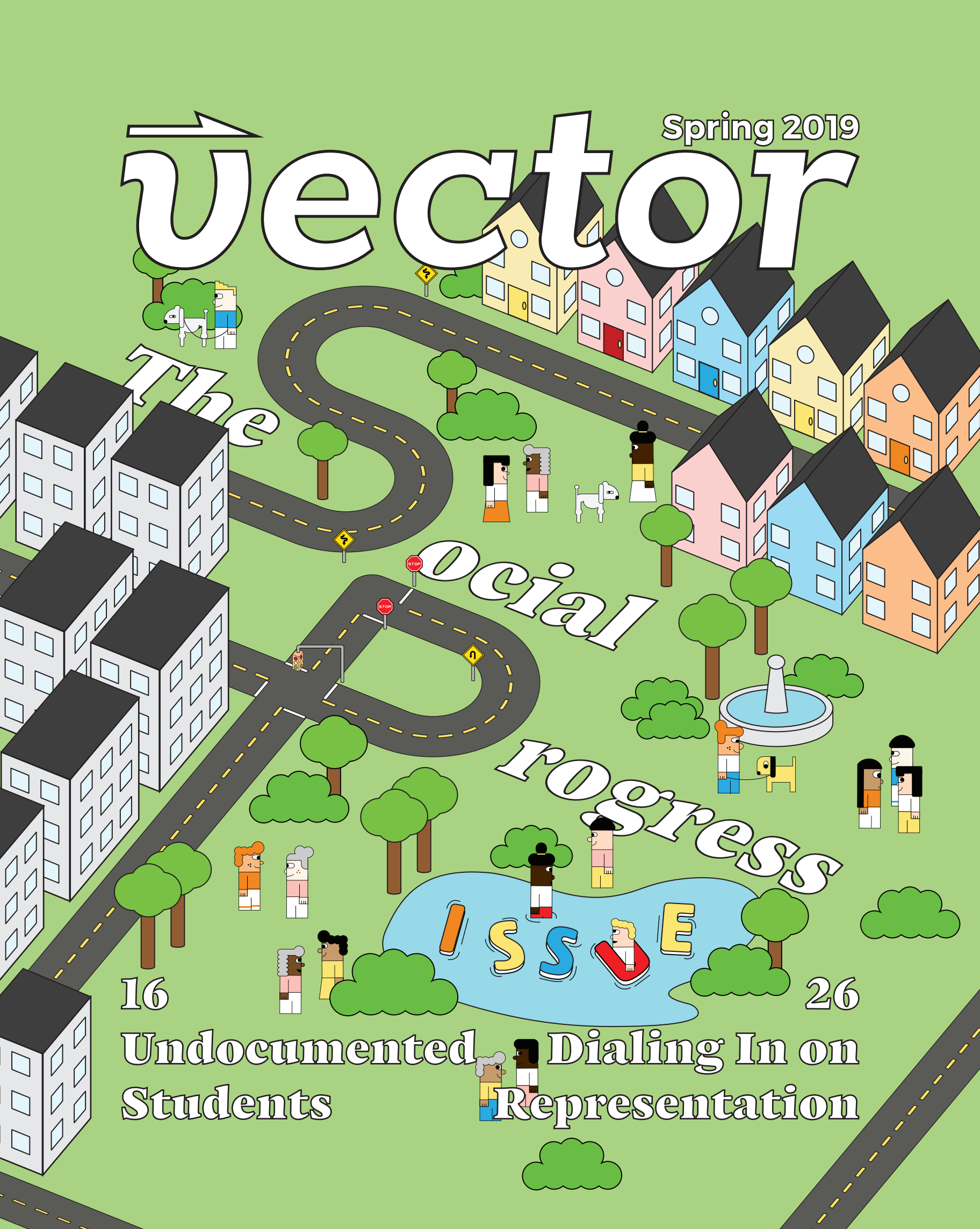# Vector

The Social Progress Issue

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Letter from the Editors

Our university is uniquely situated in a city that is making leaps and bounds every day. As new technology emerges and flings us into the future, it also opens up lanes for other parts of society to advance quicker than ever before. This issue of Vector keeps up with some of those areas of change. We ask: what problems are faced by undocumented students at our university? How does the internet help advance ideas like anti-vaccination or activism? What happens when a fleet of electric scooters overruns a city? Our excellent staff has captured some of the aspects of social progress that are important to the student body with help from sources around the university and city we call home.

Just in my (Brendan's) four years on the staff of Vector, I have seen immense progress in this university and specifically the content of our magazine. We want to thank the outstanding staff that has made all this possible. Every person credited below, especially the officer team, pushed many hours into creating the beautiful work you hold now. We hope you are as excited as we are to turn the page and see what's next...

All the best,
Ritu & Brendan

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WHY ANTI VAXX HAS GONE VIRAL

There's a few reasons why measles has become the face of non-religious vaccine reluctance. This severe respiratory disease is preventable, highly contagious, and marking a return in developed countries after nearly being eradicated. Any news of anti-vaccination is often headlined with "measles outbreak." The World Health Organization (WHO) cited a 30% increase in measles worldwide when it named vaccine hesitancy as one of the top ten threats to global health. But for all its attention, measles isn't what's on the list; it's vaccine hesitancy, and there's two reasons why. The short answer is that anti-vaccination involves a wide network of contagious diseases beyond just measles. The longer explanation involves both the disease network, and the information network.

Experts say society is currently in the third industrial revolution–the information revolution. And just as the steam engine was the key technology for the first one, so is the internet for the information age. This platform of knowledge is integral to both collecting and sharing data; 2.5 quintillion bytes are added daily, and 2.77 billion people are on social

> **REFUSING IMMUNIZATIONS BASED ON RELIGION IS A SPIRITUAL DEBATE. MAKING LAWS ON VACCINATIONS IS A LEGAL DEBATE. BUT THE SCIENTIFIC EFFICACY OF VACCINES CANNOT BE A DEBATE BECAUSE IT'S A FACT.**

media. Yet not all this data is trustworthy. With the rise of information comes the rise of fallacies, falsities, and general propaganda. All this information blurs the lines between fact and debatable opinion, impacting the perception of vaccinations. Refusing immunizations based on religion is a spiritual debate. Making laws on vaccinations is a legal debate. But the scientific efficacy of vaccines cannot be a debate because it's a fact. The results are quantifiable, the process logical, and the trials replicable. Unfortunately, the nature of the internet is its downfall here. Its passivity enables mass accumulation of information, but prevents filtering out fake news and misinterpretations of the science behind vaccines. As for the networking aspect of the internet, lax regulations allow for communities who gravitate towards these incorrect claims to form. The Facebook page Natural News, for example, is anti-vaxx and has 2.9 million likes. Vaccine hesitancy isn't the only misconception getting helped by incorrect claims. However, compared to fake political news and other recent phenomenons involving misinterpreted data, refusing to vaccinate is unique in how public health impacts its online spread.

Receiving vaccines is largely an individual act, but vaccinations itself fall squarely into public health. According to UT Austin public health professor Leanne Field, this is because of community immunity. Unvaccinated people form networks of infection allowing the virus to create an outbreak. Vaccinations, when done in large quantities, form roadblocks to prevent the flow of infection from reaching those who can't get vaccinated for medical reasons. The key word here is community; multi-

ple people need to get vaccinated to prevent contamination for the population as a whole. Even vaccinated people are protected by this immunity–as WHO says, sometimes vaccines don't work on people because of chance and some fluctuation in immune systems. These people don't get sick from the vaccine, but are at risk if they meet someone with the virus. This system relies completely on prevention, and it works: diseases like smallpox, polio, and of course, measles, has been reduced by 99.9% or more in the United States as of 2006.

And for all its success, "prevention" isn't a flashy word, which applies for much of public health. Achievements in individual-oriented medicine claim headlines again and again: a record breaking open heart surgery, a potential cure for cancer, a pill for disease. What would headlines in public health successes say? "Water is uncontaminated as usual"; "No food recall for lettuce today." The question is hypothetical because these headlines don't happen. This means Twitter feeds and Facebook timelines are devoid of the successes proving the worth of public health. As UT Austin public health professor Marilyn Felkner says, "when it works, public health is silent. The result is... there is no problem." When vaccines work, there's no contamination. Information is spread when public health goes wrong–an outbreak, or something else. For the online anti-vax communities, public health has

"MY MOM FOUND US A DOCTOR WHO DIDN'T MAKE US GET VACCINATED. AND SO I FOUND OUT, AS A MED STUDENT, THAT I WAS UNVACCINATED..."

"gone wrong" not through vaccines, but in vaccine education; false information has pooled in areas of the internet and strengthened its hold on a growing number of people.

This false knowledge isn't shared with malicious intent, however. Marketing tactics show how unfamiliar chemical names and overly scientific concepts create fear of the unknown. Because science is an unfamiliar field to many, false knowledge has a stronger effect, especially when it seems to expose hidden evils. A google search for aspartame, an artificial sweetener declared as safe for consumption by the FDA in 1999, still shows multiple sites claiming it has toxic chemicals and serious side effects. Vaccine chemical thimerosal, similarly unfamiliar, even has ethylmercury. Uninformed people could, and have assumed the vaccines are secretly harmful because of this. Coburn Allen, a pediatric infectious disease physician at Dell Children's Medical Center, actually used to be unvaccinated. "My mom found us a doctor who didn't make us get vaccinated. And so I found out, as a med student, that I was unvaccinated, and I had to get all my vaccines... It's hard to understand the science behind it– you have to go to medical school to really understand how vaccines are safe and why they work."

Vaccine-based fear also doesn't have much competition, as many people aren't scared of the alternative: getting infected. The fear parents had towards infectious disease just isn't as strong anymore after vaccines eradicated them in the United States. Sherry Bell, UT alum and current staff member, recalls from her childhood in the 1960's on

how people coped with and recognized infectious disease before vaccinations. (To clarify, chicken pox is a contagious disease which usually only causes a rash and mild fever.) "If somebody had chicken pox, people would take all the kids over there to play with them so everybody would get the chickenpox at the same time, and it just didn't drag on forever. Just, let's everyone get the chickenpox and get it out of the way. Many if not most moms stayed home back then. You'd never see anybody taking their kids over to anybody's house who had the measles."

Because social media is largely a social experience, sharing information is more dependent on emotions, which encourages spreading fear-based falsehoods. But while the internet is not regulated, social media platforms are. On March 7th, Facebook Vice President Monika Bickert said the website will begin removing false information about vaccinations. Better public relations could quell vaccination fears by unsilencing public health successes. Spreading awareness and untangling the science behind vaccines is also crucial to convince anti-vaxxers to just go vaxx. "The best thing we can do is continue to talk about immunization, continue to educate people and let them know that immunizations are safe," says Chris van Deusen, at the Texas Department of State Health Services. "And of course we need partners in the local communities to do more of a grassroots effort to spread the word."

In the end, lack of awareness in vaccination efficacy perpetuates the fear behind much anti-vaccination. Many of the proposed solutions familiarize the unfamiliar. Education and campaigns on this public health achievement could take away this falsely perceived threat behind vaccinations, as well as the very real global threat of vaccination hesitancy.

**WRITTEN BY: MINA KIM
LAYOUT & GRAPHICS BY: ROSEMARIE POUSSET**

CUT AND PASTE

THE IMPLICATIONS OF GENETIC ENGINEERING IN HUMANS

The 1997 science fiction film *Gattaca* introduced the notion of designer babies long before advances in CRISPR-Cas9 technology brought genetic engineering to the forefront of the popular imagination. In fact, Andrew Niccol's contemplative thriller on the future of humanity given the ability to predetermine our genetic traits was released even before scientists had completed their mapping of the entire human genome (see The Human Genome Project). Of course, more contemporary movie audiences are more likely to recognize the genetic experiments that produced fictional superhumans like Captain America or the Incredible Hulk. However one imagines it, in the last few decades genetic engineering has truly leapt from the silver screen to our everyday lives. While it may be some time before superhumans walk among us, genetic experimentation has already produced benefits to humanity. Dr. Jeffrey Barrick, who studies synthetic biology at The University of Texas at Austin, described some of these benefits. "You [can] use genetic engineering to make as optimal a cell as possible that will produce as much of a desired product as it can... there are already a lot of genetically engineered plants, most of the cereal crops we eat are," he said. However, with all of the potential that comes with this technology, there is undoubtedly risk as well.

There are two main concerns associated with the proliferation of genetic engineering. The first of these is more practical: genetic experimentation could lead to serious and unforeseen consequences. In popular science fiction, we often see depictions of how miracle gene therapies can lead to disastrous results. In *I Am Legend*, genetic experimentation produces the long sought-after cure for cancer. However, careless medical application eventually leads to a dangerous viral outbreak similar to a zombie movie. Dr. William Shawlot, the director for the Mouse Genetic Engineering Facility, described a much more realistic medical mistake. "Several years ago there was an investigation into a gene therapy application in which one of the patients died. They died because the DNA [the researchers] were inserting into the patient ended up in an oncogene, a gene that causes cancer, and turned it on... You can get unintended things in [genetic engineering] and that's why you have to be very careful in humans," he said.

Of course, common scientific and medical regulations already take risks like these into account, hence the frequent use of indicative studies on organisms like mice or flies to identify genetic outcomes long before a human subject is involved. However, a recent experiment conducted at the Southern University of Science and Technology in Shenzhen, China flies in the face of these concerns. The researchers claim to have edited the genes of embryos to increase their resistance to HIV, and the embryos have since grown and been born as a healthy pair of twin girls. While this study may prove to be a considerable step in the scientific community, there are many who are concerned how this artificial change may affect

the girls' lives and the lives of their descendants, not to mention the legal concerns the research team likely sidestepped to conduct these trials.

The second of these concerns is more philosophical in nature. Although the reality of a genetically stratified society such as in *Gattaca* is hopefully many generations away, there is still a genuine threat that limited access to the technologies that result from work in genetic engineering will inevitably lead to an increasingly unequal society. We can already observe the effects of increasing wealth inequality, as the incredibly rich gain access to further means to affect the decisions of governments and the direction of societies. Just as well, we can already see how the growth in automation technology has led to an increasingly unstable position for lower-income and working-class jobs in favor of greater productivity and financial growth for the more well off individuals. If one imagines a future in which the genetic engineering of human embryos can be done relatively easily, one can see the lengths that wealthy parents would go to ensure that their future offspring are gifted with only the most desirable traits.

Long before these scenarios can actually play out, it is important that scientific and governing bodies come to a consensus about how these technologies can best be applied, ideally in such a way as to provide the most benefit to the most people. Dr. Benjamin Gregg, who lectures on social and political theory at the University of Texas at Austin, described how these sorts of discussions could be guided. "The project for what might be called 'biotic justice' would be the project of extending access [to genetic technologies] to persons at the lower end of the social gradient who, precisely because of their poorer starting positions, would benefit most from the various forms of genetic intervention," he said. In this case, Dr. Gregg envisions an approach not unlike that of the research team from Shenzhen. Rather than focusing on traits that would give the twin girls an unexpected advantage, like height or strength, the experiment claims to have taken a step towards reducing the effect of HIV. Certainly, it is much more desirable to envision genetic engineering as a way to reduce or eliminate disease for all, rather than a tool for increasing inequality. Securing the future of genetic engineering requires not only conducting safe scientific practices but also ensuring that its application is only wielded to the benefit of the entire human race, if it is ever wielded at all.

Written by: **DANIEL SNYDER**

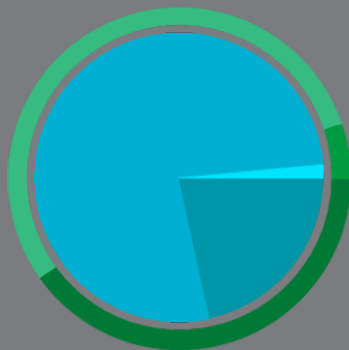Photography by: **ALLIE RUNAS**

Layout by: **KAT WALTERS**

SCOOTER MAYHEM

Written by: Maurizio Marcotulli • Photography by: Ethan Denfeld • Layout by: Priyal Soni

Gender and Age Group

- Male
- Female
- Prefer Not To Say
- 18-19 years old
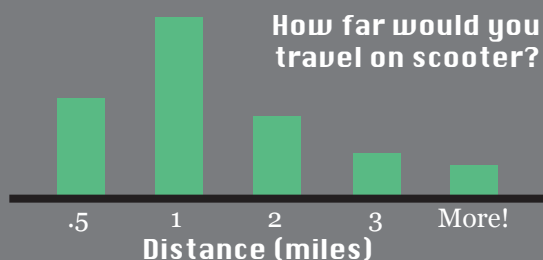- 20-21 years old
- 22-25 years old

You've seen them in the middle of the sidewalk, you've seen them in our bike racks, they seem to be in every imaginable nook and cranny. It's the invasion of the electric scooters. These scooters arrived with little to no infrastructure and on relatively short notice. This has caused a lack of cultural understanding of how they are meant to be used or whether they should be used at all. After surveying 200 UT Austin students through an online poll, we saw how there is significant conflict in the safety and parking measures taken while people use scooters. This lack of norms and understandings is an issue that has no clear solution, but the demand for scooters shows that they won't be disappearing anytime soon.
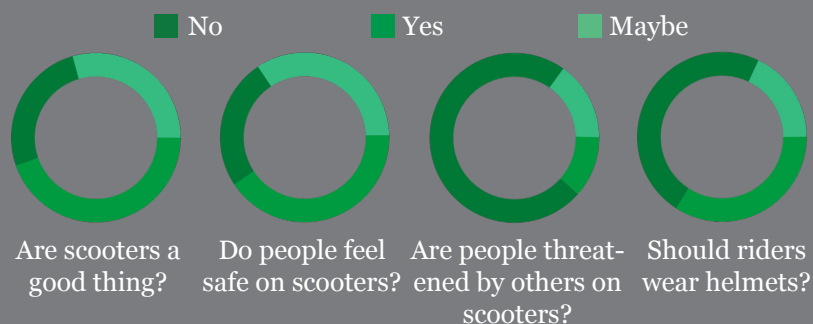
Where Scooters Are Parked
vs. Where They Should Be Parked

- Next to the Bike Racks
- Dedicated Scooter Parking
- Anywhere Out of the Way
- Anywhere
- Other

2/3 individuals have used scooters before

18%   82%

say they use them more than **3 times a week**

87% of individuals polled said they regularly see scooters parked in places they consider wrong.

How far would you travel on scooter?

Distance (miles)

.5   1   2   3   More!

- No
- Yes
- Maybe

Are scooters a good thing?

Do people feel safe on scooters?

Are people threatened by others on scooters?

Should riders wear helmets?

The Automation Dilemma

Last summer, I took a job in a shipping warehouse. My job was fairly simple; reading orders, locating the appropriate products among the towering racks of merchandise, boxing up the orders, and slapping a shipping label on the box. The monotony of my job was broken up by a robot that kind of looked like Wall-E. This robot had four wheels and a hook on the back to pull carts laden with boxes around the warehouse. As the robot rolled up and down the aisles, four engineers watched it intently and scribbled in notebooks.

One day, I looked up from a big box of eye drops as our robot crawled down the aisle. I heard my coworker say, "One day, robots will be the only workers left in here," and that simple comment got me thinking. It got me thinking about workplace automation, its current and future effects, and what should be done about it. While the day my coworker described may be far in the future, automation has been in our industries for the past few decades and it definitely isn't going anywhere. Are robots taking our jobs? Have they been? Will they? Generally; no, no, and maybe. Here's what I found out about automation and its future.

It's important to realize that the relationship between unemployment and automation is more complicated than it may seem. For every one robot employed in a factory, or in a warehouse, or even in an office, one human does not necessarily get fired. Dr. John Thompson, an economics professor here at UT Austin, explained that jobs can be simultaneously created and destroyed around automation. "The accounting industry has been changed by technology," he stated. "Before, it was all by hand with calculators. Before that, not even calculators, and now we have spreadsheets. Spreadsheets or a computer may simultaneously enhance the productivity of an accountant but it could also reduce demand for the total number of accountants. So it's not clear exactly how all of that plays out."

Professor Thompson then recommended that I look at industry-specific employment data in the context of automation. According to projections by the Bureau of Labor Statistics, by 2024 overall US employment will experience a "0.6-percent average annual rate of growth," since 2014, a figure that suggests automation will not decrease employment in the near future. However, in certain industries, automation has made employment less accessible to unskilled workers. In the same report, the BLS projected a 0.4% decrease of jobs in the manufacturing industry. "In the past, many manufacturing jobs were considered low skill and had fewer educational requirements than other types of jobs. Over the last few decades, manufacturing plants have become more automated, thus requiring skills that are more technical," stated the BLS report. Other industries prone to automation, such as agriculture and utilities, are also projected to lose jobs by 2024, and even more industries like transportation are experiencing slowdowns employment growth.

Right now, the data suggests that more jobs are being created around automation than destroyed by it. However, unskilled workers, our most vulnerable population, are experiencing and will experience the negative effects of automation. A study done by David Autor and Anna Salomons of the Brookings Institution used complicated economic metrics to find that "technological progress, broadly construed, has been employment-augmenting but labor share–displacing—that is, generating net employment gains while serving to reallocate value added away from labor and toward other factors." In other words, the economy is growing, but not for everyone. It's growing for owners of capital and not for laborers.

When I asked Professor Thompson more about automation

Written By: Riley Sanders
Photography By: Julia Nguyen
Layout By: Shalini Das

and unemployment, he acknowledged the inherent inequality of technological progress: "Some industries, some part of the labor force, may be impacted by it. Or some people who are later on in their careers and have a particular skill set and the economy becomes more high tech and they get bounced from a job in manufacturing and they don't have a skillset… so they're gonna be impacted."

Jennifer Sukis, a professor of Artificial Intelligence at UT who works with IBM's Watson program, explained that the more money an industry could save by adopting new forms of automation, the more likely they are to take this cost-cutting step. "The reason you see the markets that are using AI accelerate is because they're the markets that have a lot of money," stated Sukis. Companies that implement IBM Watson and other automated solutions need less employees to do the same amount of work, resulting in "huge ROI for these relatively simple machine learning implementations" across large economic sectors including manufacturing, finance, and healthcare.

As a general rule, automation has been shifting low-skilled jobs around rather than destroying them. But how long do we have until new forms of automation like IBM Watson start to have a significant impact on employment?

When asked about automation and AI for data analytics, Dr. Sukis reminded me that "it's the laborious, time consuming work like reading a million medical journals to come up with some recommendations for how you should treat a patient's symptoms" that get automated.

If you can boil something down to a series of fundamental steps, you can automate it, no matter how seemingly complicated the process is. However, according to a

Money Inc magazine article by Nat Berman, more jobs than one may think can be boiled down to a series of steps. Focusing on the auto industry alone, Burman identifies ten jobs that could be automated in the near future, including commercial drivers, technicians, and even marketers. As more complicated forms of automation emerge, industry will take advantage of them perhaps at the expense of their employees.

Automation is a tricky subject because its effects on the labor market change with time. The rise of data analytics automation systems like Watson causes concern because automation is moving into the skilled labor market, which has historically had a more complicated relationship with automation. Like Professor Thompson pointed out, automation enhances productivity and profitability while simultaneously replacing some jobs.

"When IBM says 'AI,' what they mean is augmented intelligence," explained Dr. Sukis, "…the intent behind those words is to clarify our stance that decisions shouldn't be being made by machines. They should be helping humans do their jobs better."

As industries automate higher and higher skilled jobs, data from the Autor and Salomons study shows that productivity and total output is growing faster than jobs. Jobs have not become scarce due to augmentation yet, but it certainly seems like a possibility as machine learning capabilities become more and more advanced.

Of course, just like Dr. Sukis stressed, humans will always ultimately make the decisions. In the near future, one of those decisions may be whether or not to implement a universal basic income to mitigate joblessness from automation. Drawing from extra capital generated in part by the cost efficiency of automation itself, some

countries have already implemented a UBI. A 2017 Motherboard magazine article reported that socialist French Presidential Candidate, Benoit Hamon, has even proposed a "robot tax" that would use tax revenue from the owners of automated capital to fund a UBI. The point of a UBI is to be distributed evenly among all citizens of a country, so Hamon's robot tax would provide a living wage to victims of automation and simply supplement everyone else's income.

Debates about the practicality of Universal basic income will exist as long as the concept itself exists. If, right now, only some people are experiencing job displacement because of automation, is a UBI really an appropriate measure? Probably not, argues Professor Thompson. "I'm not saying [a UBI] couldn't help anybody; it certainly could. But if we're talking the overall effects of the policy I think it would disincentivize work." Thompson then suggested targeted income assistance as a solution to automation-related unemployment.

Right now, as automation increases total productivity and, therefore, wealth, it is beginning to create a set of circumstances in which a UBI would be feasible. The one thing that's missing is the mass joblessness caused by the automation.

So far, the robots haven't taken our jobs in swathes. For the most part, we work alongside them and they enhance our capabilities. However, it's easy to imagine a future in which data analytics robots like Watson crunch all the numbers, mechanical robots do all the heavy lifting, and only a few humans are needed to run things. In this probable but perhaps far off future scenario, a UBI is an attractive solution.

Humanitarian

Design

Engineers In Action

Most people think of college as a time of preparation. It's a place you go to explore your passions and learn new things. But many students at UT aren't just learning and preparing for their futures, they're taking action and solving the world's problems as we speak. The engineering school at UT is bursting with students and programs aimed at actually making a difference in the global community.

One such program is Projects with Underserved Communities, or PUC. This organization creates teams of students who are given a task or problem in a developing country, and who brainstorm, fundraise, and implement their solution personally. Pooja Trivedi, a biomedical engineering student who participated in PUC during the 2017-2018 school year, was in a group tasked with building a water station for personal hygiene in the village of Don Klang, Thailand that had limited access to clean water. The experience allowed her group to not only help the town with a legitimate engineering issue, but also experience "so much culture, love, and acceptance from the people of the vil-

lage". The experience has a very profound impact on the students who do it. Trivedi says "PUC made me promise to myself that wherever my engineering career takes me, I have to be doing something that impacts people or the environment for the better."

Another interesting program at UT is the President's Award for Global Learning. This program lets teams of students propose solutions to humanitarian problems around the world. It then gives students the structure and resources to help implement these solutions. Chemical engineering student Ishani Chakravarty, a member of one such team team, says that the experience has not only allowed her to implement her engineering skills, but also learn about social work, public health, and their connection to engineering. Her team is making sustainable feminine products for women in Lebanese refugee camps. To do this, they are designing feminine products that are customizable as well as easy to make with the resources in refugee camps. The team is currently in the process of evaluating their prototypes for efficacy and comfort through testing. The team will go to Lebanon in

the summer to implement their new product after they have optimized its design. Chakravarty says "interdisciplinary action while implementing engineering solutions in other countries is super important because you need to understand how to work with other communities". This program is a reminder to engineering students that their degree can be used to truly make a difference in today's world.

As the world advances forward, there is a growing awareness of the issues faced by underprivileged communities around the globe, as well as growing resources for people to actually do something about it. These programs mentioned above are just examples of the way mere students like the ones at UT are truly touching the lives of others around the world. The reason why these programs make such a profound impact on the students who do them can be said best by Julie Delarosa, a teammate of Trivedi's: the experience teaches you how to "communicate without ever speaking the same language". By using engineering to help others, students are also learning valuable lessons about how to work with foreign communities and make a global difference.

Written By : Lauren Gaggini

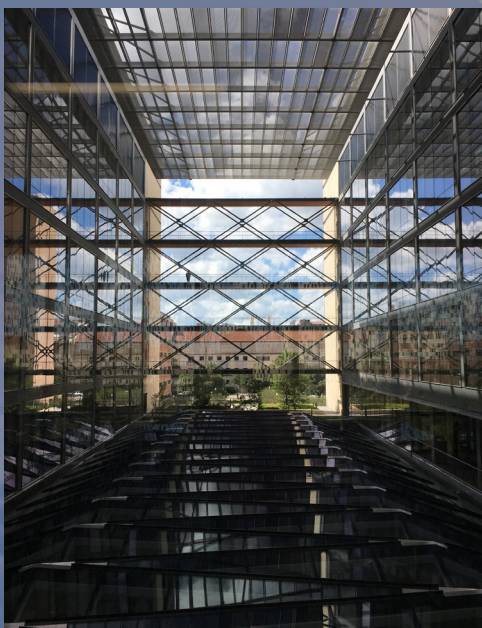Photography By : Hannah Myers & Lauren Gaggini

Layout By : Deanna Rodrigues

INCLUSIVITY IN ENGINEERING

Vector's Spring 2019 Photo Contest theme was Inclusivity in Engineering. Check out the amazing entries!
Photos by (top to bottom, left to right): Chi Cao, Matthew Yu, Allie Runas, Allie Runas, Ritu Shirali, Allie Runas, Andy Chang

LAYOUT BY:

JULIA NGUYEN

**Winner of the Vector Photography Contest by Andy Chang**

RISE UP

Vector photographers went to rooftops around campus and took some stellar shots. Check them out!
Photos by (Top to bottom, left to right):
Ritu Shirali, Jakin Cordova, Ritu Shirali, Ritu Shirali, Hannah Myers, Wendy Montano, Wendy Montano, Jakin Cordova

UNDOCUMENTED STUDENTS

Top countries of origin for DACA recipients or current
DACA enrollees (from Pew Research Center 2017)

EL SALVADOR
3.7%

SOUTH KOREA
1.1%

HONDURAS
2.3%

PERU
1.1%

MEXICO
79.4%

GUATEMALA
2.6%
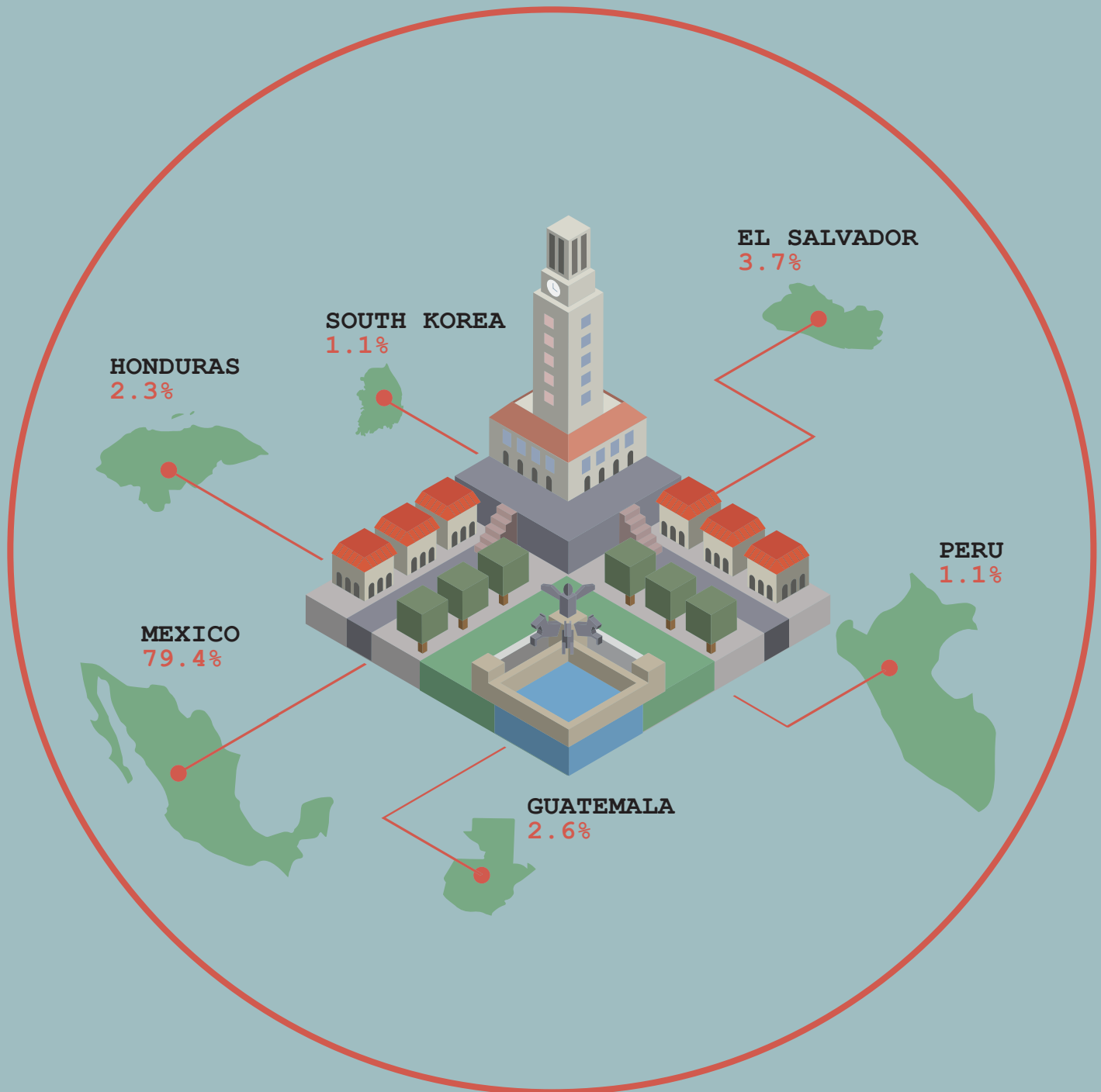
written by: Kajal Bhakta & Wendy Montaño
photography by: Wendy Montaño
layout by: Johnathan Tran

Imagine getting injured and not being able to go to the doctor. Imagine turning on the TV to listen to the news about how you are not wanted in the country you live in. Imagine having to worry about being able to continue for your next semester at UT Austin. These are some of the subtle, internal struggles undocumented students are faced with.

Undocumented students make up roughly 65,000 of the students attending college in the United States. These students are children who were born abroad (in countries like Mexico, South Korea, and England) and come to America, without having obtained citizenship or resident status. Many undocumented students struggle with the admission process, tuition, financial aid, and more. Many of us cannot comprehend how undocumented students feel and how many small freedoms can be taken for granted. A current Austin Community College student, who in this article will be referred to as "John", shares his experience being an undocumented student.

John was 12 years old when he arrived in Arlington, Virginia from Guatemala. He was immediately hit by waves of culture shock and struggled for 5 months to learn English. At the age of 16, he started working a job under a fake social security number. He was mistreated by his employers; however he endured the mistreatment because he needed the money and knew it would be difficult to get another job. From a young age he always loved movies and cinematography and knew he wanted to attended college. However, his pursuit for higher education was significantly hindered. Like many other undocumented students, John was placed in a bind. His parents were not familiar with the college processes (admission, tuition, etc.). His high school counselor asked him "can't you just apply for citizenship?". He felt like he had no support and had to do it on his own.

Despite all this adversity, John still attended community college. However, another issue arises: tuition. Even though he had lived in Virginia for 6 years, he wasn't considered a resident. He would have to pay out-of-state tuition. When attending college in the US, many undocumented students would have to apply as international students, meaning that tuition is drastically more expensive as compared to in-state tuition. When seeking help from this community college advisor, he was told "I can't help you with that. You're on your own." Eventually, community college became unaffordable to him, forcing him to drop out.

At this time John was considering going back to Guatemala, because he did not see any hope to improve his life in the US. As his hope was deteriorating, the Deferred Action for Childhood Arrivals (DACA) was passed. DACA allowed him to work legally, without the fear of deportation. He even secured an internship in Texas. While in Texas, he was amazed by Austin Community College (ACC) and the support of their advisors to help undocumented students. Even though John was helped by DACA, many students around the nation can not apply for DACA anymore. Current DACA members can still renew, but no new applications being accepted by USCIS (United States Citizenship and Immigration Services). Students who didn't qualify for DACA can not obtain driver licenses and work permits.

The individuals who oversee that DACA program (politicians and school administrators), will not take action unless they are pressured to. This is why John feels activism by undocumented students and other allies is so important. When the issue is not impacting you, you don't take action; however, by the time the issue begins to impact you, it is too late to take any action. This is why it is crucial to be aware of and support students that are impacted by DACA.

John hopes there would be more training for advisors for how to help undocumented students so that no one has to hear "why don't you just apply for citizenship" or "you're on your own". He wants to make campus immigrant friendly so that undocumented students can know that they're not alone. "It's really powerful to know that you're not the only one going through this and that your school wants to help". Programs like Monarch are designed to be a safe zone for undocumented students seek counseling and support with tuition and understanding the college process. Monarch is located on the 5th floor of the Student Services Building in the Longhorn Center for Academic Excellence. Additional resources include the International Office's Longhorn DREAMers Project, which aims to empower undocumented students and help them reach their full potential. It is important as students across campus to always be mindful of what you are saying and how your words can impact others.
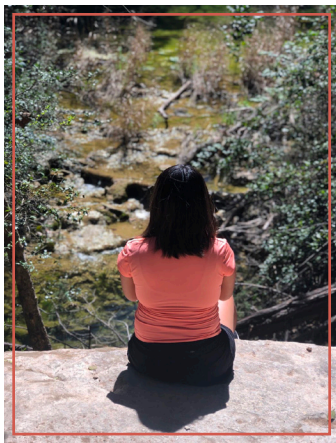
THE ECO-(UN)FRIENDLY ECONOMY

With the imminent threat of climate change and the desire to protect the environment, many people are turning towards sustainable consumption. Sustainability is the method in which things are done to satisfy the needs of the present, yet without compromising the needs of the future. The issue is that there is no clear black and white solution. In many cases we have to make consumer choices that are simply "better" rather than "good", but this understanding comes with its own difficulties. To be able to distinguish whether something we do or buy is better we need to have a high level of consum-

er awareness. We need to understand that in the case of many products we must refer to a life cycle analysis to truly understand its environmental impact, and additionally we must avoid the pitfalls of greenwashing in modern product advertising. If we better understand these two aspects of products, we can make far smarter choices for our environments and for ourselves.

Life cycle analysis is the harder of the two aspects of sustainable consumer awareness to understand. This is the process in which a product's impacts and externalities are observed from the sourcing of

its material components all the way to the general methods of disposal. In many cases a product can have certain stage of production that is in some way more environmentally friendly than a competing product, yet over its entire lifecycle, it will be worse for the environment. One clear example of how life cycle analysis can be used to compare sustainability of products is the comparison of various disposable or reusable cups. When comparing styrofoam cups, paper cups, and reusable cups, many environmentally conscious people would automatically assume that the reusable cups are the best, but in certain situations that is not actually the case. The reason for that is the difference in the energy of production and the cost of washing. On average a reusable ceramic cup can take over 25 times the energy necessary to make a paper cup and the difference is even more significant when comparing to styrofoam cups. One paper cup takes

700 times more energy to produce than one styrofoam cup (Institute for Lifecycle Energy Analysis 2002). These numbers show that when using reusable products we need to make sure that we are using them to their fullest. If you buy a reusable cup or bottle every month or so, you are having a significant impact energy wise. The issue with this analysis is that even though styrofoam cups use significantly less energy to make, their landfill impacts are greater. The answer is never clear, and the goal of life cycle analysis is to prove that. The ways you can apply this to your daily life is thinking about the packaging and production of the products you regularly buy. For example. when going to the grocery store, try to use as little reusable bags as possible, and if you forget them, instead of buying a new one, select the plastic bag and reuse it as well. Be aware that not all environmentalist fads are perfect solutions. For example, paper straws may be biodegradable and have a lesser impact in landfills, but they use significantly more energy to produce. If the straws aren't being sent to composting centers, then they are the same as any other piece of garbage.

Another reason why it is important to be wary of fads like paper straws is because they are part of a seemingly environmentally friendly marketing scheme. In many cases products use imagery or other marketing techniques to give the illusion of eco-friendliness, and this scheme is called greenwashing. Consider for a moment the amount of times you see products labelled as "all-natural" or other language that implies eco-friendliness. A blatant example of this is the marketing of Fiji water, Fiji consistently uses imagery of mountains and nature to give people the illusion of connection to nature and sustainability, yet the bottled water industry regularly uses unsustainable plastic bottling and uses large amounts of fuel to transport its products. It isn't just eco-friendliness that this marketing strategy targets, it's also part of a heightened awareness of personal health. An example of greenwashing that is prevalent in our

lives, is the predominance of the term "organic". There are a plethora of reasons why we need to look past what the surface information tells us about organic products. Consumers are led to believe that organic products are the perfect adaptation of agriculture or production for the future, but in reality it has plenty of caveats. For example, we can use lifecycle analysis to see clearer the costs and benefits to organic foods. Organic food uses significantly more land to achieve the same amount of crop yield. This is land that previously could have been a forest or other natural systems. On the other hand, some studies show that organic food may contain higher levels of antioxidants and nutrients

All these details show that the label of organic in its purest form is not perfect. The situation worsens when considering how loose the definition of organic is. Many people believe that organic food is pesticide free, but in fact it uses even more pesticides, they are simply naturally derived. Consumer misconceptions continue as many people believe that all natural and organic are similar, but the label of "all natural" can be applied to any product, it has no regulation compared to the already minimal regulation of the USDA organic label.

Things may seem grim, but greenwashing is part of a trend with positive implications. The fact that companies are marketing in ways that seem environmentally friendly and healthy, shows that there is a consumer demand for it. It shows that people are willing to pay to make a small difference. The only issue is that our society needs to work towards deeper understanding of what they are buying. They may have good intentions, but many people are uninformed. It's unfair to expect everyone to know how every product is made, but there are a few things that can help. Even though a product may be covered with green iconography and use words like all natural, it is still important to read the ingredients. Also take into consideration the bigger picture of what you're buying. If there is a way you can buy a similar

product without the packaging then do so, or if the packaging is reusable go for that. Even though a product is recyclable that is not the ideal solution, recycling takes massive amounts of energy and is barely profitable. A better alternative is to buy products with reusable packaging, such as glass bottles. Another thing to take into account is the fact that when it comes to sustainability, less is more. Simply by buying less products and focusing on the quality and reusability you can make a significant impact. The single use economy is part of the environmental issue, and by spending money in it, the consumer is indirectly supporting the business model.

In conclusion, it is impossible for there to be a perfect solution to any issue regarding sustainability, especially when it comes to products that are bought. The only thing that can be done is to use tools like lifecycle analysis and the awareness of greenwashing to make better consumer decisions. If people collectively continue the trend for sustainable consumer habits, eventually a significant impact can be made.

WRITTEN BY:

Maurizio Marcotulli

PHOTOGRAPHY BY:

Megan Reynolds

LAYOUT BY:

Kat Walters

#ACTIVISM

WRITTEN BY: ROSEMARIE POUSSET

PHOTOGRAPHY BY: MEGAN REYNOLDS

LAYOUT BY: JARED CORMIER

The protest tactics of 1965– marches to the capitol, lunch counter sit-ins, and bus boycotts–have made room for a new medium of protest: hashtags. In 2011, the term "hashtag activism" was first coined by media outlets to describe the social media presence of the Occupy Wall Street protests of that year. Since then, hashtags including #BlackLivesMatter, #BringBackOurGirls, #MeToo, and #NeverAgain have pervaded our social media and many of our lives. At first glance, one might wonder how something as simple as a hashtag, just a few words or an acronym strung together behind an arbitrary symbol, could do anything in the real world.

However, this question can be answered in two ways. First, placing the idea behind a movement under a hashtag lends a sense of organization and unity to the movement itself, allowing members to feel part of a single body. This is especially significant in movements whose members might be geographically separated, as well as those whose members may feel the need to hide their support or identity in real life. Second, although a movement may be difficult to see among the noise of a multi-million-user platform, social media can allow a trending hashtag to be picked up by real media outlets.

As with any kind of technological or societal change, the introduction of social media to activism has been met with a certain amount of negative feedback. Some critics even go so far as to call the use of microblogging for activism, "slacktivism". Defined as "the practice of supporting a cause by means of social media, typically involving little effort or commitment," the term has a clear implication of ineffectiveness toward real change. Even Selina Eshraghi, a UT Austin engineering and film student and self-made "social media influencer", agrees that "slacktivism" is admittedly real. A hashtag is often the extent of activist efforts for social media users, many of whom may post about their support of a trending movement once and forget about it. "If that's the only thing you're doing it only goes so far," said Eshraghi. However, even "slacktivism" can have a positive effect: whether or not the individual behind a post or tweet is a real-life activist, that post still generates traffic for the hashtag, thus increasing its popularity and bringing attention to the associated movement.

Even so, high-traffic hashtags can still be overshadowed or go relatively unnoticed. As an activist with an Instagram following of almost 3000, Eshraghi conceded, "I can't really choose who follows me, so oftentimes I'm preaching to a choir… and unfortunately, politicians aren't as well-versed in social media as our generation is." She is right on both counts. Politically active or not, social media users tend to interact with –follow, retweet, friend, like–other users who share the same interests and views. This trend is intuitive; most people wouldn't want to see

posts they disagree with or dislike, so of course they wouldn't follow or subscribe in any way to have those posts in their feed. Many of us have seen this rule in action, whether it's unfriending that distant relative who shares ridiculous politically-charged articles on Facebook, or unfollowing that celebrity who starts to retweet the wrong politician.

Despite this challenge, often referred to as the echo chamber effect, social media still has the ability to unite users across geographical boundaries. This power can be especially useful in protests: in the 2016 Dakota Access Pipeline protests, supporters from around the world, united under the hashtag #NoDAPL, "checked in" on Facebook to the event to protect those who were physically present. A similar tactic was used in the Occupy protests of 2011. This boundary-breaking power also helps expose users to the experiences of those from environments that differ from their own, especially with regard to socioeconomic status. Expanding their worldview through social media can sometimes even lead to users reconsidering their opinions on political issues, especially those closely linked to environment. For Eshraghi, this has led to new viewpoints on issues she never thought she'd change.

"Having grown up in Austin, which is generally labelled a liberal city, I don't really get access to differing views except via the internet," she said. "[Via the internet,] I get news a lot faster…and see other people's opinions, or see different ideas surrounding a topic that I wouldn't have had access to seeing before. To me, social media is less about the influence I can have if I grow my following, and it's more about the capacity to have a productive discussion quickly after an issue arises and be
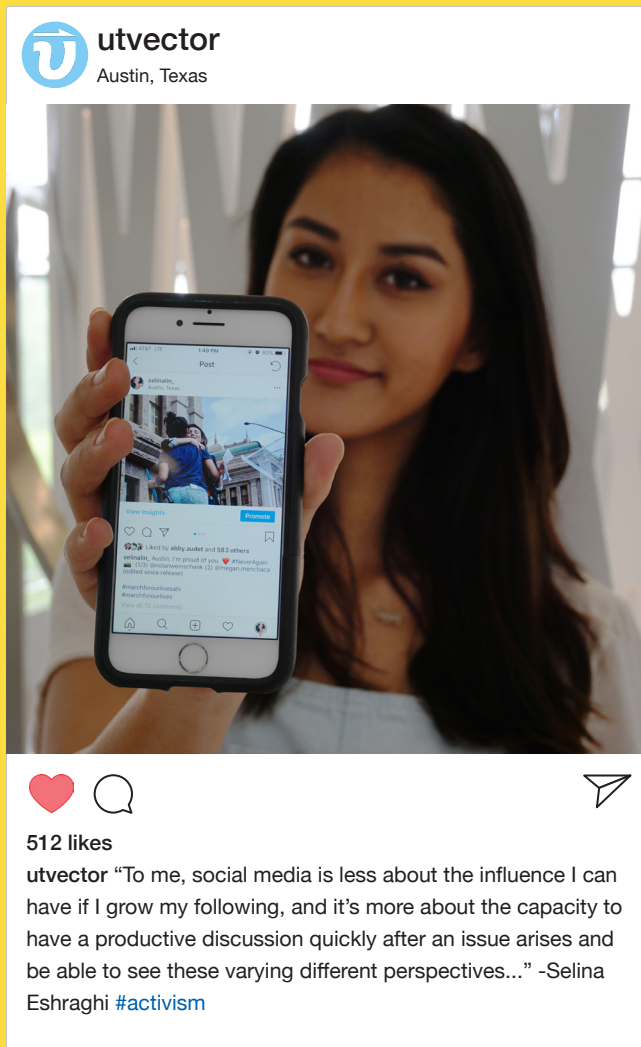
able to see these varying different perspectives despite the fact that, geographically, I'm kind of in an echo chamber itself."

Another double-edged aspect of social media is the fact that almost anyone can use it, given an internet connection and a device on which to log in. While this can allow anyone to build a voice for themselves, like Mari Copeny–an 11-year old activist better known by her twitter handle,

utvector
Austin, Texas

♥ ○ ▷

512 likes
utvector "To me, social media is less about the influence I can have if I grow my following, and it's more about the capacity to have a productive discussion quickly after an issue arises and be able to see these varying different perspectives…" -Selina Eshraghi #activism

@LittleMissFlint--, it also leads to high levels of "noise". Any number of well-meaning, informative, or otherwise important tweets or other posts can easily go unnoticed among memes, advertisements, personal status updates, and more. Because of this, social media's greatest impact on political and social activist movements is demonstrated in its ability to spread ideas not just to other users

but to media outlets themselves. If a particular hashtag or post picks up enough momentum, with the speed that information travels through the internet, change can happen in a matter of hours.

Soon after the Santa Fe High School shooting in May of last year, March for Our Lives Austin --an organization in which Eshraghi is deeply involved-- found out that Governor Greg Abbott advertised on his website a raffle to win a "Texas-Made Shotgun". March for Our Lives took to Instagram and Twitter to demand the raffle be taken down in light of the shooting. "We find this a disgusting display of disregard of the toll gun violence takes…in the wake of the #SantaFe shootings," wrote representatives of the movement. In less than two full days, the posts had gained so much traction that the story was soon being covered by big news outlets, including CBS Austin and even CNN. "Once it hit CNN, it kind of exploded. [Abbott] never made a public statement back, but he took [the raffle] down, and this all happened within, like, 36 hours," Eshraghi recounted.

Social media has changed the landscape of activism whether we like it or not. Despite its shortcomings, it has empowered users of different ages, races, and backgrounds to create a voice for themselves and a chance to try and be heard. It has allowed people from across the world to unite and share their ideas in a matter of moments. It has enabled individuals to support causes locally and globally through organizations created in virtual space. Maybe one day history textbooks will tell the stories of the #BlackLivesMatter, #MarchforOurLives, and #MeToo movements alongside the civil rights movements of the 20th century.

AFFORDABLE FOOD

In early March, University Housing and Dining announced both unlimited meal swipes and expanded hours for J2 and Kinsolving, the two all-you-can-eat on campus dining halls. Starting Fall 2019, students who purchase an on campus meal plan will receive unlimited swipes, curtailing the anxiety many students face on campus towards the end of the academic year. Students living off campus will also be able to purchase this unlimited meal plan for $2,850. This is an integral step to improving the food situation for the over 7,000 students who have meal plans on campus. At present, with their busy schedules, many students begin the day before 10 AM (which is when campus dining halls open) and are out until 7 or 8 PM for organization meets, sports, or other activities. This leaves students to either buy food at Jester City Limits, Littlefield Cafe, or numerous on and off-campus food vendors, including food trucks like Pinch and restaurants like K-Bop and Thai How are You—or they can skip meals, which is what the vast majority of students end up doing. Out of the fifty peers I surveyed, forty-two admit to have skipped at least one meal in the past three days (meals being a standard breakfast, lunch and dinner). Morgan Sholeen, an ECE freshman, cites that buying food off campus is an almost everyday ocurrance, and it ends up adding up- specifically because so many dining options on Guadalupe Street are overpriced. An average meal on Guad costs about eight dollars. Over the course of a week, if a student buys food off campus, say, eight times (accounting for the present dining hall hours, which only in-

clude brunch on weekends), this is almost sixty dollars a week, including tax. It is not worth the costs of having a meal plan. Many of my peers admit to having a lot of Dine-in-Dollars left over because they don't necessarily swipe at a dining hall three times a day due to the inconvenience of distance or closing time.

Additionally, J2 and Kinsolving Dining are located in the central part of campus, serving students who either find themselves in the central or western areas of campus, or have an hour or more to make the trip, eat, and get to class. While many may argue that chunking out time for meals and self-care falls under the added independence which comes with schedule planning and classes, it is an undeniable fact that ease of access to fresh, healthy food not only improves students' moods, but their academic performance as well. A USDA Food Security Survey released an alarming statistics- that 59 percent of college students experience some form of food insecurity, which includes limited of access to healthy food. A study published in the Journal of Nutrition revealed that adults with chronic health problems such as back problems, arthritis, diabetes, heart disease, and mental illness, were more likely than those without those ailments to live in food insecure environments. While the "freshman fifteen" is a term often thrown around, a study by the National Institutes of Health reveals that the average gain is something close to 1.7 lbs. Therefore, weight gain in college has been overly hyped- in fact, it is not that students are overeating. The vast amount of walking we do as students, especially in a huge campus like UT- offsets some of this. We should be more concerned about having healthy food that nourishes both our minds and bodies.

Kins and J2 have made incredible strides in offering locally sourced and even vegan options, and frequently take student input to improve food quality. However, these benefits don't hold if students cannot enjoy the food in the first place. Many popular dining options located

directly off campus- such as Kerbey Lane, Thai How Are You, Taco Bell, and Don, aren't deemed for being particularly healthy or nutritious. Yet they are enjoyed for their convenience. Having more easy dining options spread around campus which accept Dine-in-Dollars could help combat this problem.

Besides the improved dining hall hours in the upcoming academic year, there are preliminary plans to turn Creekside Dormitory, the university's oldest dorm, into a larger co-ed dormitory with a dining hall. This would make it vastly easier for students in the engineering, law and arts buildings to get quick access to food without making the trek down Speedway or up Dean Keaton for J2 or Kinsolving. University Housing and Dining continues to gather student input and expand on food options, including locally sourced and vegan options, and university garden produced fruits and vegetables. However, for now, we must remember that the best way to improve our food situation is to take control by ourselves- whether that means by prioritizing self-health, meal planning, or simply bringing our own nutritious food.

Written By: Swetha Berana

Photography By: Chris An

Layout By: Carlos Villapudua
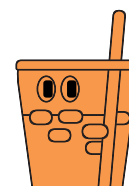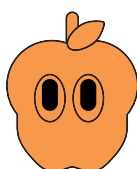
Men and women are pressured by social expectations, which are reinforced by media, to have a certain body type. This can cause them to become dissatisfied with their bodies

BODY

42%
of girls in 1st to 3rd grade want to be thinner

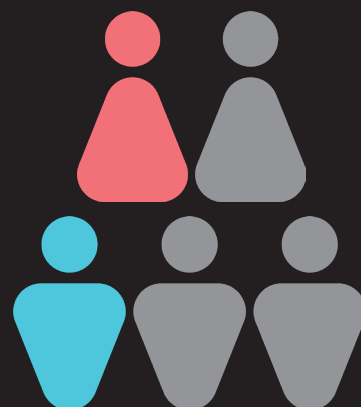*Source: Martin, J.; Nutrition Today, 2010, vol. 45*

14 to 16-year-old boys feel like they need to "bulk up" in order to fit in or be cool

Source: Bradley University; the Body Project

Girls under 18 years old are more easily influenced by media than older women

Source: Martin, J.;
Nutrition Today, 2010, vol. 45

From 6 to 8-years-old,
1 in 2 girls and 1 in 3 boys
are insecure about their bodies

Source: Common Sense Media;
Media and Body Image

Writing and Layout by: Yee Lee Chen
Photography by: Chris An

A person's anxiety can cause them to have a morphed perception of their body and to develop eating disorders.

30 million

people in the US have eating disorders

Source: National Association of Anorexia Nervosa and Associated Disorders (ANAD)

1 in 4 seven-year-olds have attempted a form of dieting

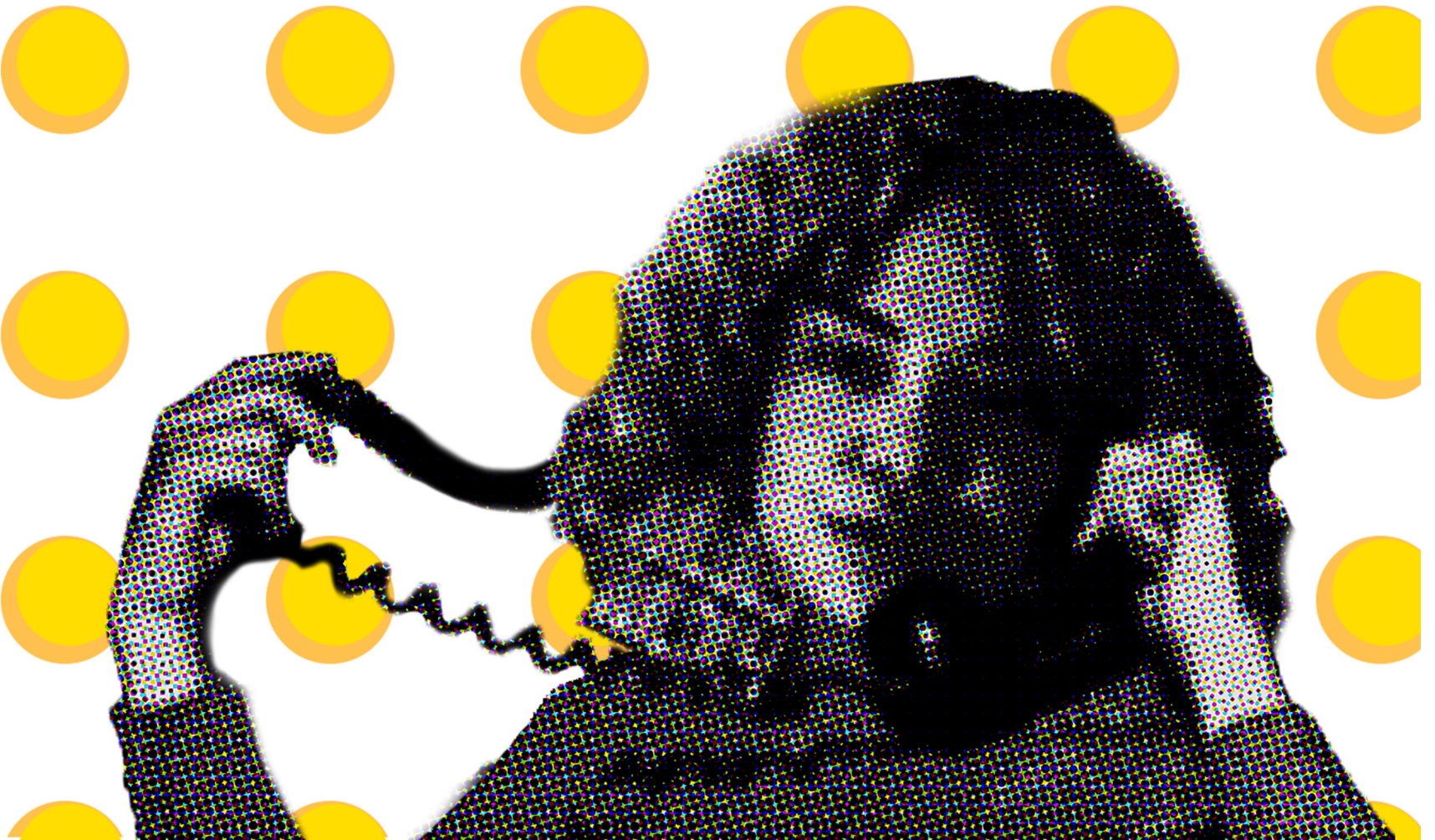*Source: Common Sense Media; Media and Body Image*

A person can view their bodies as two-thirds larger than it actually is

Source: Telegraph Media Group, Blake H. 2010

DIALING IN ON

REPRESENTATION

Written By: Jakin Cordova I Layout By: Shalini Das

In an alternate present, economic oligarchs have once again become ruling titans of industry along the lines of Rockefeller and Carnegie, except this time they control Silicon Valley. Employees can barely afford to keep their homes. Conditions are at the point where Worry Free, a manufacturing company, begins offering guaranteed housing and work through lifelong contracts. Contracts that they can exploit to achieve the highest profits at the lowest cost of labor.

This is the reality of *Sorry to Bother You*–a trippy, insane, hilarious, meaningful debut film from writer/director Boots Riley. The movie is not for the faint of heart as it delves into both extreme realism and surrealism. Cassius (Lakeith Stanfield), a telemarketer, drives a smoking, broken car, pays for gas with coins, can barely pay his rent, and uses his windshield wipers by yanking a piece of rope. But through his corporate journey, Cassius dives deeper and deeper into the absurd.

He becomes extremely good at his job by conforming to expectations-during calls, he replaces his regular voice with his "white voice", a dubbed approximation of what white people think they are supposed to sound like. He meets his new boss, who only speaks in his white voice and is censored when he says his name because he lost his identity to his corporation (even in the credits, the actor is listed as "Mr. _____"). And when Cassius is promoted, his increasing wealth is shown through objects in his apartment physically breaking in half while new ones rise to take their place.

The movie intentionally challenges its audience. With its all-star black cast (Lakeith Stanfield, Tessa Thompson, Danny Glover, and Terry Crews), it could easily be the comedy that it was advertised as. But it is something more. It is a commentary on the very people watching it, a warning for their future, and a promotion of political activism.

One aspect mentioned earlier, the "white voice", is something that UT Austin government student Iman Serbones has dealt with firsthand. This voice is a technique that the telemarketers in the movie use because customers would never buy from someone with their natural black voice. Iman worked in retail and often had to use a script, during which she unknowingly changed her voice. The voice is a little higher, a little faster, and a little "nicer". Only after seeing the movie did she return to her job and catch herself in her white voice. No one ever told her to change her voice and she never consciously did it, but that fact that it is real shows how people can repress their own voice and culture to conform to the world nonetheless.

But the white voice is just the start. The movie reveals gross, disfigured slaves broken by their lifelong contracts as an exaggeration of capitalism's tendency to reward manufacturers with the cheapest labor and highest profits. Cassius even has his body physically broken to have Worry Free's wrongdoings exposed in the media, only for the company's

stock to go up. Situations like this are something that everyone should recognize, but especially government students like Iman who will have to face these very problems in the future. In the words of Steven Yeun's character Squeeze, "If you get shown a problem, but have no idea how to control it, then you just decide to get used to the problem."

The movie preaches a solution through political protest. In both the media and the physical parts of the story's world, characters are vi-

> "The 'white voice', is something that UT Austin government student Iman Serbones has dealt with firsthand... No one ever told her to change her voice and she never consciously did it, but that fact that it is real shows how people can repress their own voice and culture to conform to the world nonetheless."

olently beaten to exhibit their message. It is not easy, but it is necessary to prevent further abuses by industry leaders. Through this movie, the director was able to elevate the same types of protest that he fought for in movements such as Occupy Oakland. Riley sees a repetition of the days of the Industrial Revolution, and we need to solve our problems in the way that the industrial unions solved theirs-through always making sure that our voices are heard.

Image Source: Sorry to Bother You

WRITTEN BY: DANIEL SNYDER
LAYOUT BY: EMMA GORDON
PHOTOS BY: HANNAH MYERS

Even the most experienced city-slicker could be forgiven for not noticing the advance of hostile architecture in urban Austin. For the unexperienced city slicker, a definition: hostile architecture is the design of public spaces to discourage people from using them in an unintended way. Hostile architecture can often be seen in the design of bus stops or park benches, fitted with handrails or designed to be exceptionally narrow such that anything other than sitting on them is impossible. While the stated goal of such design indicates more generality in 'the passive deterrence of crime in public spaces,' observing the effects of such architectural decisions show that they are mainly focused on one goal: preventing loitering or extended use of the space. More specifically, hostile architecture is most often employed to discourage individuals experiencing homelessness from using park benches, stoops of buildings, bus stops, etc. as makeshift resting places. Whether or not they say it explicitly, real estate developers and community planners of Austin are slowly but surely changing the architectural landscape of the city largely for the key goal of reducing the visibility of homelessness in public areas.

While the moniker 'hostile architecture' certainly paints the design trend in a negative light, there are positive aspects to consider. For one, the passive nature of these designs generally supports more efficient use of city resources. Police officers can focus on investigating more serious crimes rather than constantly having to revisit otherwise innocuous city streets, and city maintenance workers are less burdened by the repair requirements that come from consistent misuse of public architecture. Dean Harvey, co-founder of Factory Furniture which produces among other things what has been called 'hostile' benches, described another positive argument. "There [can be] a lot of pressure from lo-cal residents to not install anymore benches, because public areas can become hangouts. It's a problem -- you either put in no seats, at the request of the residents, or you come up with a design that prevents long stays and day drinking," he said. That is to say, the most direct solution a city can provide for preventing the misuse of a park bench, save for designing it such that it can only be used for sitting and short rests, is to remove the bench entirely. In truth, hostile architecture will likely continue to be a useful tool in cities' approaches to deterring small-scale criminal offenses. However, the primary issue with hostile architecture is that it only really serves to cure the symptoms of certain crimes, rather than the underlying causes. In this case, we are discussing homelessness.

More effective methods for understanding and addressing the presence of homelessness in our cities requires thinking beyond simply the 'quick fix' of removing homeless persons from public areas. One solution that communities have been looking towards is the so-called 'Housing First' approach. Housing First involves focusing community funds for vulnerable citizens primarily on providing heavily if not entirely subsidized housing units. The thinking behind this approach generally recognizes the link between citizens in unstable housing and citizens with mental illness or citizens dealing with alcohol or drug addictions. That is to say, social workers have often found

ENGINEERING

that persons experiencing homelessness are also likely to be dealing with at least one of those other issues. Thus, experiments with Housing First have sought to prove that by solving the issue of housing immediately, communities are better able to address these vulnerable citizens' other needs. This has come in the form of higher return rates for addiction treatments or counseling as well as more consistent involvement of vulnerable citizens in community organizing. Dr. Heather Way, who works as the director for the Entrepreneurship and Community Development Clinic at The University of Texas at Austin, noted how solving the housing issue can provide ancillary benefits to the community. "There's very strong research out there around how important the Housing First model is for creating stability for folks who are the hardest to serve. This approach results in a range of community benefits from reductions in recurring healthcare costs to keeping people out of prison," she said.

However, adapting a city's housing strategy in this way cannot happen overnight. In Austin specifically, it is challenging to develop an integrated approach as support systems are structured as silos of money, government agencies are provided budgets only to address their specific lines of concern. Healthcare providers are incentivized to only focus on addressing healthcare needs, criminal justice system personnel are incentivized to only focus on enforcing laws, etc. Dr. Heather Larkin, who serves as the director for the Nation-

al Center for Excellence in Homeless Services, explained how many communities would benefit from system redesign. "People with recurring problems at the highest level of risk end up falling through the cracks of a fragmented social services system. System redesign involves creating funding streams and policies that actually drive programs to be able to operate more cooperatively and in an integrated fashion. ... In this approach, we ask 'How do we help programs work together at building community resilience and other protective factors,'" she said. Moreover, solutions such as Housing First often suffer from a lack of financial incentive. As Dr. Way explained, "cities have a hard time with Housing First due to a lack of providers willing to actually build those [subsidized] units and provide

the associated services." The contractors that city governments would look to in order to construct the units and provide property management services would be working at near bottom-dollar. When compared to the sort of premium revenues these companies could expect from providing the same services in a gentrified neighborhood, it is clear why building momentum behind Housing First can be such a challenge.

The magnitude of the challenge of system redesign reinforces the importance of looking beyond simple 'quick fix' solutions to addressing homelessness. Of course, with the rate at which city governments are tasked with addressing a variety of problems, as well as the difficulty of generating political momentum, it is expected that a comprehensive solution may not emerge in practice for some time.

HOSTILITY

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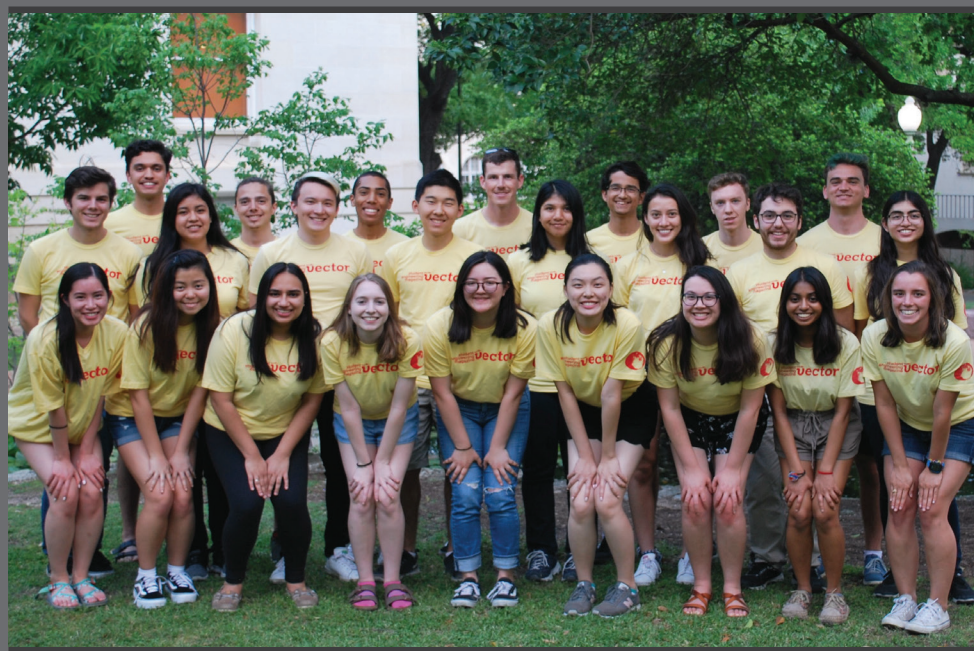Find the job that's right for you.

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MALEK IBRAHIM   JAMES SCALES   DANIEL SNYDER

MIDDLE

ETHAN DENFELD   WENDY MONTAÑO   NICK BLACKLEY   CHRIS AN

DEANNA RODRIGUES   ROSEMARIE POUSSET   JACOB STEHSEL   RITU SHIRALI

FRONT

JULIA NGUYEN   MINA KIM   PRIYAL SONI   LAUREN GAGGINI

MEGAN REYNOLDS   YEE LEE CHEN   EMMA GORDON   SHALINI DAS   HANNAH MYERS

UNPICTURED

ALLIE RUNAS   JOHNATHAN TRAN   SWETHA BERANA   KATHERINE WALTERS

KAJAL BHAKTA   RILEY SANDERS   JAKIN CORDOVA   THEODORE KIM

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faites des merveilles

बढ़िया चीज़ करो

做不可思议的东西

làm những chuyện tuyệt vời

mach etwas fantastiches

افعل أشياء عظيمة

Translated by Vector friends, family, and staff
Photo by Allie Runas