cooperation rather than division, positive online experiences

rather than abuse. As users, we too may well learn to adapt to this new communication environment so that civil and productive interaction remains the norm online as it is offline.

“I’m optimistic,” Danescu-Niculescu-Mizil says. “This is just a different game and we have to evolve.”

References

The New Statesman tracked abusive tweets sent to women MPs in the run-up to the 2017 UK general election.

A 2017 Pew Research Center survey showed that 41 percent of Americans have experienced online harassment.

Researchers at University College London investigated what hunter-gatherers can tell us about social networks.

Research published in PNAS showed that emotion influences how content spreads online.

In 2016, Ars Technica reported a study showing how Twitter bots can reduce racist slurs.

Community Security Trust, a charity that protects British Jews from anti-Semitism, published a report about anti-Semitic content on Twitter in 2018.

Gaia Vince is a journalist, broadcaster and author specialising in science, the environment and social issues. Her article first appeared in Mosaic.

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78: Taking the Native American Narrative Beyond Reservations (Vizcarra)

Natasha Vizcarra

#nativeamerican #language #artsandculture ##history #review



"Sisters of War". Jolene Nenibah Yazzie

Who in the U.S. could tell if a man sitting in a coffeeshop was Native American? At the comic book store, the two young women who were obviously into each other – who could tell they were Diné? Who would even know the Diné was another name for the Navajo Native American tribe, or consider the fact that Native Americans might be active members of society beyond casinos and reservations?

"Tiger Lily," Jolene Nenibah Yazzie says, referring to a supporting character in J.M. Barrie's *Peter Pan*. "Don't forget Tiger Lily." Yazzie, a Denver-based artist and photographer, is Diné. Princess Tiger Lily lives in Neverland with her tribe, the Piccaninny.

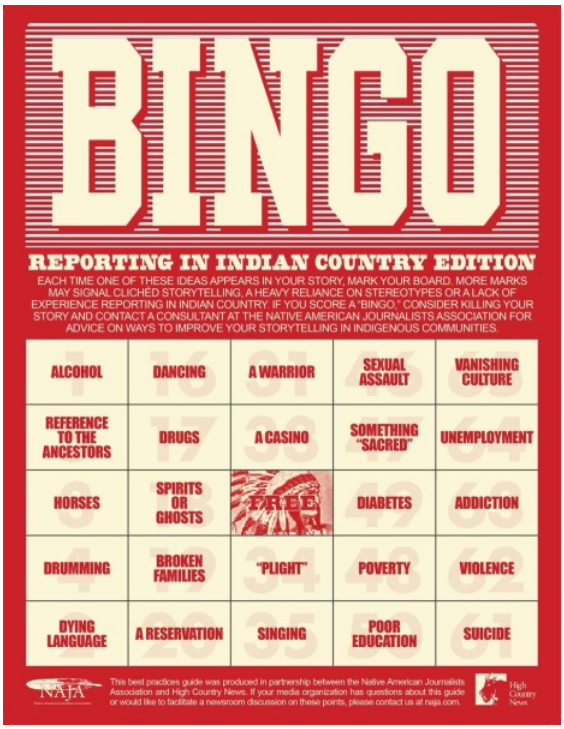
Why Barrie, who wrote the story as a play in 1904, chose a racial slur for dark-skinned children of African descent to name her tribe is telling. And Disney's depiction of Tiger Lily 50 years after Barrie wrote the original play is even more so.

"That feather in the headband, a feather sticking out," Yazzie says. "I don't know any tribe who wears feathers like that, especially in our ancestral stories." Sixty years after the Disney film's release, Tiger Lily still wasn't right and was played by Rooney Mara in the 2015 film *Pan*. (Most Native American characters have been played by white actors in Hollywood films).

This flippant and racist disregard to accuracy is typical of Native American stereotypes propagated by U.S. history, pop culture and mass media. The Native American is either the noble savage, the bloodthirsty savage, the despairing Indian on a reservation or simply invisible.

"There were always these stereotypes of what a Native American was, and it was always a bad guy," says Yazzie, who devoured comics in her youth growing up on the Diné reservation in Tse Si Ani, also known as Lupton, Arizona. Known for its magnificent sandstone cliffs, the small town straddles the border between New Mexico and Arizona. "I just don't like those types of characters, and they're all men too," she adds.

Decades older than Yazzie, writer Sherman Alexie of the Spokane-Coeur d'Alene tribe felt the same. In his 1998 Los Angeles Times essay "I Hated Tonto (Still Do)," he wrote: "In the movies, Indians are always accompanied by ominous music. And I've seen so many Indian movies that I feel like I'm constantly accompanied by ominous music. I always feel that something bad is about to happen."



To raise awareness among media about reporting Native American stories, Ahtone helped in the gamification of words to approach with caution. Photo courtesy of NAJA and High Country News

These stereotypes not only negatively affect Native Americans' self-esteem, but they also radiate outward and influence institutions, such as mass media. Tristan Ahtone, a journalist and citizen of the Kiowa Nation, is exasperated by mainstream media's sloppy and stereotypical coverage of issues involving Native Americans and Indigenous peoples worldwide.

"The point about challenging stereotypes about Native people is you just have to write about a real person," he says. "It's not that hard. It's an incredibly low bar to write about somebody as a normal person, instead of, 'Oh my God we've never seen anything like this!' "

Why has this status quo been living for so long? Ahtone thinks it stems from an avoidance that has deep racial roots. "When it comes to these sorts of colonial practices in the U.S., we're incredibly inconvenient to have around," he says. "U.S. history provides ample evidence of genocidal policies. So by having us around and talking about surviving, for instance, that's a big issue."

But while Alexie was coy about fighting stereotypes ("We Indians became so numb to the possibility of dissent," he wrote), Ahtone and Yazzie are among many Native Americans unequivocally committed to changing their own narratives – and Native American narratives as a whole.



Yazzie uses graphic art to address gender and Indigenous issues in the U.S. Photo courtesy of Jolene Nenibah Yazzie

Too Many Feathers for a Woman

When Yazzie was only 4 years old, she already knew she was different. “My parents knew it too. I always wanted to be with the boys and do things better than the boys,” she says. “Being gay and being a person of color – being Diné – it questions a lot of things.”

Of course, the inevitable happened. “I started competing against boys in powwows,” she recounts.

This was one of the first things Yazzie did to claim her narrative, and she did it despite being seen as disrespectful to their traditions. “People said to me, ‘You can’t dance in the boys’ category because you’re a girl.’ I have questioned that ever since.”

Yazzie was even bullied in the powwow circle. But because her parents were always supportive, she has danced in boys’ and now men’s’ powwows ever since. She has met several men who dance in the women’s category, and she’s seen other women dance in the men’s category. “I don’t know if they’re still doing it,” she says. “I hope they are.”

Yazzie has also asserted a more authentic portrayal of Native American women through her paintings. Her comic book–style portraits of Native American women warriors raise elders’ eyebrows. In her mural “Sisters of War,” three women warriors wear hats adorned with feathers.

“Some of my own people question me because these hats are only worn by men. They say, ‘Women aren’t supposed to be warriors. They have too many feathers on their hats. That’s too many feathers for a woman.’

“But that was my interpretation of me stepping into gender,” she says. “I know there were women warriors, and there still are women warriors. They just face different wars, like domestic violence, rape, that kind of stuff.”

Over the past few years, Yazzie has added photojournalism to her storytelling tools. She has freelanced for *Al Jazeera America*, is currently finishing a journalism degree at the Metropolitan State University of Denver and will join *High Country News* as a photographer in July.

Yazzie is excited about a current project with a professor at Oklahoma State University. “She wants me to take photos of lesbians who have families,” Yazzie says. “I think it’s important because there is a lack of images of lesbian women, especially Diné or any other tribe, raising their own families.”

The project is close to Yazzie’s heart as she and her partner, who is part Diné, want to get married in a tribal ceremony. But, the Diné medicine men they have approached have all turned them away. Her desire for kids is difficult for her and her partner to imagine.

“I want to make [these images] more normal for other people, so they won’t look at [gay women] like that anymore,” Yazzie says. “Because even those little weird glances make you uncomfortable. It doesn’t make you feel that you’re a part of something. I want them to feel they are not alone, that there is a community for them.”

Every Space a Revolution

It’s been about six years since Ahtone left general news reporting and to focus primarily on tribal affairs and Indigenous stories. He has worked for news outlets including *NPR, Al Jazeera America, PBS NewsHour, Frontline and National Native News* and won a few awards for his work. Now an associate editor for tribal affairs at *High Country News*, Ahtone works hard at making space for Native American voices in the national conversation.

“There is no Indigenous voice in mainstream or legacy media,” Ahtone says. He feels these outlets just don’t hire enough Native reporters or editors, if they hire any at all. Their coverage of Indigenous issues also leaves much to be desired. “Some places will have a marijuana beat but they don’t have a beat covering the 567 tribal nations across the U.S.,” Ahtone says.

So, after several years of sticking it out in mainstream outlets, he left. He says, “It’s incredibly tiring to have to continue to try to convince an industry that prides itself on being very democratic and open to underrepresented voices that our voices matter.”

Ahtone was drawn to *High Country News* because they devoted resources and time to producing multi-faceted, high-quality coverage of Native Americans and their lands. Ahtone also worked for cable news channel *Al Jazeera America*, which was aiming to be the go-to network for underrepresented voices. Unfortunately it shut down in 2016 after only three years on the airwaves.

Most legacy outlets, Ahtone says, only want one-off reports or occasional 'Indigenous Voices' series. "These outlets routinely screw things up with Indigenous communities but also with most communities of color," Ahtone says.

He attributes this to an underpinning concept of ownership: "The commodification of Native people – be it through land or through image – often plays a role in reporters thinking that they can do whatever they want in these communities."

Ahtone thinks that journalists in legacy outlets might not even be conscious of this, and that this lack of self-awareness in turn keeps them from recognizing their reporting and correcting their behavior.

For Ahtone, publications such as *The New York Times* and *Washington Post* are most culpable as their influence and strong digital presence ensures they dominate news coverage and "take up a lot more space in the national conversation."

As Ahtone digs into more investigative pieces for *High Country News* and builds his team of reporters and correspondents, he also keeps his eye on young Native American writers keen on becoming journalists.

Working with the Native American Journalists Association (NAJA), Ahtone and his colleagues advocate to get more Native people into newsrooms, "because Indigenous peoples holding space is revolutionary," he says. "We need to be holding these spaces.

"If you're at a tribal outlet, if you're in a mainstream outlet, it doesn't matter. We need your voice. No matter where you are, we want you there."

The community of journalists such as himself might be small, but it is strong, he says. Experienced Native American journalists are eager to mentor those who are younger and equip future generations with the skills to continue changing the narrative.

"My hope is by starting to seed more people into news organizations early, with a different way of thinking, then in the future they will do a better job."

Natasha Vizcarra is a science writer based in Boulder, Colorado. She is the editor of *Sensing Our Planet: NASA Earth Science Research Features*, a freelance writer, and the author of several children's books.

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79: Which Future Would You Choose? (Walljaspar & Klein)

Jay Walljaspar & Kim Klein

#systemanalysis, #currentevents, #artsandculture, #descriptive, #sharedvalues, #pathos, #logos, #proposal, #walking



"Architecture Budapest The Parliament" by Wiesław Grąziowski is in the Public Domain, CC0

Day at the Museum: Scenario 1

You stroll down the sidewalk and come to the corner right across from the museum. The light turns red. Cars zip past. You push the pedestrian button on the light pole, and soon the light changes so you can get across.

As you walk, you take a deep breath of the crisp fall air. You know downtown suffers air pollution problems, but today it seems clear and beautiful. The museum has free admission on Tuesday, and you are happy that you could rearrange your work schedule this week to take advantage of it. You climb the stairs and enter through the turnstile, but before heading off into the museum, you decide to use the bathroom. It is neat and clean, with environmentally friendly low-flow flush toilets. Coming out of the stall, you wash your hands at the sink with the soap and paper towels provided. Outside the restroom, you stop at the drinking fountain and then, refreshed, eagerly stroll in the direction of the exhibits.

Day at the Museum: Scenario 2

You step onto the sidewalk leading to the museum through a turnstile, flashing your FASTRAK card at a machine operated by a corporation that subcontracts with the city to maintain sidewalks in this part of town. A GPS monitor on your belt deducts $1 for every twenty blocks that you walk. (This monitor has the advantage of “keeping you safe,” according to the new marketing campaign, because if you fall or are the victim of a crime, you can press a button so that police or an ambulance can easily find you.) In well-traveled zip districts, like downtown, you pay an additional $2 surcharge to use the sidewalks. (“Prevents overcrowding,” say the FASTRAK ads.)

You arrive at the corner right across from the museum and put a quarter in the meter, which activates the walk light. You have ten seconds to make it across the street before the roaring traffic resumes (25 cents more would get you twenty seconds). A few teenagers and a homeless woman cross without paying, alert for the private security guards that might arrest them.

Not everyone can afford the monthly FASTRAK card, so they sneak onto the sidewalk between turnstiles or walk in the road alongside speeding cars. Pedestrian fatalities have quadrupled since the city auctioned sidewalk rights to corporations two years ago.

People passing you wear oxygen masks with various brand names emblazoned in bright colors. So far, you have chosen not to buy “fresh air” in lightweight tanks that can be easily worn when you go outside. You are not convinced the free air is that dangerous. In fact, today it seems crisp and clear. The museum entry is half price on Tuesday, only $14 with special coupons you get when

making a purchase at the Gap. But you have to put up with Gap advertising throughout the exhibit. There are fewer advertisements on the days when you pay full price.

Once inside the museum, you pay $3 to use the bathroom and another $1 for washing your hands with automatically premeasured units of water, soap, and paper towel. Had you planned ahead, you would have used the Porta-Potty on the street, which costs only $1.75 but with no sink, only a Handi-wipe dispenser costing another buck. You look for a drinking fountain, until realizing how futile that is. Bottled water sells for $6 from a vendor who also runs the bathroom concession. You've spent enough already, you decide, and, still thirsty, trudge off in the direction of the exhibits.

Jay Walljasper is Senior Fellow at On the Commons and editor of OnTheCommons.org. This essay is an excerpt from his book, *All That We Share: A Field Guide to the Commons*. Kim Klein is a trainer, speaker and author of five books on fund-raising for nonprofits including *Fundraising for Social Change*.



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80: America's Walking Renaissance (Walljasper)

By Jay Walljasper



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Signs that Americans Have Rediscovered Walking

You don't have to look far.

- *Real Simple* magazine declared it "America's untrendiest trend" in a cover story.
- Soul Singer Pharrell Williams' "Happy" video, which highlights the sheer pleasure of strolling down the street, has been watched 850 million times.
- A recent national poll from the National Association of Realtors finds that 79 percent of Americans believe it's important to live "within an easy walk" of the places they want to go.
- Secretary of Transportation Anthony Foxx has announced an all-out effort to make walking safer in communities everywhere. "Bicycling and walking are as important as any other form of transportation," he declared at a major transportation conference.
- More than 10 percent of all trips in America are on foot, according to Paul Heberling, Policy Analyst at the US Department of Transportation—and 28 percent of all trips under a mile.

Imagine living in one of the world's great walking communities.

Your day begins with a stroll—saying hi to neighbors, noticing blooming gardens and enticing shop windows, maybe stopping for a treat on your way to work.

Weekends are even better. You step out your door and join the hum of activity on the sidewalk en route to a coffeeshop, park, shopping district, friend's home, recreation center or house of worship.

More time on your feet provides an opportunity to reflect on your life (you feel more energetic and creative now that you're not driving all the time) and your community (it feels more alive now that everyone walks more). Even driving is more fun than it used to be with fewer cars clogging the streets.

And the really good news is that you don't need to move to another town or a more expensive neighborhood to enjoy these pleasures. Any community can become more walkable if people are willing to get off the couch to make a difference.

That's what my colleagues and I at the Every Body Walk! Collaborative and America Walksdiscovered researching our new book *America's Walking Renaissance*, which can be downloaded here for free.

Feet on the Street, Coast-to-Coast

We found inspiring stories from places across the US where people got things started in communities not so different from where you live.

- In Baldwin Park, a racially diverse suburb of LA, high levels of childhood obesity are dropping as the result of a community-wide effort to make walking more safe and comfortable.
- In Batesville, Arkansas, and Albert Lea, Minnesota, improvements to boost walking around town are paying off in new residents, businesses and hope for the future.
- In Birmingham, a growing network of walking trails helps address problems arising from decades of economic decline, racial inequity and declining public health.

- In Arlington, Virginia, an innovative plan to transform neighborhoods into foot-friendly villages made it America's Most Walkable Suburb.
- In Phoenix, ambitious programs to encourage walking are part of a push to become America's healthiest city.
- In St. Paul, a multicultural community torn apart by freeway construction seeks revival and healing through better pedestrian connections.
- In San Francisco and New York, neighbors are teaming up with public leaders to end all traffic deaths on city streets.
- In Northeast Iowa, small town kids are growing excited about walking to and at school.
- In Seattle, groundbreaking policies curb speeding motorists and prevent traffic crashes.
- In African-American communities coast-to-coast, GirlTrek encourages women to take charge of their health by walking regularly.
- In California's Central Valley, Latino parents are organizing campaigns to make streets hospitable for people on foot.
- In Indianapolis, leaders from around the world study the Cultural Trail, a 21st century walk-and-bike corridor that has reinvigorated struggling business districts.
- In Greater Philadelphia, a network of bike/walk trails link the entire region—300 miles so far with 450 more planned.
- Even in Oklahoma City, once named America's "Worst Walking City", big plans are working to make walking easier, less dangerous and more fun.



"Mini chain gang" by kthypryn is licensed under CC BY 2.0

Why is walking suddenly popular?

Improvements like these are popping up all over because Americans want to get back on their feet—for better health, stronger communities and happier, more relaxing lives.

The Federal Centers for Disease Control & Prevention (CDC) found the number of people who regularly walk rose six percent between 2005 and 2010 (latest figures available), a jump which translates into 20 million Americans stepping up.

But we still have a long ways to go. Only 48 percent of adults met the CDC's minimum daily recommendation for walking or other physical activity: 30 minutes a day five days a week (60 minutes daily for kids).

That's the magic number that cuts your chances of suffering from depression, dementia, diabetes, colon cancer, heart disease, anxiety, high blood pressure and other serious diseases by 40 percent or more. The American Heart Association lauds walking as the exercise people stick with the most over time. It's free, requires no special equipment and can be done anytime, usually right out your front door.

Last year, US Surgeon General Vivek H. Murthy singled out walking as a powerful health solution in his landmark Call to Action to Promote Walking and Walkable Communities. "Walking is a simple, effective and affordable way to build physical activity into our lives," Murthy declared. "The key is to get started because even a small first effort can make a big difference in improving the personal health of an individual and the public health of the nation."

The rise in walking for recreation, transportation and exercise is also being fueled by new research showing it's good for us in many ways besides better health:

- Going out for a walk is one of the best ways to meet people and strengthen community connections, which is fun but also boosts our mental and physical health.
- Kids who walk to school do better in their classes, according to Mary Pat King, the National PTA's Director of Programs and Partnerships. Walking improves students' concentration, mood, cognitive performance and creativity, explains Dr. Richard Jackson, former Environmental Health Director of the US Centers for Disease Control.
- Metropolitan regions with many walkable neighborhoods perform better economically than those with just a few, according to a new report from the George Washington University School of Business.
- Reduced anger, increased self-control and a greater sense of well-being are other documented benefits of walking , according to 100 Reasons to Walk, issued by Walk with a Doc, an organization of physicians working in 29 states.

Everybody has a Right to Walk

"The health benefits of walking are so overwhelming that to deny access to that is a violation of fundamental human rights," declared Dr. Robert D. Bullard, father of the environmental justice movement in a keynote speech at the National Walking Summit in Washington, D.C. "All communities should have a right to a safe, sustainable, healthy, just, walkable community."

Yet it is a stark fact that children, older Americans, the poor, people of color and people with disabilities are injured or killed more frequently while walking (or rolling, in the case of people using wheelchairs or motorized carts).

- People walking in the poorest one-third of urban census tracts are twice as likely to be killed by cars.
- African Americans are 60 percent more likely to be killed by cars while walking, and Latinos 43 percent.
- The pedestrian fatality rate rises significantly for people 45 and over, according to the National Highway Traffic Safety Administration.

Many disadvantaged people now think twice before traveling on foot due to dangerous traffic, crumbling sidewalks, street crime, poor lighting, or the lack of stores and public places within walking distance.

Poor conditions for walking among low-income households limit their access to jobs and education. One-third of all African Americans and one-quarter of all Latinos live without access to a car, according to a report by the Leadership Conference Education Fund, which means walking and public transit (which involves a walk) represent important pathways to opportunity.

"A big thing we could do to help low-income families is to make it easier to live without a car. And it would help middle-class families to switch from two cars to one," says Gil Penalosa, founder of 880 Cities and an immigrant from Colombia. He notes that the average cost of owning and operating one car is about $8,500 a year, even taking into account recent dips is gasoline prices.

The good news is that the right to walk is becoming a major issue, as advocates for social justice, public health, neighborhood revitalization and other causes push for policies to make walking safer and easier in communities all across America. In fact, Secretary of Transportation Foxx, the former mayor of Charlotte, has made it one of his top priorities with the Safer People, Safer Streets initiative.

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81: Austin, Indiana: The HIV Capital of Small-Town America (Wapner)

By Jessica Wapner



"#Jesustakethewheel" by Cult Gigolo is licensed under CC BY-NC-SA 2.0

Jessica and Darren McIntosh were too busy to see me when I arrived at their house one Sunday morning. When I returned later, I learned what they'd been busy with: arguing with a family member, also an addict, about a single pill of prescription painkiller she'd lost, and injecting meth to get by in its absence. Jessica, 30, and Darren, 24, were children when they started using drugs. Darren smoked his first joint when he was 12 and quickly moved on to snorting pills. "By the time I was 13, I was a full-blown pill addict, and I have been ever since," he said. By age 14, he'd quit school. When I asked where his care givers were when he started using drugs, he laughed. "They're the ones that was giving them to me," he alleged. "They're pill addicts, too."

Darren was 13 when he started taking pills, which he claims were given to him by an adult relative. "He used to feed them to me," Darren said. On fishing trips, they'd get high together. Jessica and Darren have never known a life of family dinners, board games and summer vacations. "This right here is normal to us," Darren told me. He sat in a burgundy recliner, scratching at his arms and pulling the leg rest up and down. Their house was in better shape than many others I'd seen, but nothing in it was theirs. Their bedrooms were bare. The kind of multigenerational drug use he was describing was not uncommon in their town, Austin, in southern Indiana. It's a tiny place, covering just two and a half square miles of the sliver of land that comprises Scott County. An incredible proportion of its 4,100 population – up to an estimated 500 people – are shooting up. It was here, starting in December 2014, that the single largest HIV outbreak in US history took place. Austin went from having no more than three cases per year to 180 in 2015, a prevalence rate close to that seen in sub-Saharan Africa.

Exactly how this appalling human crisis happened here, in this particular town, has not been fully explained. I'd arrived in Scott County a week previously to find Austin not exactly desolate. Main Street had a few open businesses, including two pharmacies and a used-goods store, owned by a local police sergeant. The business with the briskest trade was the gas station, which sold $1 burritos and egg rolls. In the streets either side of it, though, modest ranch houses were interspersed among shacks and mobile homes. Some lawns were well-tended, but many more were not. On some streets, every other house had a warning sign: 'No Trespassing', 'Private Property', 'Keep Out'. Sheets served as window curtains. Many houses were boarded up. Others had porches filled with junk – washing machines, furniture, toys, stacks of old magazines. There were no sidewalks. Teenage and twenty-something girls walked the streets selling sex. I watched a young girl in a puffy silver coat get into a car with a grey-haired man. I met a father who always coordinates with his neighbour to make sure their children travel together, even between their homes,

which are a block apart. Driving around for days, knocking on doors looking for drug users who would speak with me was intimidating. I've never felt more scared than I did in Austin.

The mystery of Austin is only deepened by a visit to the neighbouring town of Scottsburg, the county seat, eight miles south. It's just a bit bigger than Austin, with a population of about 6,600, but it's vastly different. A coffee shop named Jeeves served sandwiches and tall slices of homemade pie, which you could eat while sitting in giant, cushiony chairs in front of a fireplace. A shop next door sold artisanal soap and jam. The town square had a war memorial and was decorated for Christmas. The library was populated. The sidewalks had people and the streets had traffic. There were drugs in Scottsburg, but the town did not reek of addiction. The people didn't look gaunt and drug-addled. No one I asked could explain why these two towns were so different, and no one could explain what had happened to Austin. But a new theory of public health might yet hold the answer. Known as syndemics, it may also be the one thing that can rescue Austin and its people.

The term syndemics was coined by Merrill Singer, a medical anthropologist at the University of Connecticut. Singer was working with injecting drug users in Hartford in the 1990s in an effort to find a public health model for preventing HIV among these individuals. As he chronicled the presence of not only HIV but also tuberculosis and hepatitis C among the hundreds of drug users he interviewed, Singer began wondering how those diseases interacted to the detriment of the person. He called this clustering of conditions a 'syndemic', a word intended to encapsulate the synergistic intertwining of certain problems. Describing HIV and hepatitis C as concurrent implies they are separable and independent. But Singer's work with the Hartford drug users suggested that such separation was impossible. The diseases couldn't be properly understood in isolation. They were not individual problems, but connected.

Singer quickly realised that syndemics was not just about the clustering of physical illnesses; it also encompassed nonbiological conditions like poverty, drug abuse, and other social, economic and political factors known to accompany poor health. "Syndemics is embedded in a larger understanding about what's going on in societies," he said when I spoke to him. Singer dubbed the syndemic he'd observed in Hartford 'SAVA', short for substance abuse, violence and HIV/AIDS. In the past ten years, several medical anthropologists have pursued syndemics theory in other contexts. Emily Mendenhall, who studies global health at Georgetown University's School of Foreign Service, has described a syndemic of type 2 diabetes and depression among first- and second-generation Mexican immigrant women in Chicago. She named that syndemic 'VIDDA', short for violence, immigration, depression, diabetes and abuse, the constellation of epidemics the women were experiencing. "The people who get affected by any given disease, it's not random," said Bobby Milstein, a public health scientist, today at the Massachusetts Institute of Technology, who founded the now-defunct Syndemics Prevention Network at the Centers for Disease Control and Prevention. "It happens systematically with certain people who are placed in conditions of vulnerability that are not entirely under their own control." As Andrea Gielen, who directs the Center for Injury Research and Policy at Johns Hopkins University, explained to me: "Everything works together. To be in silos delivering one thing for one problem, another thing for another problem, is not as effective as stepping back, looking at the whole person, and addressing the complexity of needs in an integrated way."

Mendenhall, a leading researcher in syndemics theory, told me her method would be to approach Austin as an ethnographer; that is, by studying the people and the culture. "In syndemics, one of the most important parts is seeing who's affected," she said. She harkened back to John Snow, the British physician known as the first epidemiologist, whose examination of a London neighbourhood affected by cholera included speaking to as many people as possible, leading to his identification of a contaminated water pump as the cause. As Mendenhall explained, a syndemic approach to Austin would mean obtaining in-depth life history narratives from large numbers of people, both those who use drugs and those who don't. Those narratives would then be framed within the larger political economy, to identify the factors that put the town into strife. The approach would isolate the identifying characteristics of people who are using drugs. Is it everyone who's associated with a factory that shut down? Who was the dealer that brought drugs into the community? Is there a social belief linked with use, or is it more stress-related? "You have to figure out the social and political networks that link people to drug use," Mendenhall said.

If I was to untangle the web of problems that was smothering Austin, then I'd have to start in the past and track how that web was spun. Austin was founded by four men in 1853. The town was small – in 1880, the population was 287 – but bustling. There was a furniture shop, a woodworking shop, a cabinet and coffin maker, two blacksmiths, two grocery shops, a saloon, a hotel, a newspaper, a literary society, two doctors and three ladies' hat shops. The main industries were timber and canning. The Morgan Packing Company, a canning factory that became the town's largest employer – and which still is today – was founded in 1899.

Brittany Combs, a public health nurse for Austin who grew up in the south-west corner of Scott County, remembers her childhood as happy and carefree. “There was a real sense of community,” she said. “We all helped each other.” In the 1960s, the Morgan Packing Company began expanding its workforce by transporting people north from Hazard, Kentucky. Many people living in Austin today trace their routes to that Appalachian town, including Darren and Jessica. “They call this Little Hazard,” said Jessica.

Austin’s decline seems to have begun in the late 1980s. The American Can Company, which manufactured cans for the Morgan Packing Company, was the town’s second-largest employer for decades, but closed in 1986. Connie Mosley, who has lived in Austin since she finished high school in 1965, thinks the town deteriorated when the older generation died and the younger generation, instead of staying, sold the houses and left. “Outsiders started buying up everything,” she said. Inexpensive rentals – the average monthly rent is less than $700 in Austin, lower than the US average of $934 – attracted transient people who were not necessarily looking to settle down and raise a family.



"Austin, Indiana" by Chris Flook is licensed under CC BY-SA 4.0

In January 1990, unemployment spiked to a high of 16.9 per cent. The average jobless rate for that year was lower, at 8.5 per cent, but still starkly at odds with an overall US unemployment rate of 5.6 per cent. The town’s infrastructure began to deteriorate. Jackie McClintock, a nurse who works with Combs, points to the lack of recreational activities as leading people to use drugs. “There’s nothing for people to do,” she said. “There’s boredom, unemployment.” Jerome Adams, Indiana’s state health commissioner, describes Austin as having social and economic conditions that are ideal for a drug epidemic. “It’s kind of the epitome of years of neglect, poverty, lack of education and lack of opportunity, or people’s perception of lack of opportunity,” he said.

Today, the estimated median household income in Austin is $33,000, about $15,000 less than that for Indiana. The average home is valued at $78,000, the US median in 2010 being $210,000. About 8.3 per cent of Austin residents are unemployed, compared with a US average of 5 per cent. An estimated 34 per cent of working people in Austin hold manufacturing jobs and just 7 per cent have a college degree. In 2013, about 25 per cent of Austin residents were living in poverty.

Widespread pill abuse can be traced back to the 1990s. Will Cooke, a physician who opened his practice in Austin in 2004, claims he has patients who have alleged pills were available at a local bar, even to teenagers. The moment he started seeing patients, they were asking for opiates and benzodiazepines, the tranquilisers more commonly known as Valium and Xanax. As Cooke sees it, Austin’s substance abuse problem is the legacy of decades of challenges. “As far back as people that I’ve talked to can remember,” he said, “it’s always been a struggle in survival mode.”

Adams told me the problem was exacerbated by physicians themselves. Many opioid prescriptions start out as legitimate treatments for pain. Most doctors are untrained in pain management and yet patient satisfaction scores for physicians, maintained by the Centers for Medicare and Medicaid Services, are directly determined by patients’ assessment of how well their pain was managed. That score has consequences: a low one leads to a decrease in pay. “We have an environment where doctors and hospitals feel compelled to continue to prescribe opioids based on their bottom line,” said Adams. “We still haven’t accepted that overprescribing is a part of the problem to the degree that I think it clearly is.” In addition, addiction treatment services have been lacking. In the entire state of Indiana, there are two or three psychiatrists specialising in addiction. “We’ve underfunded mental health and substance abuse for decades,” Adams said.

All of what has happened since the late 1980s is potentially part of Austin's syndemic: the sudden unemployment, the desertion of the young, the fall in rent prices, the rise of the itinerant population, the decline of infrastructure, the overprescription of pain pills, the lack of assistance. By the late 1990s and early 2000s, it seems, the town itself had become sick, the result of various forms of 'structural violence' – a term introduced by Harvard physician and anthropologist Paul Farmer to describe harmful social frameworks – along with historical, behavioural and political risk factors.



"Opioids" by K-State Research & Extension is licensed under CC BY 2.0

It was into this diseased town that Jessica and Darren were born. "The first time I saw someone taking drugs I was probably about nine or ten years old," Darren told me. "You literally couldn't walk around a corner without somebody asking, 'Hey, you wanna try this?'" He said that many relatives are drug addicts and dealers. They told me that sometimes elder relatives would sell their pills to get by. They're hardly alone. "Some of these kids around here just did not have a chance," said Darren, who has seen parents selling drugs in front of their five- and six-year-olds. Barney Rushkoff, an HIV-positive 57-year-old who lives in a mobile home without electricity or heat, told me about seeing a child playing in the street. The little boy had a towel wrapped around his arm and was shouting "shoot me, shoot me", mimicking his parents injecting. Rushkoff said he'd recently quit using but still kept sterile drug paraphernalia in his tiny bedroom for his son, an addict who lives with him in the trailer.

Darren has used cocaine, Lortab, Percocet, OxyContin and most recently Opana, an opioid he's been shooting for the past few years. He started selling pot when he was around 14 years old. "I'd take my money and buy cocaine with it," he said. Today, he has almost nothing. He owns one pair of shoes, one pair of pants and one pair of shorts. When I asked how he would stay warm in winter – it was early December when we met – he pointed to a fleece jacket. They had sold the washer and dryer for drug money, along with almost everything else in their house, including copper stripped from the air conditioner. He's been in jail many times and served two prison sentences. He wakes up in pain and survives day-to-day, doing whatever he can to get money for drugs, including burglary, selling items stolen from the dollar store and pimping out his sister. Jessica's trajectory has been largely the same, though she has spent more time prostituting and less time in jail.

From a purely biological standpoint, the 2015 HIV outbreak was caused by the transfer of the virus by dirty needles used to inject liquefied pain pills and methamphetamine. "Everyone knows each other," Darren said. "And they're all sharing needles." Because of the sharing, a single introduction of HIV exploded among the community of drug users. Jackie McClintock, the nurse who started working with Combs when the outbreak made headlines, told me about a couple she met who'd recently moved to Austin. "They shared one needle for a month," she said. "They would shoot up at least ten times a day."

The laws surrounding drug paraphernalia, yet another part of the syndemic, likely augmented the problem of needle sharing. Prior to Indiana's governor, Mike Pence, approving the temporary needle exchange programme there, anyone found carrying a needle could be arrested for a felony. Such laws are in keeping with the mindset that people who are addicted to drugs have only themselves to blame, a foundation of the US government's War on Drugs, set in motion by President Richard Nixon in 1971 and upheld by several subsequent administrations. Policing, along with social stigma, "increase the likelihood that drug users will live in and inject in unhygienic environments," wrote Singer and fellow researcher Nicola Bulled in their study 'Syringe-mediated syndemics', published in *AIDS and Behavior* in 2009.

The picture that emerges from this is one of a disease with many causes, including place of birth. An estimated 2.6 per cent of Americans have injected drugs, compared to up to 12 per cent of Austin. Thus, the very fact of living in Austin can be considered a

risk factor for substance abuse. A child born there is imperilled by circumstances beyond their control. The desperation felt by many contributes to the town's illness, in part because people diagnosed with HIV may not seek treatment for either their infection or their addiction. "There's not a whole lot of hope for nobody," said Kristy Madden, 37, a recovered addict with two children and two grandchildren. "Nobody doesn't really have anything to look forward to." She said she has relatives with HIV, some of whom are still using drugs. An Austin man named Cecil, who has HIV, told me he'd recently spent $3,500 on Opana pills in less than five hours. "My days is numbered," he told me, "so why stop now?"

Syndemics does have critics. Alexander Tsai, of the Center for Global Health at Massachusetts General Hospital, published a study in 2015 demonstrating inconsistencies in evidence linking diseases and harmful social conditions. "It was a harsh critique," said Mendenhall. The study highlighted a lack of proof that syndemics works epidemiologically, that it is still theoretical. "People haven't actually tested syndemics quantitatively," Mendenhall said. In other words, there is no concrete data proving that, say, domestic abuse is a definitive cause of diabetes among Mexican immigrant women in Chicago, even though Mendenhall's hundreds of interviews implied otherwise.

But evidence linking disadvantage to poor health does exist. According to the landmark Adverse Childhood Experiences study, published in 1998, people exposed to neglect, sexual abuse, living with a substance abuser, and other situations as children were far more likely to abuse substances as adults. More recently, the massive Global Burden of Disease study, which examined a wide range of illnesses across the world, looked at suicide rates as one quantifiable measure of mental health issues. There, suicide was considered one solid indicator of such problems. A smaller-scale analysis measuring the various components of a given syndemic in a given population has not been done.

Part of the challenge is that a syndemic is hard to measure. "If a broken social network affects people's outcomes more than their daily exercise," Mendenhall noted, "how do you explicitly prove that?" Syndemics relies largely on qualitative data; that is, on descriptions provided by affected individuals, rather than on numbers and percentages. Mendenhall, who has edited a series of papers on syndemics soon to be published in the *Lancet*, agrees with the criticism and the importance of numerical data. But she noted that, considering its holistic view of illness, syndemics works best by "interrogating the social experience as much as the biological". And that means more allowance for correlative data. "We need people in public health and medicine to take syndemics seriously," she said. "That will allow them to incorporate the social into the understanding of the medical." Meanwhile, there are signs that medical research may be learning to make more room for so-called 'softer' science. A recently published open letter to the *BMJ* by 76 senior academic researchers cited concerns about the high rejection rate for qualitative research at not only that journal but also *JAMA* and the *New England Journal of Medicine*, and called on these influential journals to reconsider such policies.

But even if the HIV outbreak and widespread drug addiction in Austin are viewed as part of a system of problems, rather than a collection of individual issues, how can this new understanding be applied? What good does any of this do? Perhaps learning to see a problem in all its true complexity will give us the opportunity to heal it more effectively. As a result of Mendenhall's work, doctors at John H Stroger, Jr Hospital of Cook County, Chicago, now routinely ask women about domestic violence. Merrill Singer's work in Hartford also led to new interventions. Previously, no support system existed for women who were pregnant and abusing drugs. Newborns were at risk of HIV and being born with drugs in their bodies. Singer was also concerned about children being put into state custody and becoming locked in the system, potentially maintaining the SAVA syndemic for the next generation. The identification of Hartford's SAVA syndemic led to a comprehensive programme specifically for women who were pregnant and abusing drugs. Funding eventually waned, but a residential drug treatment programme in the town, which was born of the effort, remains.

I caught a glimpse of how a syndemic understanding of Austin's problems might work when I accompanied Combs and McClintock during their home delivery of sterile drug paraphernalia, a service they provide every Friday afternoon. Their needle programme has been controversial in the town. "Fuelling the habit is not helping," said Linda Brandenburg, a 47-year-old Austin resident. Another local, Linda Bowling, thought the money would be better spent on children. These might be considered understandable positions in the absence of a syndemic perspective.

Combs and McClintock were so friendly with the people they brought supplies to that I was, at first, squeamish about the chumminess. They knew the clients and greeted them with familiarity. Sitting in the backseat of their car as they made their rounds, I caught myself judging Combs and McClintock for being so accepting of people shooting up. When they asked what size needle to provide – meth users and Opana users prefer different gauges because of each drug's thickness – it had all the gravity of a coffee

order. They asked about needle sharing, sleep habits and injection frequency quickly and in the same cheery tone as their greeting. Back in the car, Combs and McClintock discussed the potential whereabouts of missing clients in a way that seemed far removed from what that absence might imply. As if catching up on the day's news, McClintock scrolled through the county jail inmate list on her phone to see if they could account for anyone. I wondered if the critics could be right. Their niceness surely condoned the addiction.

But their programme has been enormously successful. More than half the town's injecting drug users are enrolled. The HIV outbreak tapered off soon after it began. As effective as it has undoubtedly been, though, addressing the entire syndemic in Austin requires more than a needle exchange. "It's not enough," said David Himmelgreen, who has studied the connection between food insecurity and HIV in southern Africa. "You want people off their addiction, but they need to be well-nourished in body and mind." Jerome Adams sees social stigma as a major barrier to reducing substance abuse. "We've got to get everyone on board with the concept that addiction is a chronic disease," he said. "It is not a moral failure."

Two days later, I began to understand the underlying value not only of Combs and McClintock's work for the needle exchange, but of the human exchange it fostered. When interviewing Darren, he told me he had never talked about his life before. Nobody had been interested. He said he thinks every day about all the people he's hurt and wishes he could go back to school and then work as a car mechanic. Jessica also dreams of another life. "I would give anything in the world if I had never seen a pill," she said. They're both grateful for the clean paraphernalia they receive each week. "That needle exchange is the best thing that could've happened to Austin," Darren said. It's likely that soon after I left, Darren and Jessica got some Opana or did some more meth until they found their relative's lost pill. Jessica was planning to enter rehab six weeks from then, which may or may not have happened. The barriers to any sort of healing for them both may be insurmountable.

What I'd realised, during my week in Austin, was that a friendly interaction might just turn out to be as healing for its people as a sterile needle. But does that make the no-trespassing signs and the community's attitude toward addiction part of the syndemic? Many residents I met spoke of drug users as evil, with only themselves to blame for their choices. Others resented how the media portrayed the town. "The country just singled us out as the only place this ever happens," an owner of Buchanan Funeral Home told me. She admonished me to be sure I got the facts right when I wrote about Austin. Then she excused herself to tend to a family who had come to collect their funeral flowers. They'd just buried their 26-year-old son, who'd died of an overdose, two years after burying his older brother.

(Although interviewees granted permission for their names to be used, some have been changed for privacy and legal reasons. Some family relationships have also been obscured.)

Jessica Wapner is a freelance writer who writes about the intersection of health, disease and social justice. Her essay appeared on Mosaic.

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82: On Reparations, the Question Isn't If, but When and How (Warfield)

By Zenobia Jeffries Warfield



"Family of slaves in Georgia, circa 1850" by Unknown, New York Historical Society is in the Public Domain

"We will never achieve racial justice in America if this country does not examine the impact and legacy of slavery—and make strides toward achieving reparatory justice."

—Jeffery Robinson, deputy legal director, ACLU

For nearly 250 years, enslaved Africans and their descendants toiled on the land and in the homes of White enslavers in the United States.

They planted, fed, weeded, mowed, and harvested crops that were not theirs; cared for and fed children they did not birth; and cleaned homes and tended lands they did not own.

We're all familiar with this uncomfortable but sanitized image of U.S. slavery.

The harsh reality is that too many of the more than 300,000 African men, women, and children who were brought to this land for the sole purpose of providing *free* labor—and their children and their children's children, and so on—were brutalized and terrorized to continue the cycle for centuries to come.

It's estimated that over 4 million Africans and their descendants free-labored under the legal institution of slavery—and not just in the South, but also in the North, East, and West.

Having no agency over their own bodies or minds—not to mention not owning land or having property—*they were property*. Many lived in the most inhumane conditions. They were beaten, raped, starved, and in some cases worked to death—literally. They were forced to breed children to increase the numbers of the enslaved. Their children were often stolen from them and sold away. Furthering the torment, many of the women were forced to nurse their enslavers' children, care for them, tend to them, raise them.

It is that 250 years of "sun-up to sun-down" menial free labor that this country was built upon. It is the 200-plus years of free labor that is the foundation of this country's wealth and the capitalist system that has prospered globally, exploiting us all.

And it didn't end there

If slavery is the foundation, then Black Codes and Jim Crow laws that followed emancipation are the walls; housing discrimination and redlining the roof, and mass incarceration the windows of the house America built.

A house that is starting to crumble.

This year we observe the 400th anniversary of the first captive Africans brought to what is now the United States of America, and this month we observe Juneteenth, the celebration of freedom for all U.S. enslaved Black people.

But we will also observe another monumental moment in U.S. history.

On June 19, Juneteenth, the House Judiciary Subcommittee on the Constitution, Civil Rights and Civil Liberties will hold a slavery reparations hearing. It is the first of its kind in decades. And the first time ever the issue has garnered as much attention and support, including a declaration from the United Nations. The purpose of the hearing is "to examine, through open and constructive discourse, the legacy of the Trans-Atlantic Slave Trade, its continuing impact on the community and the path to restorative justice."

While the topic of reparations has made its way to the forefront of mainstream discourse, this hearing is the result of centuries of work. The push for reparations did not just come into being with current presidential candidates purporting their support of some kind of reparations. It didn't just come about as a reaction to the divisive leadership of Donald Trump. And it didn't come into being, as some have reported, with the excellent reporting of Ta-Nehisi Coates' 2014 piece in The Atlantic, "The Case for Reparations."



""A deeper black: Race in America" with Ta-Nehisi Coates" by Gerald R. Ford School of Public Policy, University of Michigan is licensed under CC BY-ND 2.0

In the late 1800s to early 1900s, a formerly enslaved Black woman named Callie House, who was head of the National Ex-Slave Mutual Relief, Bounty and Pension Association, led a movement to secure reparations for formerly enslaved U.S. Blacks—specifically pensions to older freed men and women who'd worked without pay—to no avail.

House was jailed for her efforts.

Other movements for reparations to those enslaved, and later their descendants, would wax and wane with no success for the next 150 years. Although reparations were given to enslavers for loss of their "property."

In 1989, former Congressman John Conyers introduced the first reparations legislation. Created with the help of N'Cobra (National Coalition of Blacks for Reparations in America), bill HR 40 would establish the Commission to Study and Develop Reparation Proposals for African American Act, designed to examine the institution of slavery, investigate its impact, and make recommendations for reparations to Congress. Every congressional year for almost 30 years until he was forced to resign in 2017, under allegations of sexual harassment, Conyers introduced this bill.

This year Rep. Sheila Jackson Lee sponsored the bill, and presidential candidate Sen. Cory Booker is sponsoring its companion in the Senate, the only reparations bill ever to be introduced in the post-Reconstruction U.S. Senate. Booker along with Coates and actor-activist Danny Glover (honorary board member of YES! Magazine) will testify at the hearing.

It's important to know that as we listen to the testimonies—and even if some of us choose not to listen—that the purpose of this hearing (or the legislation, period) is not to determine whether reparations are warranted or should be dispersed.

The purpose is to convene a group of accountable specialists who can determine *how* reparations will be given.

In his article, Coates estimated the cost of reparations to be nearly a trillion dollars, paying out annually for the next 10 to 20 years the $34 billion estimated by researchers in the 1970s. A more recent tally given by University of Connecticut researcher Thomas Craemer puts the cost of reparations between $5.9 trillion and $14.2 trillion.

It’s unlikely that checks will be cut and given to every American Descendant of Slavery. In fact, it’s not practical nor expected, I would imagine.

But there are very practical implementations that could be made. To name a few: funds (or loans forgiven) for housing, education, health care, those institutions where descendants were systemically and systematically cut off or exploited. Funds (or loans forgiven) for Black farmers and growers. Coates described a “claims system” for Black veterans who were denied the benefits of the GI Bill.

Direct intentional harm was done to those 388,000 Africans who made it to this land and to their millions of descendants. One hundred-fifty years of so-called freedom where intentional harm continues, contrary to what some like Senate Majority Leader Mitch McConnell say, does not erase that.

McConnell and his ilk—those before him and his contemporaries—have benefited mightily from the free labor and continued oppression of Black people in this country. They all are just as responsible for the harm and wrongdoing as their ancestors.

There is a debt owed to the the American Descendants of Slavery.

And it’s time for the U.S. to pay up.

Zenobia Jeffries Warfield is a senior editor at YES! She covers racial justice. Her essay was published in YES! Magazine.

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83: You're Not Going to Get Accepted into a Top University on Merit Alone (Warikoo)

By Natasha Warikoo



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After weeks of negotiation, Harvard University recently agreed to provide the Department of Justice access to its admissions files. The department is reopening a complaint by 63 Asian-American groups that Harvard discriminates against Asian-American applicants. The complaint was previously dismissed under the Obama administration. Many worry that government lawyers plan to use the case to argue that all race-conscious admissions – including affirmative action – are a violation of the Civil Rights Act.

Separately, Harvard undergraduates have recently begun to take advantage of their right to view their own admissions files, often only to become frustrated in their efforts to pinpoint exactly why they got admitted.

The inquiries of the Department of Justice and the curious Harvard students have something in common: Both are unlikely to turn up any evidence of why some applicants make the cut and others don't. That's because both inquiries rest on the faulty assumption that admissions decisions are driven by an objective, measurable process that will yield the same results over and over again. As a Harvard professor who has studied and written a book about college admissions and their impact on students, I can tell you that's just not how it works. I am not speaking officially for Harvard and I am not involved in undergraduate admissions.

Elite private universities have made clear time and again that their admissions decisions are made through a holistic decision-making process that involves a series of discussions among the admissions team. This means, for example, Harvard rejects 1 in 4 students with perfect SAT scores. The University of Pennsylvania and Duke University reject three out of five high school valedictorians. Despite universities like Harvard, Princeton, Yale, and Stanford having closely aligned admissions criteria and similar rates of admission, just because an applicant gets into one school does not mean the applicant will get into another. That's why it makes headlines when a student is reported to have gained admission to all the Ivies. This is a rare, unexpected event.

What a holistic approach entails

So, how do universities make admissions decisions? William Fitzsimmons, dean of admissions at Harvard, writes of an "expansive view of excellence." This includes "extracurricular distinction and personal qualities" in addition to test scores and grades. Evaluating applications is a long process. At Harvard, it involves at least two readers of each file. It also involves discussions among a subcommittee of at least four individuals that last up to an hour. The process is similar for other selective colleges. Admissions officers at the same university often differ about which students to admit. The process is more art than science.

Holistic evaluation allows admissions officers to take into account opportunities, hardships and other experiences that may have affected an applicant's grades and SAT scores. They may also consider how those things affected their participation in activities outside of school. Nevertheless, the outcomes of admission to the most elite colleges are unequal. In fact, while 37 percent of young adults in the United States are black or Latino, just 19 percent of students at the top 100 colleges in the country are.

In addition, while only one-third of American adults have a bachelor's degree, a review of Ivy League universities' published data reveals that about 85 percent of students have a parent with a bachelor's degree. So, even if holistic evaluation does a better job than looking at test scores and grades alone, the process still concludes by systematically undervaluing working class, poor, black and Latino young men and women. That is, if we assume that talent and "personal qualities" are equally distributed in our society, this disproportion should tell us something is amiss.

In addition to the holistic evaluation process, admissions teams need to consider the needs of specific groups on campus. These needs vary from campus to campus and from year to year. Coaches can recruit top athletes for positions on their teams played by graduating seniors, and those recruits enter the fast lane to admission. And, just as the baseball coach can recruit a shortstop, the orchestra director may request a top bassoon player to fill a missing part in the orchestra. Since needs of campus organizations and teams vary from year to year, you can't glean much from admission files in isolation like the DOJ and curious students hope to do.

Merit is overrated

Are there any discernible patterns between who gets in and students who were seriously considered but rejected? Probably not. Harvard President Drew Faust has said that Harvard could fill its incoming class twice with high school valedictorians.

In fact, we should discard the notion that admissions is a meritocratic process that selects the "best" 18-year-olds who apply to a selective university. When we let go of our meritocracy ideals, we see more clearly that so many talented, accomplished young people who will be outstanding leaders in the future will not make it to the likes of Harvard, Stanford and Yale. There simply are not enough places for all of them at those universities. Further, many more disadvantaged young people have never had the opportunity to cultivate talents because their parents did not have the resources to pay for private music lessons or a pitching coach. In fact, the gap between what wealthy and poor parents spend on extracurricular activities has dramatically increased in recent years. So looking for explanations for why you did get in, or whether some groups are favored over others, misses the broader picture of the lack of clarity on what gets anyone into elite colleges. It also ignores the unequal opportunities young Americans have in the process.

One way forward for college admissions, which I have suggested as a thought experiment in my book, "The Diversity Bargain," is to take all qualified students for a selective college and enter them into an admissions lottery. The lottery could have weights for desired characteristics the college deems important, such as social class, geographic diversity, race and intended major. This method would make clear the arbitrariness in the admissions process. It would also help students admitted — and those not admitted - understand that admission — and rejection — should not hold the strong social meaning in American society that it does today. In "The Diversity Bargain," I show the downsides of maintaining students' beliefs that college admissions is a meritocracy. Most students expressed strong faith in a process that ultimately underselects black, Latino and working class applicants, among others. They will take these understandings with them as they ascend to positions of power and make hiring decisions, design tax policies and shape media discourses.

Until the Department of Justice and admitted students understand the arbitrary nature of how admissions decisions at elite colleges are made, they will be perplexed by the complex art that is elite college admissions.

Natasha Warikoo is Associate Professor of Education, Harvard University and the author of *The Diversity Bargain: And Other Dilemmas of Race, Admissions, and Meritocracy at Elite Universities.* Her essay was originally published in The Conversation.



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84: Chicago's Urban Prep Academy – Known for 100% College Acceptance Rates – Put Reputation Ahead of Results (Warren)

By Chezare A. Warren



Underclassmen in the hallway at Urban Prep's Englewood Campus."ENG Students" by Jbak87 is licensed under CC BY-SA 3.0

When I joined Urban Prep Academies in 2006 as the founding math teacher at what was to become the nation's first all-boys public charter high school, the school's faculty and staff had one central goal.

We were on a mission to get black boys from Englewood – a racially segregated and economically distressed neighborhood in Chicago, and a community described in the media as one of the city's most dangerous – to and through college.

Each spring, Urban Prep Academies boasts that 100% of seniors graduating from each of its three campuses gains admission to a four-year college or university. But if you look beneath the 100% college acceptance claim – which sometimes gets misinterpreted as 100% actually going to college – you may find results that raise serious questions about the quality of education at the school.

College acceptance versus college readiness

For starters, the reality is only 12.8% of Urban Prep students at the West campus met Illinois' college readiness benchmarks. Further, only about two-thirds of the class of 2017 at Urban Prep's West campus actually enrolled in college. A little less than 44% of the school's 2016 graduates were persisting in college based on the latest report.

In a statement to *The Conversation*, school officials maintained that a major reason its graduates don't persist in college is due to lack of money.

"The number one reason we are given as why Urban Prep graduates choose not to continue pursuing their degree is a lack of financial resources and proper supports at the colleges they attend," Dennis Lacewell, chief academic officer at Urban Prep Academies, wrote in an email to *The Conversation*. "This is consistent with national data related to first-generation and black male students going to college."

However, in my own and other higher education scholarship, lack of money is sometimes related to students' lack of academic preparation for college. For instance, at least two young men who participated in my study of Urban Prep's graduates revealed that they lost an academic scholarship because of low GPAs.

West campus recommended for closure

The future of one of the school's campuses – Urban Prep West – became imperiled in December 2018 when officials at Chicago Public Schools recommended shutting it down. That decision was later overturned by the Illinois State Charter School Commission.

When the school was in danger of closing, "some students stated" that they "didn't care" if the school closed down or that it was "good" that it was closing.

One student spoke about how the "teachers put on a show" for parents, but treat students badly "behind closed doors."

Reflections from Urban Prep graduates

Urban Prep graduates expressed similar sentiments when sociologist Derrick Brooms and I originally set out to conduct the research that led to my book – "Urban Preparation: Young Black Men from Chicago's South Side to Success in Higher Education." Our aim was to describe how students at Urban Prep saw the school in terms of helping them complete college.

Two of the young men shared how they felt like "commodities" and "caged in" at Urban Prep. Another young man revealed that "there was more time being put into the look of the school than the actual students."

These young men admitted they did not want to let the school's supporters down. They said they did whatever was asked of them to gain admission to college, which they knew would reflect well on the school. The young men's comments point to pressure they felt to "look" the part of being college-ready, despite feeling as if they may not have initially had the necessary academic tools to succeed in college.

Several of the young men reported that they rarely felt academically "challenged" during their four years at the high school. Those who got to take an Advanced Placement course tended to agree these courses made them feel most prepared for college. Still, these young men's broader reflections on their academic preparation, transition to college, as well as data from the Illinois Report Card, reveal that Urban Prep may have invested more in a portrait of academic success than they did in providing high quality educational experiences.

New lease on life

These criticisms aside, for other students and officials at Urban Prep, the March decision to allow the school to stay open is – as founder and CEO Tim King stated in a recent letter to supporters – a "major triumph."

Publicly available data show that the school's SAT scores and other indicators of college and career readiness remain a troubling reality. For instance, Urban Prep West students averaged scores in the 31st percentile on the SAT, which is considered "pretty low."

Lacewell, the chief academic officer at Urban Prep, told The Conversation that Urban Prep students "outperform their peer groups on myriad metrics including high school graduation rates, daily attendance rates, standardized test growth." Technically, that is true.

However, not everyone is convinced that Urban Prep West deserves to stay open.

"The school is not set up to be successful, and we are potentially just delaying a school closure because they're not going to be able to do the turnaround that needs to happen," Bill Farmer, one of two members of the Illinois State Charter School Commission who voted against keeping the school open, stated at a hearing in March. "There needs to be a bigger systemic approach to infuse areas with the appropriate resources they need."

Race at the center: Looking beyond 100% college acceptance

Much of what the public knows about Urban Prep is based on images of clean cut young black men donning black blazers, button-down shirts and red ties, sporting the baseball cap of the college they intend to enroll. But that is where the cameras stop rolling. And this is precisely where the public must continue to ask probing questions such as: Do they enroll in college, do they persist and do they complete? And most importantly, do these young black men feel prepared to pursue their own dreams despite being confronted by "antiblack racism?"

Boasting about 100% college acceptance rates claiming to "change the narrative" about young black men and boys does very little to answer these questions.

Chezare A. Warren is an Assistant Professor of Teacher Education, Michigan State University and the author of *Urban Preparation: Young Black Men Moving from Chicago's South Side to Success in Higher Education*. His essay originally appeared in *The Conversation.*

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85: Recent Attempts at Reparations Show that World War II Is Not Over (Webster)

By Timothy Webster



"Consolation women in Myitkyina , Myanmar , after their liberation by US soldiers, August 14, 1944" by US Army is in thePublic Domain

World War II ended in 1945.

But the world has never stopped debating its legacy and how to make restitution for the damage done to the war's victims. Consider some recent events.

In February, the Holocaust Deportation Claims Program, which compensates Jewish survivors of Nazi death camps transported on French trains, doubled its compensation payments, from US$200,000 to nearly $400,000. This makes it the most generous of any of the recent compensatory programs worked out by U.S. and European governments. This one is paid for by the French government, but administered by the U.S. State Department.

In March, a South Korean trial court ordered the seizure of property owned by the Mitsubishi Corporation in South Korea. Such efforts are apparently needed to enforce a November judgment by the South Korean Supreme Court, ordering Mitsubishi to pay $100,000 to each of five Koreans who performed forced labor during the war.

Whether the Koreans will ever see that money, or die before the forfeiture action is completed, remains up in the air.

These are among the latest manifestations of global efforts to review, revise, repair and remember the war – akin to the Nuremberg or Tokyo War Crimes Trials - but for the 21st century.

Restoring human dignity

In the 1990s, a renewed interest in human rights, greater access to historical materials and a less polarized international political environment converged to spur reflection on World War II.

In the United States, civil lawsuits emerged as one tool, among many, to probe wartime human rights violations.

Federal courts in New Jersey, New York and California presided over cases against Swiss banks, French insurers, German corporations and even the Austrian government.

Plaintiffs sought wages for unpaid labor, return of looted art, restitution of bank accounts and other assets, and the restoration of their human dignity.

Two cases ended up in the United States Supreme Court. One, in which an elderly refugee mounted a lawsuit to recover family artwork seized by the Nazis, got a Hollywood ending. In "Woman in Gold," Ryan Reynolds helps Helen Mirren sue Austria to recover a painting by Gustav Klimt.

Most cases did not follow the Hollywood script. Plaintiffs generally lost, either because the claims were too old or already resolved by postwar treaties.



"Deportation of Polish Jews to Treblinka extermination camp from the ghetto in Siedlce, 1942, Poland during German occupation." by Unknown, Institute of National Remembrance is in the Public Domain

Selective leadership

But that did not dispel the pressure from Jewish organizations or human rights activists to provide reparations.

During President Bill Clinton's second term (1996-2000), the U.S. government, led by Ambassador Stuart Eizenstat, worked with European allies to craft international agreements and reparations mechanisms.

Germany set up a $5 billion fund to compensate wartime forced laborers and slave laborers, and to support projects on history and human rights.

Later, the State Department set up additional programs, including the 2016 Holocaust Deportation Claims Program. The French government still runs the Commission for Reparations of Victims of Spoliation, established in 1999 to process claims about seized property and art.

In East Asia, survivors of World War II human rights abuses have had their day (decades, actually) in court.

Chinese victims of wartime medical experimentation, Korean forced laborers and Filipina "comfort women," among others, have sued Japan and the Japanese government throughout the Asia-Pacific, including the United States.

But instead of using these lawsuits to reevaluate Japan's role in World War II – as other programs did for European countries – the U.S. government has either absented itself from these discussions, or challenged the lawsuits on various grounds.

The moral leadership that yielded transatlantic solutions to war responsibility issues in Europe dissolved when the topic emerged in East Asia.

Whereas the Clinton administration, especially Stuart Eizenstat, worked with European officials to set up compensation mechanisms in France, Germany and Switzerland, the administration of President George W. Bush asked U.S. courts to dismiss the East Asian cases.

US security interests

South Korea and Japan are America's closest and most important allies in a region simmering with geopolitical tension, from trade wars with China to nuclear proliferation on the Korean peninsula. U.S. regional security interests hinge upon the successful coordination of relations among Japan, Korea and the United States.

As an international legal scholar with a background in Asian legal systems, international human rights and international economic law, I believe the United States ignores the Asian tensions over World War II at its peril.

The Obama administration understood this, and tried to persuade both Japan and South Korea to resolve their "difficult historical issues." Chief among those issues is, of course, making reparations for injuries that Japan visited upon Koreans during the war: from the comfort women system to the forced mobilization of Korean laborers.

But the Trump administration seems unconcerned. It has exhibited indifference or hostility to human rights matters generally, refusing to respond to U.N. investigations about U.S. abuses along the Mexican border, and withdrawing from the U.N. Human Rights Council. Nor does the administration place much stock in international relations or diplomacy, with its attempts to starve the State Department of funding, and belatedly appointing an ambassador to South Korea.

In Asia, civil litigation has emerged as the key method to seek war reparations, though the track record is spotty.

Japanese courts have largely dismissed these suits, although a small handful of Japanese corporations decided to settle the cases and to pay modest amounts of compensation.

That state of affairs changed with recent decisions from the South Korean Supreme Court. The November judgment against Mitsubishi suggests compensation is still possible, at least in certain jurisdictions. Henceforth, Korean courts will almost certainly order other Japanese companies to pay compensation.

But even if plaintiffs win, they might still encounter difficulties enforcing the judgment. Losing Japanese companies may refuse to pay the Korean judgments, requiring Korean courts to seize Japanese assets located in South Korea.

Transforming the tragic past

The agreements reached in the 1990s and early 2000s by the United States with Germany, France, Switzerland and Austria to provide war reparations are not perfect, but each aspires to transform and repair a tragically forgotten past.

The United States' failure to do the same in Asia perpetuates a pernicious double standard set after the war.

The United States has the experience, leverage and opportunity to resolve simmering animosities between its allies in Asia, as it did in Europe.

But does it have the ambition?

Tim Webster is Associate Professor of Transnational Law and Director of Asian Legal Studies at Case Western Reserve University. His article originally appeared in *The Conversation*.

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86: The Black Muslim Female Fashion Trailblazers Who Came before Model Halima Aden (Wheeler)

By Kayla Renée Wheeler



Halima Aden, the first Muslim model to wear a hijab and burkini on the cover of the swimsuit edition of the Sports Illustrated. Photo: "Halima Aden at Paris Fashion Week Autumn/Winter 2019 Date" by Myles Kalus Anak Jihem is licensed under CC BY-SA 4.0

Media reports have celebrated Halima Aden becoming the first woman to be featured in the Sports Illustrated annual swimsuit edition wearing a hijab or a burkini. In the past, she has appeared on the covers of Allure, British Vogue and Glamour Magazine.

As a scholar who studies black Muslim fashion, I often find that reporters covering Muslim women's fashion seem to have the notion that Islam and fashion are incompatible.

This attitude ignores the influence black people have had on Muslim fashion going back at least eight decades.

Early Islam in the US

First, it's important to understand the long history Muslims have in the United States.

According to the Pew Research Center, black Muslims account for one-fifth of all Muslims in the United States. Islam first came to the United States with enslaved Africans.

Their numbers were small, ranging from 30,000 to 40,000. However, as historian Sylviane Diouf notes, enslaved African Muslims left a lasting impact on black American culture, especially in the Sea Islands and Lowcountry region, the coastal area stretching from North Carolina to northern Florida.

The first Islamic text in the United States, the Bilali Document, was written by an enslaved African living on Sapelo Island named Bilali Muhammad in the 19th century. It includes rules about daily prayers and a list of beliefs of Muslims.

Another important text – perhaps the only known narrative by an enslaved person in Arabic – was written by Omar ibn Said in 1831, who lived as a slave in North Carolina. In it, he recounts his life in Senegal, including his religious education. The autobiography also includes several Muslim prayers.

Clothing as identity

In the 20th century, black Americans were reintroduced to Islam through several people and organizations.

These included the Moorish Science Temple of America and the Nation of Islam. The Moorish Science Temple of America was founded by a Moorish American, Noble Drew Ali, in 1913 in Newark, New Jersey.

Drew Ali taught his followers that they were not Negros or Ethiopians, rather they were Moors and that Islam was their true religion. According to Drew Ali, Moors are descendants of the ancient Moabites who founded Mecca, one of the most important cities in Islam.

W.D. Fard Muhammad, who founded what would become known as the Nation of Islam in 1930 in Detroit, Michigan, also taught his followers that they had forgotten their true identity as Asiatic Muslims and members of the lost tribe of Shabazz. The term Asiatic referred to black people and other people of color.

Clothing played a central role in constructing a unique black Muslim identity. Black Muslim women used their dress to challenge American beauty standards, which typically holds thin young white women as the ideal beauty. Their dress practices also challenged beliefs that Islam was only an Arab religion by encouraging members to develop their own local dress practices.



"Moorish Science Temple of America inc" by *swanksalot* *is licensed under* *CC BY-NC-SA 2.0*

In the Moorish Science Temple of America, male members wore fezzes or turbans and women wore turbans often paired with long shift dresses as part of their everyday wear.

Men in the Nation of Islam dressed in tailored suits and bow ties or ties. Women donned a Muslim Girls Training uniform. The Muslim Girls Training included lessons for women and girls on the rules and beliefs of the Nation of Islam as well as how to cook, clean, raise children and practice self-defense. The uniform included a high-neck tunic that came down to the thigh. It was paired with either loose-fitting pants or a skirt that came to the ankles.

Black Muslims

In my forthcoming book, I argue that Nation of Islam and the Imam W.D. Mohammed community have played an important role in developing the modest fashion industry in the United States. Imam W.D. Mohammed took over the leadership of Nation of Islam in 1975, following the death of his father Elijah Muhammad, who had succeeded the founder W.D. Fard Muhammad.

These organizations and their members have organized fashion shows and operated clothing stores centered on Islamic modesty since the 1960s. The models were usually volunteers from the local community.Elijah Muhammad discouraged female members from embracing the fashion trends of the day.

The fashion shows were a means of highlighting the creative ways Nation of Islam women could dress modestly and maintain the unique aesthetic, while still looking beautiful. They featured diverse head coverings such as berets and fezzes, color-block outfits and different takes on the classic Muslim Girls Training tunic.

Imam W.D. Mohammed and his members would continue to encourage women's fashion ventures. They incorporated Afrocentric inspired designs and clothing, like the dashiki and kente cloth.

For a decade, starting in the 1960s, when the oldest daughter of Elijah Muhammad, Ethel Muhammad Sharrieff led the Muslim Girl's Training, clothing became a way of building a self-sustaining black Muslim community.

A clothing factory she managed produced the official Muslim Girl's Training uniform. Members were encouraged to buy the uniform from the factory. Temple #2 clothing, a store in Chicago, Illinois, sold a wide range of products including shoes, lingerie and jewelry.

Fashion shows

This May, I attended the Sealed Nectar Fashion Show, an annual fashion show hosted by the Atlanta Masjid of al-Islam in Atlanta, Georgia. It is one of the longest-running Muslim fashion shows in the United States, with 2019 marking its 33rd anniversary.

The fashion show was founded in 1986 by Amira Wazeer, an Atlanta-based designer, as a means of celebrating beauty and modesty. This year's theme, "World Traveler," featured six black Muslim women designers from the United States, Tanzania and Kenya.

More recent ones include in cities such as Washington D.C., Houston and an upcoming one in Philadelphia.



"Moslema in style fashion show at PWTC." by Firdaus Latif is licensed under CC BY-SA 2.0

The fashion shows and bazaars highlight black women's creativity and diverse definitions of Islamic modesty. This includes different styles of wrapping head scarves – turbans and buns that leave the neck and ears exposed to show off jewelry – as well as multiple clothes layering techniques, like wearing a pair of skinny pants under a short dress.

Black Muslim models

What Aden has been able to accomplish in three years is certainly worth celebrating. She has opened the doors for other hijabi models like Ikram Omar Abdi, who was featured on the cover of Vogue Arabia along with Aden and another Muslim model, Amina Adan.

However, in my view, it is important to place Halima Aden within the larger history of black Muslim fashion in the United States. Unless we do that, there is a risk of erasing the black Muslim fashion trailblazers who came before her and made her rise possible.

Kayla Renée Wheeler an Assistant Professor of Area & Global Studies and Digital Studies at Grand Valley State University. Her essay first appeared in The Conversation.

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87: For a Flooded Midwest, Climate Forecasts Offer Little Comfort (Wu)

By Shuang-Ye Wu



Flooded A&W stand after 2009 flood in Cedar Rapids, Iowa. "Iowa A&W" by WELS Christian Aid and Relief is licensed under CC BY-NC 4.0

Flooding in the Midwest, triggered by an intense "bomb cyclone," has devastated parts of the region, which has been plagued by flood events in recent decades.

Floods are triggered by extreme rainfall events, often combined with ground conditions, such as saturated or frozen ground, that make it harder for water to percolate down into soil, which increases runoff.

Global warming has the potential to intensify the Earth's water cycle, which will alter the quantity, frequency, intensity and duration of rain and snowfall. As my research and work by others has shown, all of these changes raise the risk of floods for Midwest states.

A wetter Midwest

There is strong consensus among scientists that climate change will make many parts of the world wetter. This happens because higher temperatures increase the rate at which moisture evaporates from Earth's surface, and warmer air holds more moisture than cool air. For every 1 degree Celsius of warming, the moisture-holding capacity of the atmosphere increases by about 7 percent, based on well-established laws of physics.

As the air becomes moister, we can expect more precipitation – but the increase is not uniform. Assuming that wind patterns don't change significantly, more moisture will be transported into some regions under the influence of storm tracks. This means that storm-affected areas are likely to experience larger-than-average increases in precipitation and flood risks, while areas located away from storm tracks are likely to have less precipitation and greater risk of drought.

The U.S. Midwest is located in a convergence zone where prevailing winds blowing from the east and west meet. The polar jet stream blows from west to east along the boundary between warm and cold air and regularly brings in storms, particularly in cold seasons.

Using data from the U.S. Historical Climatology Network, I have shown that from 1951 to 2013, mean precipitation for the United States increased by 1.6 percent per decade. In the Midwest, however, it rose by about 2.1 percent per decade, and winter precipitation increased by 3.7 percent per decade. About half of this growth was caused by more frequent storms, and the other half can be attributed to an increase in storms' intensity.

I have also used high-resolution regional climate models to simulate future climate change in the Midwest for the period 2040-2070 compared to 1970-2000. In this study I found that mean precipitation across the region is likely to increase by 8 percent by mid-century, and winter precipitation is likely to increase by as much as 12 percent. The northern part of the region could see an even

larger increase, likely due to greater evaporation from the Great Lakes resulting from higher temperatures and less ice cover in winter as the region warms.

Stormier weather

With more moisture in the atmosphere, storm systems are likely to produce heavier rainfall events. Enhanced moisture in the atmosphere also increases latent heat – warmth released by water vapor as it condenses into liquid drops in the air. This heat provides more energy to increase the intensity of storms.

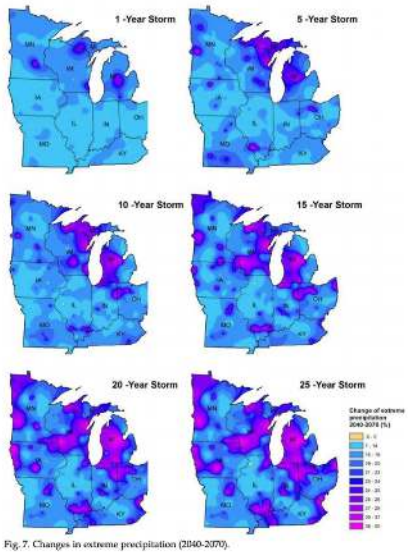


Fig. 7. Changes in extreme precipitation (2040-2070).

More intense precipitation events are predicted to happen in Midwest states. Shuang-Ye Wu University of Dayton, North American Regional Climate Change Assessment Program, CC BY

These factors mean that climate change is likely to cause a disproportionate increase in heavy precipitation events in the Midwest, a trend that is already apparent when looking at historic climate data. From 1951 through 2013, my study found that light and moderate precipitation across the Midwest increased by about 1 percent per decade, while heavy precipitation increased by 4.4 percent per decade.

Average precipitation for the region is projected to increase by about 8 percent by mid-century, but heavy storms – those of a scale only likely to occur once in 25 years – are projected to increase by 20 percent.



"Flooding along Missouri River - June 20, 2011" by OmahaUSACE is licensed under CC BY-NC-ND 2.0

More frequent flooding

All of these changes will significantly alter flood hydrology. A 2015 study that examined discharge data from 774 U.S. Geological Survey stream gauge stations across the Midwest from 1962 through 2011 found that 34 percent of the stations showed significant increases in the frequency of flood events. The most pronounced increase occurred in springtime for floods associated with snowmelt, rain falling on frozen ground and rain-on-snow events. In addition to increasing precipitation, this analysis showed that earlier snow melting and changes in the rain-to-snow ratio caused by higher temperatures are also driving the strong increase in Midwest spring flooding.

Another study projected shifts in flooding due to climate change and calculated how frequently an average 20th-century 100-year flood – that is, large enough to have just a 1 percent chance of occurring in any given year, or once in a century – is likely to recur in the 21st century. For most of the Midwest, the authors estimated that the probability of such floods was likely to double in the 21st century, so that what was once a 100-year flood can be expected to occur on average every 50 years.

A third study, published in 2016, examined how climate change could alter streamflow in the Northeast and Midwest. The magnitude and timing of streamflow can affect water supplies and quality, infrastructure systems and aquatic life. This study found that over this century, average 100-year three-day peak flow levels were likely to increase by 10 to 20 percent for the Midwest region.

Meanwhile, people in Nebraska, Iowa, Wisconsin, Minnesota and South Dakota affected by the most recent storm are assessing the damage. NOAA earlier this month forecast that the historic floods will be followed by more rain and flooding this spring. Current flood waters are expected to remain for months.

Shuang-Ye Wu is an Associate Professor of Geology at University of Dayton. Her article originally appeared in *The Conversation*.

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88: Think You Love Your Valentine? What's Beneath the Surface May Be More Complicated (Zayas & Shoda)

By Vivian Zayas & Yuichi Shoda

#research, #logos, #ethos, #systemanalysis, #cognitivebias, #reportinginformation, #descriptive, #argument, #artsandculture



Real love has more nuance than a candy heart's message. Laura Ockel/Unsplash, CC BY

Valentine cards are filled with expressions of unequivocal adoration and appreciation. That's fitting for the holiday set aside to express love and reaffirm commitment to one's romantic partner.

But what if there's more going on below the surface of these adoring declarations? How might thoughts and feelings that people are not even aware of shape their romantic relationships?

We are two psychology researchers interested in how the mind works, and how it affects a variety of experiences, including romantic relationships. In our studies, we've found that how people feel about their partners at a nonconscious level may be a bit more complicated than the typical message in a Valentine. Even for those who consciously express only love and fondness, thinking about a partner can elicit ambivalence – both positive and negative responses of which they're not consciously aware.

Reactions you don't know you have

People need to quickly, effortlessly and continuously make sense of their world: Who is a friend and who is not? What is desirable versus harmful? Human beings are always evaluating people, places and things on basic dimensions of goodness and badness.

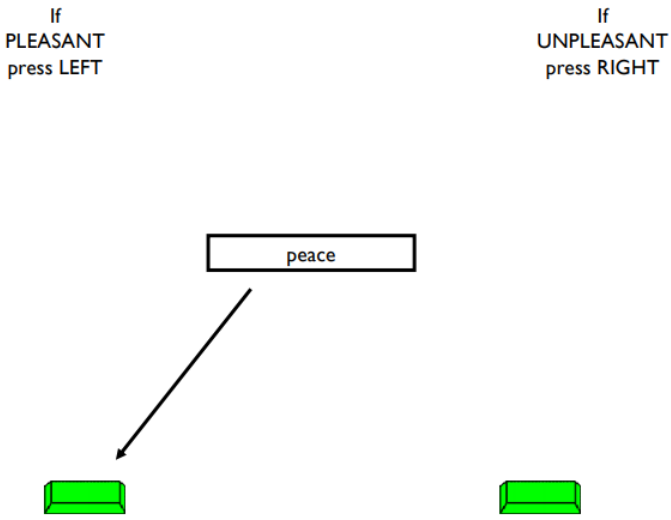
Psychology studies show that the mere thought of your partner – or the sight of their photograph or name – spontaneously activates nonconscious feelings you hold toward them. For most people in healthy relationships, thinking of their partner elicits a "good" response.

Research into these kinds of nonconscious evaluations suggests they can be a better barometer of relationship quality than what people explicitly say about their partner. For example, people who have stronger positive nonconscious partner evaluations tend to feel greater emotional commitment, security and satisfaction in their relationship. They are also more likely to have a brighter outlook about the future of their relationship and more constructive behaviors in interactions, and are less likely to break up.

But poets and songwriters have long lamented that those you love are also those who can hurt you most. Psychologists too have long recognized that lovers' thoughts are complex. It seemed to us that when it comes to romantic partners, people may not have positive reactions only.

Accessing what's beneath the surface

So how did we tap into that ambivalence people may not even be aware of having? In our work, published in the journal Social Psychological and Personality Science, we used an indirect method. It assesses how people feel about their partner not based on what they say, but by inferring their feelings based on how they do on a word classification task.



Example of the computerized word-sorting task. Vivian Zayas, CC BY-ND

Here's how it works. Imagine that we were looking for evidence of how people felt about something that is clearly positive, like flowers. We would quickly flash the word flower on the screen, then replace it with a second word that is unambiguously good or bad in meaning, such as sunshine or garbage. Participants' task is seemingly simple: ignore the first word and classify the second "target" word as good or bad.

Even though people are told to ignore flower, they can't. Thinking of flowers brings to mind not just specific objective features – flowers have petals, a stem – but also feelings and attitudes about them – flowers are beautiful, good.

As a result, after seeing a positive word like flower, most people are faster at classifying targets, such as sunshine, as "good," and slower at classifying targets, such as garbage, as "bad." In fact, research shows that the first word, flower, triggers a motor response towards the "good" response. So, if the target word is also "good," like sunshine, seeing flower facilitates the correct classification. But, when the target word is "bad," like garbage, there is what psychologists call response competition; since flower triggers a motor response towards "good," people need to override it to correctly classify a "bad" target.

Of course it works in the other direction too. If, instead of flower, the first word has negative connotations, such as cockroach, people are faster at classifying garbage as "bad" and slower at classifying sunshine as "good."

Mixed emotions

We used this type of indirect method to assess the feelings that spontaneously come to mind when people think about their partners. So, instead of flower, imagine that the first word flashed was your nickname for your sweetheart.

Not surprisingly, people tend to be faster at classifying positive target words after seeing their partner's name. But something very interesting happened when the second word was negative – people were also faster at classifying negative targets after seeing the name of their partner.

This boost in response speed to the negative targets was almost as big as when thinking about a cockroach! It's as though thinking of one's partner spontaneously brought to mind a negative evaluation.

So while the mere thought of a romantic partner whom you love is enough to spark a nonconscious positive evaluation, we also found that it may simultaneously elicit a nonconscious negative evaluation. Perhaps when thinking about romantic partners, people can't help but think about both the good and bad.

Research like our study is just beginning to reveal the complexity of these nonconscious feelings toward partners. Why might someone simultaneously hold such conflicting emotions?

Our findings fit with both theory and intuition. Even in the most satisfying and secure relationships, partners experience disagreements, frustrations and misunderstandings. And even the most supportive and responsive partners aren't always available. Experiencing a negative emotion or interaction is not necessarily an issue. In fact, it seems to be a normal part of relationships.

Psychologists have long considered ambivalence to be pathological, characterized by anxiety and internal conflict, experienced only by a troubled few. Such consciously experienced ambivalence may well be problematic. But the sort of nonconscious ambivalence revealed by our research does not seem pathological. Rather, it appears typical and may occur even when you very much love your partner.

Research has found that positive nonconscious partner evaluations can predict relationship quality and stability. Now we need to figure out how negative nonconscious partner evaluations work.

So if you are feeling at some level a tinge of ambivalence towards your partner, know that you are far from alone. Perhaps on this Valentine's Day, consider honoring your relationship by fully embracing the complexity of your feelings.

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