

FACES OF COOPER: GRACE KENDALL

MARY DWYER (ME '19)

Editor-in-Chief: Pranav Joneja (ME '18)

Associate Editors: Matthew Grattan (ChE '19) Kavya Udupa (BSE '19)

Front Cover: Zekiel Maloney (Art '20)

Online Operations:

Anushree Sreedhar (ChE '18)

Director of Photography: Winter Leng (ChE '18)

Photographers:

Sage Gu (CE '19) Yifei Simon Shao (ME '19) Wentao Zhang (ChE '19)

Comic: Kyle Finkelstein (Art '20)

Writers: Monica Abdallah (ChE '17) Mary Dwyer (ME '19) Noah Fechter (CE '20) Daniel Galperin (ChE '18) Juan José García (Art '20) Robert Godkin (ChE '18) Gabriela Godlewski (CE '19) Emma Faith Hill (Art '17) Anthony Passalacqua (CE '18) Tell us about your background and how it impacted your career path.

I grew up in Richmond, Virginia with two siblings who studied engineering. I attended Smith College where I majored in English and Psychology. Originally, I intended to be a high school English teacher, but then I joined Smith's Residence Life and my plans reconfigured. I was a Resident Director for a couple of years, and when I was in grad school at the University of Maryland College Park, I had a grad assistantship at UMD Baltimore County. I started working at Pratt's Residence Life in 2006. I was in charge of the first-year students, and then transitioned to the Director of Special Projects. In the spring of 2015, I was appointed the interim Title IX coordinator. I remained the Director of Special Projects, and then I became the non-interim Title IX coordinator. In both roles I became a coordinator for student diversity initia-

What experiences at Pratt strengthened your passion for what you do?

tives.

When I was at Pratt, I became involved in a lot of different groups dealing with policy and the revision of our approach to policy. I think it is important to recognize that everything is not going to work the same in different environments. The government issues a lot of guidance and legal policy regarding Title IX and diversity, but how we interact with the students to ensure the policies are in place varies from school to school. At Cooper, a school that is so small where everybody knows everyone, our policy coordination will be different from a place like NYU where they have entire offices dedicated to one goal. In the development of policies process in Pratt, we went through a lot of iterations to ensure that our process aligned with the students. The process should meet the needs of the people involved with it, not just what the policy dictates.

What brought you to Cooper Union?

I really like the idea of being able to dedicate full-time efforts to Title IX, Diversity, and Inclusion. My responsibilities revolve around creating a safe and healthy envi-



Meet Grace Kendall. Photo by Wentao Zhang (ChE '19).

ronment for all students and that is the entire reason I became involved in student affairs.

What are your goals at Cooper?

Right now my goals are really just to meet as many people as I can, so that I can understand what students need and want, and then develop processes to meet those needs. I have approached various student clubs and groups so I can meet everyone and introduce the concept of Title IX and raise awareness about who the student body can go to if they encounter an issue. The next steps are developing more programmatic things and resources, figuring out the needs beyond Title IX. The needs for Title IX are much more clear based on school policy than they are for other aspects of identity.

Tell us what you want a Cooper student to know about you.

I really think it is important, particularly in a college environment, that all students feel welcome, are included, and have their rights upheld. Everyone should know that they are entitled to that by being students here and that there are a lot of people willing to help them if they are in a situation where people are not giving them all of their rights, including them, or making them feel welcome. ◊

MUSEUM REVIEW: THE COOPER HEWITT

GABRIELA GODLEWSKI (CE '19)

Peter Cooper was known as a philanthropist for his dedication to the advancement of science and art in our society, a goal immortalized in our institution. What few people know is that his goal remains alive outside of our school in a beautiful museum tucked away in the Upper East Side: the Cooper-Hewitt Smithsonian Design Museum. The Cooper-Hewitt is a unique museum dedicated entirely to design and its implementations in both mod-

The Cooper-Hewitt Museum was founded in 1897 by Peter Cooper's three granddaughters, Amy, Eleanor, and Sarah Coo-

ern and historic contexts.

for student admission. Don't let that deter you from visiting, though. Just flash your Cooper ID at the ticket booth and you get access to all the incredible exhibits for \$9.

Traveling from our natural habitats in the casual East Village to the more upscale Upper East Side compliments a museum outing perfectly. Breathing in the fresh air from Central Park, I arrived at the Cooper-Hewitt and bought my ticket. With my ticket, they gave me

> a large stylus: one end worked as a pen for drawing on tablets spread throughout the museum and the other end saved favor

throughout the 20th century, and a collection of Louis Comfort Tiffany glassware. There is also the famous Immersion Room, which has become very popular on social media. The room features two interactive walls that visitors can design by drawing on the tablet in the middle of the room. The result is the drawing projected onto the walls, making for a great design lesson and photo op.

Notably, the third floor is entirely dedicated to exhibiting the design process as it integrates in our daily life. The exhibit, "By the People: Designing a Better America," presents ingenious inventions made by average people and architecture plans for sustainable homes. It not only highlights the social and economic inequality that exists in our society, but also demonstrates how thinkers, when presented with a problem, can design a solution through architecture and engineering. we were asked to design a possible solution to our problem that would address the theme and then submit the final design to be a part of the exhibit. People of all ages were discovering the same type of design process that everyone attending the Cooper Union learns and implements in their projects.

I strongly recommend taking at least a few hours off from studies or projects to go to see what the Cooper-Hewitt has to offer. What I love most about this museumespecially in the eyes of a Cooper student-is that there are exhibitions that anyone in our school can enjoy. The inventions featured on the third floor are perfect for an engineer and budding entrepreneur. Architects can enjoy and draw inspiration from the various plans and models on display. Everything featured in the museum is a work of art that artists and everyone else can enjoy. The Cooper Hewitt is a testament to Peter Cooper's legacy that can and should be appreciated. ◊

Hossam Saleh (ChE [•]18) Tandis Shoushtary (Art [•]20)

Michael Pasternak (ME '17)

Brandon Quinere (CE '19)

Tobias Stein (CE '18)

The Pioneer is printed on packing paper with soy-based ink by Victoria Sobel (Art '13), Jacob Jackmauh (Art '18) and others on their risograph in Brooklyn.

> Questions? Concerns? Email The Pioneer at pioneer@cooper.edu or visit LL217.

per-Hewitt. It

was originally an extension of the Cooper Union located in the fourth floor of the Foundation Building. In 1967, the Smithsonian Institution absorbed it as the design branch in their extensive museum network. Shortly after in 1970, the museum and its exhibitions were moved into the Andrew Carnegie mansion on 91st and 5th overlooking Central Park where it remains open to the public to this day.

The museum is open every day from 9 a.m. to 6 p.m. Since it was once a part of the Cooper Union, the Cooper-Hewitt offered free admission to students. However, when the Cooper Union began charging half-tuition, the Cooper-Hewitt also began charging ite exhibits to a personal library

accessible online. This stylus and library were integrated in the museum experience to make the exhibits more interactive, further distinguishing the Cooper-Hewitt from other museums.

The Cooper-Hewitt houses many c interesting exhibitions but a few e were particularly notable. The first the exhibit I saw, entitled "Scraps: in Fashion, Textiles, and Creative s Reuse," showed the work of three the designers who were inspired by r sustainability to use discarded T PVC and fabric scraps to make a clothing and accessories. Other exhibitions include treasures has from the Hewitt sisters' personal c collections, a room full of mirrors A and shoes painted silver, notable the examples of interior design pieces results.

A personal favorite was the Process Lab, a room that guided the viewer step-by-step through the design process. First we were asked to

choose a sticker stating a theme we were interested in, such as family, technology, or resilience. Then we were asked to find a problem relating to our central theme. After sifting through inspiration cards



Photo by Gabriela Godlewski (CE '19).

TRUSTEE INTERVIEW: ADRIAN JOVANOVIC (BSE '89)

MATTHEW GRATTAN (ChE '19)



Photo provided by CUAA.

Where you are from and how did you hear of Cooper?

I'm from way upper Manhattan (now called "Hudson Heights") and discovered Cooper Union in my junior year of high school, when researching potential colleges. I was looking for a top school where I could pursue my interest in computers, and free tuition certainly made Cooper stand out!

I moved to Seattle in 1990 to work for Microsoft and later, in 1994, founded eMedia Music, an educational software company. Over the years we've expanded into instrument and software bundles and distribution of other music related products. I'm running the business there, managing software development, and overseeing our sales/marketing and operational efforts. I'm based in Seattle but do get to New York regularly to support our operations and contribute to the effort to restore Cooper Union's free education mission.

You were elected to the Board of Trustees in 2015; how would you describe your involvement on the Board?

Like all Cooper trustees, I share responsibility for the strategic development and oversight of the school. But it's no secret that alumni elected me, and I joined the Board, in order to help achieve an expeditious return to a stable, tuition-free, and thriving Cooper Union. To achieve those goals, the Board has to build trust and support through transparency, fiscal responsibility, and unity of purpose. I'm pushing hard and trying to spur discussion and action on all three fronts!

How would you describe your involvement with the Free Education Committee (FEC) so far?

The Free Education Committee was one of the new board structures dictated by the Consent Decree. Its role is to develop a comprehensive and viable plan to return to full-tuition scholarships for all Cooper undergraduates. I believe that the FEC is critical to the ultimate success of our efforts to restore Cooper's mission. That's why I pushed for its inclusion in the Consent Decree and sit on the Committee.

The FEC has to consider complex fiscal, legal, educational, and operational issues as it develops its recommendations. It's a massive undertaking. To date, we've been gathering information and studying past efforts. But I'd like to see us make more progress, faster, in developing a thoughtful framework for the plan to return to "free" as well as establishing extended working teams to pursue specific plan elements. I've asked the Board to consider adding more trustees to the Committee to help expedite that work.

As President of the Committee to Save Cooper Union (CSCU), you were one of the main petitioners in the lawsuit against the Board of Trustees. Some of the respondents of the lawsuit—such as current Chairman of the Board, Richard Lincer—are still trustees now. How would you describe the dynamic of your relationship with them now that you serve with them as a trustee?

Chair Lincer and the trustees have made a genuine effort to cordially welcome me to the Board. I truly appreciate that effort. For my part, I'm determined to work constructively with the Board and do my part in helping it be as effective as possible. Acting together as a unified and mutually supportive group is the best way to succeed.

Richard Lincer's term ends this December, what action will the Board take thereafter? What would you say is the main focus of the Board of Trustees looking forward?

After Richard Lincer's term ends, the Board will appoint another Chair. The Chair has a considerable amount of influence on the board—for example, the Chair appoints all Committee Chairs and sets agendas for board meetings. It's premature to speculate on the focus on the board until the new Chair is in place.

"The Board will not authorize cuts that compromise the education or safety of our students."

How would you describe Cooper's current financial outlook especially considering our higher-than-normal proportion of non-instructional staff relative to students? What steps has the Board recommended to create a balanced budget?

At the June 2016 Board meeting the Board instructed Bill Mea to model and evaluate scenarios for additional expense cuts between \$5 million and \$7 million. However, while it is critical that Cooper live within its means, the Board will not authorize cuts that compromise the education or safety of our students.

Scott Lerman (Art '81) joined the Board recently. Wasn't he involved with the Committee to Save Cooper Union? Could you describe his what he does with CSCU and the Board?

Yes, Scott is one of the important new voices on the board—as a former President and CEO of two leading global brand consultancies, and current CEO of Lucid Brands he brings valuable organizational and branding expertise to the board.

Scott was officially a strategic consultant to CSCU (pro-bono—we couldn't afford him otherwise!) and was directly involved in the Attorney General brokered settlement negotiations that resulted in the Consent Decree. He currently serves on the Communications and Development committees of the Cooper Board.

What do you think about electing Laura Sparks as President? What skills do you think she brings to Cooper?

The Board sought a 13th President capable of partnering with the Board to stabilize Cooper's finances, restore full-tuition scholarships for all, and advance the quality of the schools. Laura Sparks brings highly valuable experience and skills to Cooper Union. She has led a leading not-for-profit foundation, is knowledgeable about fund- and grant-raising, and has relevant financial expertise. Her proven abilities in uniting and inspiring diverse communities and raising institutional prominence coupled with her respect for Cooper Union's historic mission bodes well for our future. I have high hopes! ◊

FROM THE ARCHIVES: CU INAUGURATES NEW PRESIDENT

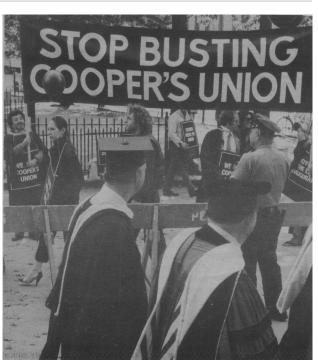
Editor's Note: This article was originally featured in Volume 60 Issue 3 printed on October 28, 1980. It references a dispute between the faculty union (CUFCT) and Cooper Union's administration. The core of the dispute was over the Yeshiva decision: The U.S. Supreme Court rules 5-4 that the faculty members at Yeshiva University are "managerial employees" and are excluded from protection under the National Labor Relations Act. Under President Lacy, the administration attempted to invoke the Yeshiva decision to remove protections and benefits for faculty.

A gala day of ceremony and celebration marked the official inauguration of Bill N. Lacy as the ninth President of The Cooper Union for the Advancement of Science and Art. Lacy assumed the position last semester, succeeding the retired John White.

JOHN MIRABELLO

representatives in the academic procession, led by mace bearer Richard S. Bowman, Chairman of the Department of Humanities and a professor of The Cooper Union for 41 years. The ceremony was slightly marred by the absence of featured speaker Senator Daniel Patrick Moynihan, who was persuaded to cancel his scheduled appearance due to the Union's dispute. The Cooper Union mace, symbol of power and authority, was transferred to President Lacy by Clarence F. Michalis, Chairman of the Board of Trustees, who included in his remarks the following: "I believe that Bill Lacy's presidency is going to make a lasting impression upon the future of Cooper Union."

In his acceptance speech, President Lacy cited the inseparably unique qualities of the institution and its founder, Peter Cooper: no other private institution exists where the founder's life and values represent such a current aspirational model for students, faculty, and administration. Lacy commented on the CUFCT's balloon-decked demonstration, citing their well-made placards as further examples of Cooper Union's commitment to excellence. Lacy announced his intentions to establish The Cooper Union as a viable, useful member of the local neighborhood, in addition to expanding its educational facilities. He cited a number of possible goals to be achieved through the joint effort of the Cooper community during his administration:



A special convocation ceremony, whose theme was "The Advancement of Science and Art," began 10 a.m. in The Great Hall. Classes were cancelled to afford students the opportunity to hear H. Guyford Stevers, director of TRW, Inc. and former Director of the National Science Foundation, discuss the state of the art in the field of engineering. Two additional speakers, Robert Motherwell and Philip Johnson, withdrew as a result of the dispute between the Cooper Union Federation of College Teachers (CUFCT) and The Cooper Union. Instead, the audience was treated to a showing of films of Charles Eames.

In his introduction, President Lacy commented, "I can think of no other person in the twentieth century who so ideally embodies the essence of Cooper Union's three schools." Eames, a close friend of Lacy, was also an inventor, architect, engineer, artist, and master of communication.

The installation ceremony took place at 3 p.m. in The Great Hall. Delegates from colleges, universities, learned societies, and museums joined the students, faculty, and alumni

- —maintaining a tuition-free education for all full-time students, as well as a financially sound Cooper Union,
- insuring the strength of the three schools' curriculum and faculty,
- developing the humanities to insure excellence in order to complete the education of the professional,
- —seeking ways to make current and to better use Cooper Union's unique facilities, including The Great Hall, Houghton Gallery, the Center for Design and Typography, and the Engineering Research Labs,

Faculty members protesting in front of the Foundation Building, while President Lacy's inauguration continues in The Great Hall.

- –construction of an outdoor exhibit center on the present parking lot site west from the Foundation Building,
- -building a two-storey glass-enclosed student union atop the Hewitt Building.

The day's celebration culminated with a special edition of the Cooper Union Forum series—featuring Lukas Foss and members of the Brooklyn Chorale and the Brooklyn Philharmonia. ◊

FACES OF COOPER: YASH RISBUD (EE '92, MEE '94)

ANUSHREE SREEDHAR (ChE '18)

Photo by Simon Shao (ME '19).

Tell us about your education and how you ended up at Cooper.

I went to a regional parochial high school in Bergen County, New Jersey. After that, I went to Cooper, where I graduated as an electrical engineer. I found out about Cooper because my father got his masters from Cooper in the 70s. I had a choice between Columbia and Cooper, but I wanted to be at a smaller school and go to the same place my father went to. Now here we are several years later, and I'm thankful for that decision.

How did you initially join the faculty at Cooper?

I joined the EE department as an adjunct in 1997. When I was a graduate student, I started teaching in the Retraining Program for Immigrant Engineers. It was started and funded by many philanthropic organizations to help Russian Jews who had to emigrate after the Soviet Union broke up. They were brilliant people and some had multiple PhDs, but their educational background didn't translate to the workforce

in the US. So this program retrained these people to have multiple skills so they can get work here; work that wasn't well below their academic credentials. A number of us who taught in this program ended up as adjuncts through a process of choice and need by the institution.

What is your current role at Cooper?

My official title is Managing Director of the CV Starr Research Foundation. Cornelius Van Der Starr was the predecessor of AIG fortune tree. He retired at that company, which eventually became AIG, and they started a philanthropic foundation involved in a number of different sectors including higher academia.

In 2006, Cooper received \$10 million to fund any labs, classrooms and facilities in this building; it was a capital campaign going on at the time. I was involved on the alumni side before I started here full time. When I started, one of my first tasks was to convert any of the research efforts that were going on into one unified effort under the CV Starr name it currently has.

What is your favorite part about being involved in your former college?

The last couple years have been eye opening and difficult. But even with everything going on, there's something about being around young people that is exhilarating and irritating all at the same time. I'm also

one of those that never really left Cooper; I was teaching and before I was a full time professor, I was on the Alumni Association's Board of Directors.

I never had the down time to figure out whether it was good for me or not, but I do know that there is something about the opportunity to help students figure out what their next best step is. You can't really beat that as a job. For me, it's one of the best parts of the institution. It's really one of the reasons that we have what we have, because each year we have an amazing set of undergraduate students that we put through the ringer day in and day out.

As a student, you were on the staff of *The Pioneer*, too! What was your experience at the time?

I was the business manager for two years, so when I was there we bought the first computer, (a desktop Mac) for *The Pioneer*. That was a big transition because we used to send everything out to be typed set, laid out, and produced. It was the late 80s and early 90s and we were spending a tremendous amount of money doing it. With the advent of desktop publishing tools, they made certain advances in the publishing arena back then. That was a fun job.

You mentioned earlier that you worked in the private sector. What was your experience like?

I finished both my bachelor's and master's degrees at Cooper and then worked in the financial services space. I worked the IT side of the space for about three years for a software company, one that provided software data and feeds to the entire financial sector. My first set of jobs ranged from running around from trading floor to trading floor to doing the little things like installing software. I then went to work for

a consulting firm just as the client-server market went to the delivery of what is now the internet. We did very well and I had some stock in that company. That was my first flavor of having options.

After I got married, I went to work with two other Cooper alumni on a private venture where we all had ownership stock in the company. I wish everyone can have that experience of going to go work for themselves and pay for themselves. It is tough to be an entrepreneur, but a great path to try. That is why I invest time here in working on things like that. After that was over, I did some consulting work and I helped the college with the search that was going on for my current role.

Any closing comments?

Cooper is more expensive now than it was for people from my day, and that's painful to see. I think there is always a challenge to find a better path to make education affordable for anyone, especially for students that are bright enough and talented enough to be in a place like this. I think there are ways for us to make it better and bring that impact.

The only thing I would say is that everybody should participate in the community both during their time here and after they leave. You can't claim to be part of the community if you aren't constantly supporting it.

Time, effort, support, all those things are essential. Once we cut through all the noise of the debates, it comes down to how well we want to support our alma mater. I think it's a cop out to want a clean slate after all we went through. Then, I'm disappointed that this is the virtue of the Cooper community. If you truly felt that way, then why not do something positive to change it. \diamond

MUSIC REVIEW: 22, A MILLION

NOAH FECHTER (CE '20)

Justin Vernon, whose band Bon Iver achieved prominence with the 2007 release of *For Emma, Forever Ago*, has an uncanny ability for sneaking into the spotlight. The story has been told ad nauseum: in a cabin somewhere in Wisconsin, *For Emma* was forged in unmitigated introspection and authenticity. 2011's self-titled album, *Bon Iver*, built on the sincerity of his songwriting and helped the album catch a broader audience. At some point Bon Iver had a following so large that it started caving in on itself. The band went on hiatus. tures a gospel quality in verses interspersed with feedback noise and a vocoder sample Vernon captured during a panic attack in recording. "10 d E A T h b R E a s T ⊠ ⊠" another single released simultaneously, is comprised of shuffling, breakbeat drums, grumbling waves of bass, triumphal vocal composition backed by horns, and a single, bleating, pitch augmented vocal sample echoing through the background. These tracks seem more closely inspired by West Coast alternative hip-hop than the four years Bon Iver spent as the purveyor of

MILES OF MOVIES: DEEPWATER HORIZON

MILES BARBER (CE '18)

Deepwater Horizon is about the events surrounding the explosion on Deepwater, a Texas oil rig owned by British Petroleum. The film follows the events leading up to the explosion and how the crew tried their best to evacuate.

The first half of this film features Mike Williams (Mark Wahlberg), who explains how his rig works to his daughter for a school project. He uses a soda can to explain how the rig works by capping the pressure from the oil. A lot of this introduction with Mike's family serves both as exposition and character development. Mixed in with Mike's screen time, you get little errors happening on the rig, giving you a sense of foreboding and worry. don't prioritize it. Something also worthy of praise is the sound design during the buildup, which lets you in on every creak in the rig, every little bubble of escaped pressure.

Then, the rig explodes. This half of the film is nonstop intensity, giving you no time to breathe. The camera shakes a little to make it feel real. The explosions are everywhere, as if there was nothing on the rig that couldn't explode. The water is on fire. The makeup team makes each and every one of the characters look grimy and hurt. Everything feels like it could have happened as shown. The only thing that doesn't quite work are the effects: some of the wide shots of the rig falling apart just don't look realistic.

On July 22, 2016, Bon Iver's Facebook page posted a video with audio from the single "22 (OVER $S\infty\infty N$)" and an abstract contemporary art style. It was clear from then that this album would be another example of an artist stepping away from their fanbase. It was unclear, however, just what meaning was to be found in the flickering pop-art patterns and (vaguely satanic) religious symbols. Bon Iver had emerged from the underworld.

But why did Bon Iver go to such lengths for a new artistic direction? Pitchfork Media's Amanda Petrusich called 22, A Million "... an unexpected turn towards the strange and experimental," inspired by Vernon's "hunger for true, tectonic innovation," even comparing the change in sound to Radiohead's 2000 album *Kid A*. And indeed, Bon Iver succeeds in finding a sound that is sometimes absolutely arcane. The single and opening track "22 (OVER $S^{\infty}N$)" capNortheastern Americana.

22, A Million still bears reminders that Bon Iver can convey immense beauty and enveloping emotions. The track "29 #Strafford APTS" is a page out of an earlier Bon Iver release, the folk rock instrumentation breathing heavily through a coating of dense chrome. The melodies, chord progressions, and timbre are so reminiscent that-minutes into the song-the switch to sharp vocoder vocals serrates the image as it is drawn. This track is the tour de force of the album, an imperative showing that this electronic, inhuman sound can also evoke feelings of nostalgia and warmth. _45____," the second to final track, brings up the obvious Kanye West influence on Vernon's writing. The song is comprised of another choir of vocal harmonies, a horn section put through auto-tune, and-at the tail-end of the track-a plucked banjo with heavy reverb. It's precariously similar to continued on page 5

Though other characters are introduced when we reach the rig, Mike continues to be the main character in this film. While this half of the film is a little slower than the second half, it is still tense, as each of the little problems is so well introduced. Once Mike gets on the rig, he meets Jimmy Harrell (Kurt Russell), a no-nonsense supervisor who hates corporate interference which, in this film, is presented in the form of Vidrine (John Malkovich). Kurt Russell is such a force in this film and gives a really strong performance; he's easy to get behind since he argues for safety when others

Overall, *Deepwater Horizon* is an effective disaster film. It's well-acted, has good sound, and effectively presents the build-up and the aftermath of the explosion. Kurt Russell, in particular, is excellent. The effects weren't quite as good as I might have hoped and I think the film could have been better explained at points (maybe it's still unclear what happened) but I would recommend seeing this film if you're a fan of disaster films. ◊

Grade: B-

FREE AND FAIR TRADE

MICHAEL PASTERNAK (ME '17)

We've all heard of free trade, it's become a hot button topic in the political sphere in recent times. However, who but the coffee drinkers among us have heard of fair trade? Few likely, yet it's becoming a real alternative among economists and policy makers. Fair trade is a bit more complex, but free trade is simple in concept and execution: lower as many barriers as possible to international trade in order to allow free movement of goods and services and unlock wider and larger markets for everyone involved.

"As a nation, we have to address that not all foreign labor markets should by endorsed by trade."

As a general economic principle, free trade means growth. I say this as an absolute truth: there are next to no economists in the mainstream academic sphere who believe otherwise. A University of Chicago poll from 2014 asked a panel of economists from the Initiative on Global Markets if "past major trade deals have benefited most Americans." Twenty-three percent strongly agreed, 70% agreed, and 7% were uncertain or chose not to respond. There were no panelists who disagreed or disagreed strongly. The debate of free trade versus economic controls and tariffs is purely political and the sides are clear cut. Those on one side interpret data and use history to make decisions; those on the other side choose to only interpret fear and use trade policy as a thinly veiled substitute for xenophobia.

That being said, even once it's established that breaking down barriers to trade is unequivocally positive, there are other concerns. As a nation, we have to address that not all foreign labor markets should be endorsed by trade. For example, sanctions on nations like Russia, who commit war crimes and invade neighboring countries at will, are appropriate because even though sanctions can hurt trade in the short term, war and instability are barriers to free trade in the medium and long term. It's hard to trade in a war torn country where roads and bridges are not functioning and the banks aren't open. Furthermore, you need domestic stability for economic growth. Countries who carry out war elsewhere may still experience growth, but there are few to no examples of countries in which wars are being fought that experience growth in trade. Therefore, it's in the interest of a nation looking to maximize trade to maximize global and domestic stability. In fact, American foreign policy can be much more easily understood through that lens. Where we are militarily active, it's usually for the sake of trying to keep regions under control in a general sense. We have a carrier group near China, for example, in order to prevent conflict between them Taiwan or Japan. The more critical a trade partner, the more resources the US is willing to commit to their region's stability. That's a big reason why we have such a strong tie with Israel.

However, there does enter another factor: morality and development. It isn't an explicit duty of the United States to prevent the likes of slavery and war for the sake of preventing human suffering. Nonetheless, there's a drive from a significant segment of the populace to do exactly that. Fair trade is the movement to address moral concerns of unfettered free trade, mostly driven from the political far-left but economically spread among academic doctrines. For example, slavery is not dead. North Korea uses slavery on a massive scale, and Qatar is known to be using slaves for much of the construction of its upcoming 2022 FIFA World Cup infrastructure. Indonesia, China, and India have problems with slavery or near-slave labor conditions. Fair trade, in theory, accomplishes two things: establish an even playing field for labor and guarantee rights for workers. It accomplishes those goals by preventing countries with horrible regulatory frameworks for human rights to enter trade agreements without concessions concerning guaranteed rights for workers.

There's a very real debate currently occurring between proponents of the two types of trade; a debate that is philosophical just as much as it is economic in nature. I consider myself a proponent of fair trade, but there's little data currently available to prove the long term positive effects actually exist. One thing, however, is sure: while particular trade agreements can have issues, we should aim to increase free trade wherever we can as long as we do not have a corresponding cost, and there's no reason to return to the days of tariff past. ◊

MUSIC REVIEW: 22, A MILLION

NOAH FECHTER (CE '20)

ISOLATIONISM

ANTHONY PASSALACQUA (CE '18)

To begin, the fact of the matter is that free trade is better from a global perspective than isolationism. By increasing market size and consumer base, it becomes easier and easier for companies to grow, as they have access to global resources and the best of the best in whatever they need to prosper. This, in the end, is good for your everyday man. Unfortunately, we do not live in the ideal world in which this would be the case. So today, I argue for isolationism, and, in general, nationalistic policies. I will use the two terms more or less interchangeably.

The isolationist policy with regard to trade is one based on the tariff, the-dare I say, time honored-practice of heavily taxing imports. In the modern era, tariffs have fallen to the wayside in the United States, as trade deals such as the North American Free Trade Agreement (NAFTA) guarantee there will be no tariffs between the United States, Mexico, and Canada. A similar deal, the Trans Pacific Partnership (TPP), is currently on the table, and whether it is passed or vetoed depends on the results of the current presidential elections. Both candidates, Donald Trump and Hillary Clinton, currently claim that they would not sign off on TPP, though Clinton has a history of supporting it.

"This means that the US market is, to some extent, subject to the will of foreign nations."

On the surface, free trade deals seem like a total good. The idea is that by opening up cheaper markets, prices will go down, and everyone will be able to use their comparative advantage more effectively. However, there is a more sinister underbelly to free trade deals. We put aside how large bodies like the World Trade Organization can cap tariffs, and the ramifications that such caps have on national sovereignty. Instead, we will focus on the fact that free trade is inherently unfair if not all parties in the deal are playing by the same rules. And in deals between the United States and most developing countries, the other guy is certainly not playing by the rules.

What does it mean to say that? The United States, in comparison to the countries like Mexico, China, and Pakistan, has extremely strict workers' rights laws, on top of stronger environmental regulation, and a higher corporate tax rate. That makes it extremely appetizing for countries to move abroad when free trade deals are signed—as we saw when NAFTA was passed, and as we continue to see with Ford moving its small car division to Mexico.

of the country to which they move, in the same way large companies took advantage of Americans before labor rights laws were passed. These companies can also dodge the stricter environmental and health regulations of the United States, meaning that when they move abroad they can cut corners, at the cost only of their neighbors and the Earth.

In addition, free trade deals, in their own manner, reduce the independence of the United States' market. Our manufacturing base is smaller, relatively, than it once was, and that means we rely more on imports to get access to the goods that the people want. This gives other nations a form of leverage over the United States, as they can always raise the taxes on their exports and drive up prices in the United States, without getting to the point that it is better for companies to outright return to the United States. This means that the US market is, to some extent, subject to the will of foreign nations.

Besides that, companies moving abroad strictly lowers the tax base of the United States, as the import tax (at its highest, 16%) is a good deal lower than the corporate tax rate of the United States (currently sitting at 35%). Isolationist thought suggests that these two rates should be reversed. Any imported goods, then, must be high enough quality for the people of the US to want to purchase them regardless of their increased price, while every day goods can come from the United States for a similar- or cheaper- price than they do now, owing to the greatly reduced corporate tax rate.

Imagine a scenario in which prices of goods do go up significantly. In that case, it's all now within the family, so to speak. American workers have more access to jobs which had been gone for the past twenty years since the signing of NAFTA, the corporations are contributing more to the tax base directly, as they cannot as easily pass the price on to the consumer as they can when faced with a tariff, and additional revenue flows to the state in the form of a sales tax for products that are being sold at a higher price than they once were. All this money flowing around the economy contributes to the rate of GDP growth, which has recently been sorely lacking (hovering at around 1% for the last year, and not exceeding 5% in the last 5 years).

So to summarize, what does the nationalistic policy on trade bring us? It brings us prices which are not significantly higher than currently; it adds to the tax base of the United States: it returns jobs to the United States which had left; it subjects companies to stricter environmental, labor, and health regulations; and, importantly, it allows the United States to be more independent from foreign actors than we are currently, by making us less dependent on imports. ♦



Photo by Cameron Wittig & Crystal Quinn.

continued from page 4

"Lost In The World," Vernon's collaboration with Kanye West on My Beautiful Dark Twisted Fantasy. The component parts of these tracks easily stand apart from one another, but the end product is in parts distant, powerful, and wavering.

There's a lot of callback in 22, A Million, whether intentional or not. The vocoder asides that comprise the songs "715 - CR∑∑KS" and "___45___" are nearly sparse enough to be hip-hop track interludes. The songs "29 #Strafford APTS," "666 1," and "8 (circle)" feature more organic vocal compositions, evocative of

Under a free trade deal, moving to another country only adds shipping onto the cost of a product, while greatly reducing manufacturing costs, almost always in notably immoral ways. Companies which move abroad can take advantage of the people

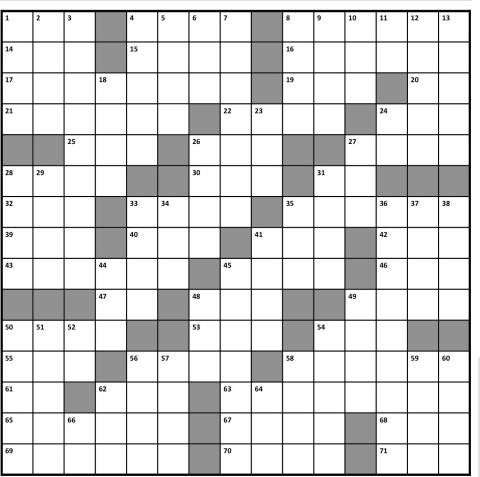
prior Bon Iver releases. The gospel-esque vocal arrangements on many tracks reflect a popular trend in hip-hop that very prominent 2016 releases by Chance the Rapper, and again Kanye West, have spearheaded. The vocoder's furious, breakbeat drums, 'chipmunked' vocal samples, and surging gospel harmonies have all been acclaimed by music reviewers everywhere. With the knowledge that Vernon is buying into these trends, then the question is surely "where is the novelty in 22, A Million?"

The image that Vernon carved for 22, A Million is cryptic, goading the listener to investigate the deep and fulfilling meaning that

the album has to offer. Yet, even the first listen yields an easy experience deep-seated in nostalgia and recollection. Every one of the ten tracks on the album now has a lyric video publicly available for every word to be mulled over, and the album is only fractionally longer than an episode of a sitcom. Though this album is wearing a style more beckoning, more ambitious, and more ambiguous than those before it, it's still Bon Iver. This is still approachable, welcoming music, written in a sonic language that is well established, and naturally accepted by audiences with open ears. ♦

CROSSWORD PUZZLE

TOBIAS STEIN (CE '18)



ACROSS:

- 1. Mule
- 4. Golfer's target
- 8. BitchBoi Jr. ChemE #scum
- #talkshitget27down
- 14. Currently 15. Oodles
- 16. Cinderella's stepsisters, by comparison 17. Basketball Creator
- 19. Dodge alteration. Tech Improvement
- for street racing
- 20. Sodium
- 21. Little Fjord
- 22. Bum
- 24." '_ a deal!"
- 25. Help!
- 26. Genetic letters
- 27. Breakfast food
- 28. Pornography
- 30. Fisherman's tool
- 31. Unit type
- 32. "Dish" in mandarin
- 33. Can you see your shadow?
- 35. Canadian Capital
- 39. Picnic spoiler
- 40. Iterative software development process framework

- 41. They say no drones
- 42. Yoga surface
- 43. Non American Sport Centered Around Races
- 45. Shot the Grammy winner
- 46. LOTR Character
- 47. Don't make the message public
- 48. 69 Across will ____ the day
- 49. "____ Dinka Doo" Durante song
- 50. Norwegian, Swedish for 'butter'
- 53. ESPN hard hitting feature
- 54. Speaker, "float like a butter fly..." 55. Tic
- 56. Childhood comp. game, purple car as protagonist
- 58. New president will appoint to the...
- 61. Painful bladder syndrome
- 62. Play-_
- 63. Too much
- 65. I love the smell in the morning
- 67. French city, compliment
- 68: Bambi's aunt
- 69. Deity + extended family
- 70. If it fits I...
- 71. Dr. Seuss character

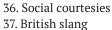
THE DOORS OF COOPER

JEREMIAH PRATT (EE '19)

When one door closes, the saying goes, another one opens (hopefully more easily than doors into ROSE)



- **DOWN:** 1. Frozen protagonist
- 2. I didn't bring you down here to win... I
- brought you here to...
- 3. Beachwear 4. Harness part
- 5. "You were" in Finnish
- 6. Much
- 7. Grain product
- 8. South of Houston, ____ & Daughters Smoked fish
- 9. Shrek
- 10. Classic 3-component sandwich
- 11.Working insurance
- 12. Monopoly payments
- 13. Garbage
- 18. Your quiz is in your...
- 23. Surfer's exclamation
- 24. Chemistry lab centered around instruments
- 26. Leak
- 27. Baseball stat, or blockbuster 28: _____tron grading sheet
- 29. Grammy-winning Mexican rock band
- 31. Celeb



33. Carriage

35. Boat tool

38. There you go boy

34. Ben's surname

- 41. Can it melt steel beams?
- 44. How to save a life
- 45. They'll keep you together
- 48. Spoil
- 49. USB device to hold all of your licenses
- 50. Bee's attack
- 51. Chinese gambling island (English)
- 52. Real Housewives of
- 54. A lot of land
- 56. -Sci major
- 57. Ultimate Hoops tournament in Minnesota Abbrv.
- 58. Branch, religious
- 59. Bone
- 60. Bone (the other kind)
- 62. Dallas rookie QB
- 64. Seven
- 66. NY__



Or what if door closes, but leaves quite the gap (I'm referring to the stalls in the loo in the NAB)?

But what if that door goes around and around, no beginning, no end, and no transfer of sound

'twixt compartments of travel, so all conversation pauses because no sound can travel from the mouths above our iawses

to the ear of our friend stuck 90 degrees to our right, 'til we both cross the membrane from our school into daylight.

With no start and no stop this door's stuck in a loop, neither open nor shut, only swift passing through, and halfway gets you nowhere but trapped in a box, and too much brings you back where you already was!

Though your tireless revolving might just power the lobby, your pushing and shoving's a poor excuse for a hobby

(goes to show non-Cooper architects should just be renamed sub-parchitects).

Photo by Winter Leng (ChE '18).

While it's technically shut, its whole point is kaputt, and your business is put on display way, way more than it should, so the door's really no good!

Others still just stay locked, defended by a red-lit box, and some are hardly doors at all, like a certain RA's in the residence hall.

When it comes to doors we've got plenty, and this great school opens so many, though squeaky or rusty or inane they may be, and for the time being they be far from free, the journey's important to you and to me, and no number of doors, be it one, two, or three, can keep us from being the best we can be!

Hold them open for your pal, let none stand in your way, and be moving always forward, while those doors are here to stay.