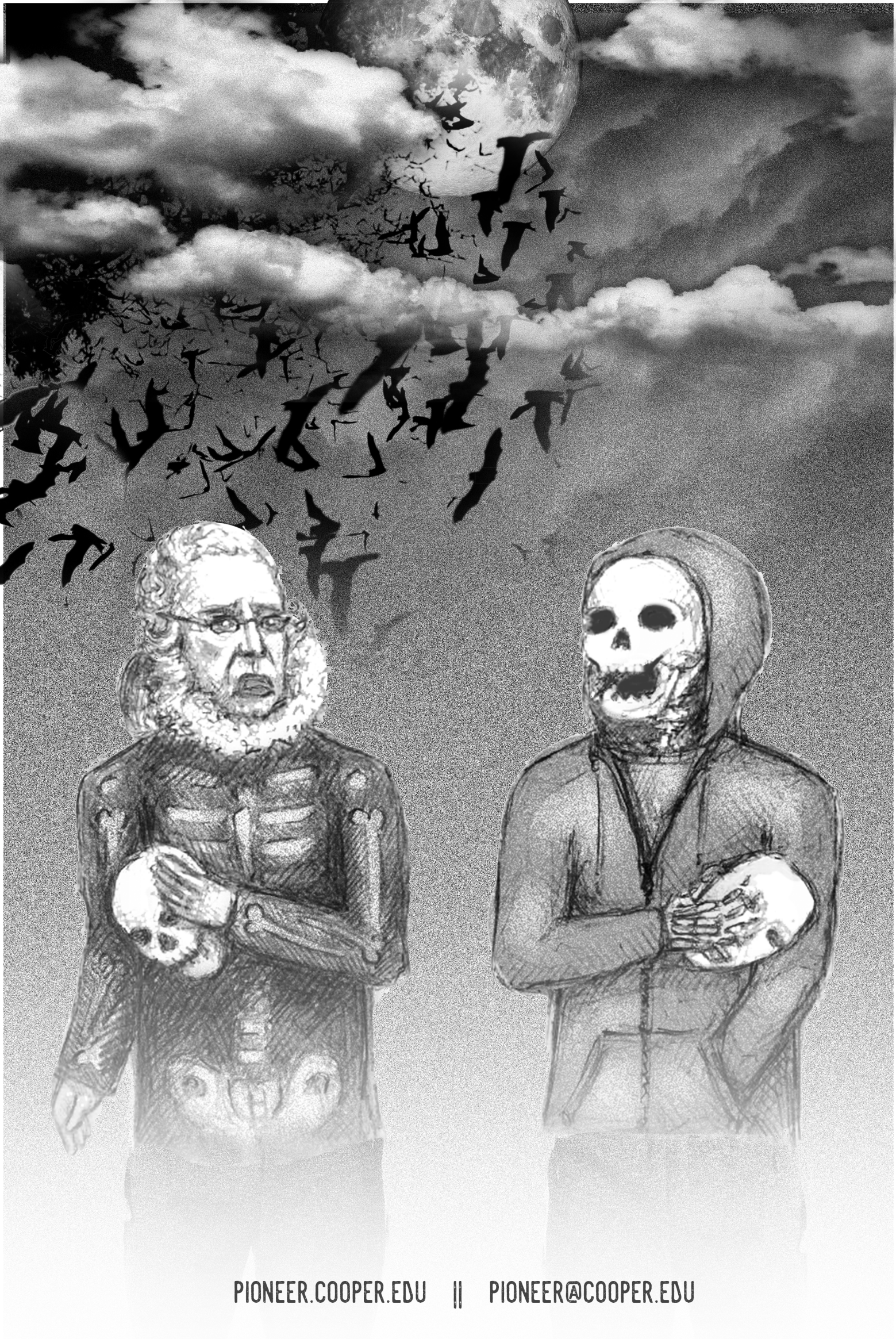


# The Pioneer

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# IMAGINE SCIENCE FILM FESTIVAL: VR STORYTELLING

GABRIELA GODLEWSKI (CE '19)



Photo by Gabriela Godlewski (CE '19).

The Cooper Union has historically been a site where art and science progress, and often meet, to create projects and works that improve the way society views ideas or explores the world. On Thursday, Oct. 19, art and science met in a fascinating and unusual way in the Rose Auditorium with the presentation of Virtual Science Storytelling. As the penultimate night of the 10th Annual Imagine Science Film Festival, The Cooper Union welcomed scientists, engineers, artists, and storytellers to take the stage and talk about their projects and individual contributions to the up-and-coming field of virtual reality (VR). Although each presenter and project were unique, they all shared the common goal of using VR to change the way ideas could be presented.

The Virtual Science Storytelling panel, hosted by VICE co-founder Alex Pasternack, featured pioneers from both scientific and artistic disciplines who have taken the VR medium and used it in a unique way.

On the panel was Pohjankonna Oy, a group of Finnish scientists specializing in biology and video game designers. Their work with VR allows users to see the biological functions of small animals, such as mice and caterpillars, from the inside. Using a VR headset, one could theoretically “walk” through the breathing tubes of a caterpillar.

Scientists from NASA were also present, displaying their work in creating a 3D model of the surface of Mars, made of photographs taken by rovers such as Curiosity that one could explore through virtual reality. “VR makes sense, especially for the Mars mission, because you can be transported to a world we can’t stand on quite yet,” said the optimistic Sasha Samochina, one of the developers behind the Access Mars VR experience.

However, not everyone present was a scientist; Momoko Seto, an independent artist, used VR to transport viewers to experiences that combined our world with worlds from her imagination. Seto and her team filmed and photographed fruits and vegetables as they rotted, fungi as they grew, and species of animals as they interacted amongst themselves. She then transposed those videos into a 3D setting that could be experi-

enced through a VR headset.

Other panelists representing virtual media companies took Seto’s vision a step further by showing such worlds in short films. Yasmine Elayat of Scatter, a company specializing in immersive media, presented her company’s work in using computer science to create movies that combined technological concepts with motion. Such movies include Zero Days, a VR-compatible movie about the computer virus created by the US and Israel to infiltrate an Iranian nuclear base. The movie took the viewers inside a computer to demonstrate how a virus worked using innovations in graphics and music. When asked about whether or not VR will eventually limit technology, Elayat replied, “My belief is that you are using VR to tell a story that cannot be told in any other way.”

Winslow Porter of New Reality Co., a Brooklyn-based media company, also made films with political undertones. Among his company’s works is Giant, which takes the viewer to a basement in Serbia 1999 during the NATO bombings to watch how a family explained to their young daughter what was happening. New Reality’s piece de resistance was Tree, a VR movie told through the point of view of a tree that explores humanity’s treatment of nature and each other. Not only did they use stunning graphics, but they also used sensors that attached to the chest and hands to give the viewer a more in-depth experience.

At the conclusion of the panel, the audience was treated to refreshments in the Gelman Foyer and to LL110 where they could experience the works presented by the panelists themselves. The room was full of curious people eager to explore Mars for themselves or experience the life cycle of a tree growing in the Amazon Rainforest. Other presenters who did not take part in the panel showed their VR creations, as one group demonstrated how VR could be used in the field of medicine by showing 3D models of internal organs. The event not only demonstrated the versatility of the VR medium, but also demonstrated the creativity of the people behind the projects. Each group pushed the medium and used it to tell the story they wanted to tell in a creative and immersive way that left a lasting impression on the audience.

# WHO WAS PETER COOPER?

AFSHIN KHAN (CE '19)

Peter Cooper was born on February 12, 1791, fifteen years after the founding United States of America. Despite having one year of formal schooling, Cooper was able to make forays into several industries, including real estate, locomotion, and insurance. At the age of 68, Peter Cooper established The Cooper Union for the Advancement of Science and Art as the first of its kind, offering a free education that was open to people from all walks of life. But these are all factoids that a quick Google search can turn up. Who was the real Peter Cooper?

The son of an army officer in the American Revolution, Cooper was born in New York City, not far from where Cooper Union’s campus is located today. Even at an early age, Cooper had a penchant for invention. The very first invention ever attributed to Cooper was a washing machine powered by a crank.

Perhaps his first lesson in business came at the young age of 13. As a 13-year-old boy, Cooper spent and lost ten dollars (about \$200 today) on a lottery ticket. This experience, especially for a boy with such humble beginnings, led Cooper to develop a risk-averse mentality. When faced with the choice later in life, Cooper would choose not to assume loans when building his businesses.

*In many ways, Cooper was a man of an interdisciplinary background—much like the institution is today.*

As a 38-year-old man, Cooper purchased parcels of land located in Baltimore, Maryland. Hoping to turn a profit by selling this land, Cooper was disabused of this idea as there was a lack of transport in the area. Fortunately, the overseer for the land informed Cooper of the abundance of iron ore on the property. As a result, Peter Cooper built an iron business on the property. It was on this

property that Cooper was able to invent a new process for rolling steel, which would later be used to build rails for trolleys. However, trolleys were actually the precursor for Cooper’s very own invention, the “Tom Thumb”, the world’s first steam-powered locomotive. The power, efficiency, and small size of Cooper’s device enabled navigation through the most difficult terrain. The Baltimore & Ohio Railroad Company, having seen his invention at a meeting for shareholders, quickly adopted his invention. Cooper soon grew his iron business into Trenton Iron Works, located in New Jersey.

At the age of 50, Cooper turned his sights to politics, becoming a member of New York’s municipal council in 1840. This was the stepping stone to his running for presidency in the election of 1876, at the age of 85, a fact unbeknownst to many. Between being elected alderman in New York’s municipal council, and running for president, Peter Cooper was planning to create an educational institution that would empower the poor, people of color, and women, by providing them with a free education. Thomas Edison was just one of the many people who enrolled in a chemistry course offered at the Cooper Union.

Cooper was a man who held many patents throughout his lifetime, including the patent for powdered gelatin, which would later be used to make Jell-O. He was also a man of many trades, from manufacturing glue to iron-production. However, he was not just business-oriented, as he held several patents and had a voice in politics, opposing slavery, and promoting equality. In many ways, Cooper was a man of an interdisciplinary background—much like the institution is today.

Peter Cooper died in New York City on April 4, 1883 at the age of 92. However, his legacy lives on. The institution he created over still exists today of course, and may even be considered his greatest invention.



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



## IN THE AFTERMATH OF WEINSTEIN

GABRIELA GODLEWSKI (CE ‘19)

In recent weeks, the dam that kept Harvey Weinstein’s victims silent broke after decades of sexual abuse, resulting in dozens of actresses coming forward and detailing how he abused them. As of this past week, the number of women accusing Weinstein for such acts has reached over 40, with many more possibly still remaining silent. Hollywood responded quickly: Within a few days, former friends of Weinstein and his own brother publicly denounced him, he was fired from the company he started, and he was unceremoniously kicked out of the American Academy of Arts & Sciences.

The scandal rocked Hollywood to its core and sent ripples through other industries and social media. More and more people came forward with their own stories about the sexual harassment they experienced. While some actresses came forward about their experiences with Weinstein, others came forward accusing different actors, directors, and producers for harassing them, demonstrating how widespread the problem is in Hollywood alone.

*And this does in fact happen in Cooper whether or not you see it, whether or not you want to believe it.*

However, the problem extends beyond Hollywood. Men and women in various industries have come forward with their stories that all seemed to follow a similar format: They were all abused by someone more powerful than them at the most vulnerable points in their careers. Recently, many people have taken to social media in response to Alyssa Milano’s tweet, posting “Me Too” if they had experienced sexual harassment or abuse in any form at any point in their lives. Within a few days, there were thousands of posts across all forms of social media as too many people came forward with their stories.

While some are taken aback by the number of people coming forward and breaking their silence, statistics unfortunately show that none of this is surprising. According to the Committee to Arm Women Against Rape and Endangerment (AWARE), 54% of workers have experienced sexual harassment in the workforce but only 31% of sexual harassment or assault incidents across all genders and demographics are reported, and only 6% of perpetrators have been incarcerated even if the incident was reported.

Such incidents aren’t often reported because of the low rate of incarceration, fear of retaliation, protection of the victim’s family and friends, fear that law officials will not pursue the case, and fear of humiliation. In many cases, the victims are blamed. Female victims will often be asked what they were wearing, whether or not they were drinking, what their sexual activity was in the past, and sometimes their claims will be disregarded completely because their perpetrator was believed over them. Sometimes, if the victim is believed and the perpetrator is to be disciplined, the perpetrator will get a comparatively light sentence, as was the case with Brock Turner. Male victims can have their masculinity used against them; they are sometimes told that “men can’t be raped” and their claims are invalidated.

These numbers are very broad and include incidents throughout all industries, so let’s be more specific and relevant to the student body of Cooper. A survey published by the National Institutes of Health polled the responses of over 600 scientists of all genders.

Of the pool of respondents, 72% stated that they either heard of or bore witness to sexual harassment in their workplace while 64% experienced it directly. Twenty percent reported experiencing physical sexual harassment or assault.

When these respondents were targeted, 90% of women and 70% of men stated that they were trainees or at entry-level when the abuse was experienced, consistent with how all of Weinstein’s vocal victims were young women whose careers had yet to be established. Of these cases, though in the majority, only 37% were ever reported and only 18% of cases reported (less than 1% of total cases) resulted in the disciplining of the perpetrator.

The architectural field surveys yield similar statistics. According to a poll run by The Architectural Review, 72% of architects worldwide have experienced some form of sexual harassment in their place of work. Although no statistics specific to the visual art industry could be found, it is likely that the numbers do not deviate far from the aforementioned.

According to Rape, Abuse & Incest National Network (RAINN), 23% of females and 5% of males (11% of students) experienced some form of sexual harassment or assault and only 12% of the victims report the incidents to police. However, it is also important to keep in mind that the survey run by the NIH (mentioned earlier) also reported that men were more likely to report that sexual harassment did not occur in their workplace even though the women in the same workplace would report otherwise. This part of the survey suggests that men are more likely to not be aware of harassment happening to their peers right in front of them.

*It starts with us, here. So pay attention.*

These numbers all say the same thing: sexual harassment is very real and very prevalent in the workforce and in college throughout all genders and ethnicities, affecting women of color and those identifying as transgender the most. But so few victims speak up, and even fewer criminals are properly dealt with by law enforcement.

And this does in fact happen in Cooper whether or not you see it, whether or not you want to believe it.

The topic of gender, especially within the school of engineering, has been brought up time and time again in the administration and in the student body. It is well known now that the ratio of women to men in the School of Engineering is roughly one to four. However, while there is talk of potentially attracting more female applicants to engineering, there isn’t enough talk about how to optimize the experience of being a woman in an engineering school or in the engineering field within Cooper. There are no statistics that show the rate of sexual harassment in Cooper experienced by students, especially female, but the experiences of too many women, including the author, in Cooper show that the problem of harassment does exist within our school and not enough is done against it.

It is one thing to point out a problem and throw statistics around, and another thing entirely to potentially address how to solve the problem. While the general problem of sexual harassment is too complicated and widespread to be fixed overnight, a culture at Cooper can be developed to make the school a better environment for all, and

## LET’S TALK: WOMEN IN ENGINEERING

YUQIAO WANG (ChE ‘19)

After a 9 a.m. fluid mechanics lecture, I opened Facebook, and saw the Society of Women Engineers (SWE) had updated the event “Let’s Talk.” I am always into such an activity, and *The Pioneer* asked me to report the event, so I refreshed myself with a grande Americano and arrived at the event place at 12 p.m. sharp, disregarding the tiresome two hours of calculation on momentum balance. At the event, although only twenty people showed up, everyone seemed interested and attentive; everyone thoughtfully answered their fellows’ questions.

As the meeting was about to start, SWE president Isabella Pestovski (ME ‘19) told the audience that recently, SWE’s proposal of increasing the percentage of female faculty members in the engineering school turned out to be fruitful. This September, three of the newly-recruited professors were women: One of them was in mathematics department, whereas the other two were in chemical engineering department. Such progress was unusual and groundbreaking in a context that “teachers” are defaulted to be women while “professors” are defaulted to be men, particularly at an engineering school. Likewise, female students are scarce as well.

Camille Chow (EE ‘19), the vice-president of SWE and one of the only five third-year women from the electrical engineering department, mentioned in the interview: “In our engineering school, girls are pretty rare in the electrical engineering and mechanical engineering departments. One of the EE classes in the past few years even had only one female student.”

*“‘Woman engineer’ means being a trailblazer.”*

When talking about the obstacles that women engineers encountered, one of the first-years said: “The word ‘woman engineer’ means being a trailblazer since such a small percentage of engineers are women. When I am articulating myself, a general worry is that people take me less seriously or will doubt my abilities due to my gender.”

During the interview, the girls expressed their miscellaneous opinions, with great eagerness and insight. One of the second-years commented: “Sometimes at school, I can sense male professors’ subtle attitude toward their female students. On one hand, they recognize the intelligence and bravery of young women majoring in science and engineering; on the other hand, they regard the girls at engineering school as merely mascots or decorations in

better habits can develop now to be carried over to the workforce and our future industries.

In the light of the Weinstein scandal, the most important thing is to pay attention. Pay attention to the people around you, to what is said, to how people react to certain situations. Pay attention when someone says they have been violated by someone else and don’t be so quick to shrug their experiences off.

We must be more aware of how society treats victims, and how society should be more comfortable supporting them and advocating for the responsibility of the perpetrator, even if the perpetrator is well-known and liked in social circles or powerful in their industry.

the classroom.”

Delphine Troast (ChE ‘21), defined women engineers to be “hard working,” “likely to face opposition,” and “empowering.” Women engineers have to stand out from the crowd, which is against society’s traditional perception of women: quiet, emotional and submissive.

Gertrude Dabo (ME ‘20), the only African female student in the sophomore mechanical engineering class, expressed her feminist concerns: “A woman engineer is someone who goes against what society believes she should do and sets her own path. Female engineers are often underestimated and viewed as incapable of handling more complicated tasks, especially if you are a

*“A woman engineer is someone who goes against what society believes she should do and sets her own path.”*

minority.”

Following Gertrude, another sophomore classmate commented: “The biggest issue is the lack of respect towards women engineers. Some people still have the backwards stereotypical mindset towards women, and they find it hard to accept the successes of women in engineering. The term signifies unity within an underrepresented group. Hopefully someday there will be no need to include the word ‘women’ in ‘women engineer;’ instead, the latter part, ‘engineer,’ should be the essence of discussion.”

The scene of discussion reminded me of a technical writing seminar I attended this April: I looked around the classroom and realized that I was the only woman in the midst of my male classmates and professors. Although I interacted with the guest speaker actively during Q&A, I couldn’t help but feel like I stood out from the room.

The voice of my female classmates revealed that the barrier in front of women engineers is not only intellectual but cultural. Moreover, the key to rewrite the unfair system is nowhere but within women’s own hands, as conveyed in Camille’s interpretation of ‘woman engineer:’ “The phrase ‘woman engineer’ to me is simply referring to an engineer that happens to be a woman. If you are aspiring and capable, simply forget you are a woman and strive to excel in your field with the fullest devotion. All the reputation, admiration and credibility upcoming will then be automatic.”

Pay attention to how friends talk about other people, if there is any indication of sexual harassment or bias in language or in action. All too often, certain comments are brushed off as “jokes” among friends. Friends calling each other out on violent language or actions does not happen often enough, with many often staying silent even when bearing witness to the event. Rarely do perpetrators, especially those well-liked in social circles, face any social repercussions. We must begin developing a culture of accountability where perpetrators face repercussions whether or not the victims decide to speak out.

It starts with us, here. So pay attention.



# AI WEIWEI IN THE GREAT HALL, FENCES AND REFUGEES

MATTHEW GRATTAN (ChE '19)

You may have noticed fences springing up around the East Village and the Lower East Side—mounted on the north side of the Foundation Building, nestled between two buildings on East Seventh Street, or lining the exterior of the Essex Street Market. Those fences, along with a host of larger sculptures and banners on street lamps are part of the Public Art Fund’s exhibition, “Good Fences Make Good Neighbors,” by artist Ai Weiwei.

Ai spoke with the Public Art Fund’s director, Nicholas Baume, in a practically full Great Hall two weeks ago. The talk celebrated the official opening of the citywide exhibition, which will remain until mid-February. “Human Flow,” a documentary by Ai Weiwei about global refugee crises, is also out in theaters.

The exhibition name, “Good Fences Make Good Neighbors,” references an old saying that appears in Robert Frost’s poem, “Mending Wall,” about two neighbors coming together to repair the boundary between their properties. Ai’s public installations can be seen as physical manifestations of that silent paradox: Fences divide people, but can also bring them together. Tensions between ongoing refugee crises and international borders also seem to have inspired the public art project.

Yet at Thursday night’s talk, Ai seemed to brush off such analyses with brief answers and quips. In person, Ai is a man of few words but quick with a witty remark. His comical side came as a surprise, considering his

political activism, the gravity of his work, and his introduction by President Laura Sparks as one of the “leading cultural influences of our time.”

One audience member asked in a well posed question if there are such things as “good fences,” and if bad fences can somehow be made better. Ai’s response: “There are no good fences. Okay, next.”

Rather than directly answering questions from Baume or the audience, Ai side-stepped with humor. Perhaps he wanted to avoid a ‘correct’ interpretation of his work, and instead leave the meaning of his art up to the viewer.

So, next time you pass the Washington Square Arch or take a trip to Central Park, keep an eye out for large fence-like sculptures. What are they separating? Who are they bringing together?



Photos of talk by Scarlett Chen (Arch '22).



# BUY HIGH, SELL LOW: CRYPTOCURRENCY

PADRAIC McATEE (ME '19)

If you’ve ever had a casual conversation on the topic of cryptocurrency, statistics show it included: (1) a computer science major boasting three LinkedIn endorsements on their “blockchain” skills, (2) a person trapped in hindsight, who endlessly regrets not buying Bitcoin when it was still worth a cent, or (3) someone wishing they knew what was going on.

Despite our society’s collective “understanding” of Bitcoin, Ethereum and the like, there is still a contentious debate on a critical fact: whether or not cryptocurrencies hold any intrinsic value. On the topic of Bitcoin, Chairman and CEO of JPMorgan Chase, Jamie Dimon, recently stated “If you’re stupid enough to buy it, you’ll pay the price for it one day.” Dimon is among the many critics of non-fiat cryptocurrencies (fiat referring to currency with value backed by governments), who believe such currencies are only worth “what the other guy’ll pay for it.” Those who find value in cryptocurrency will often cite the underlying blockchain technology, with its benefits of anonymity and regulatory liberation as the source of its value.

No matter which side is right, there is still a lot of money to be made in crypto. Testament to this notion is Goldman Sach’s recent announcement intends to start a digital currency division in response to client demand, making it the first of the big banks to show considerable interest in crypto exchanges. Given that these currencies are traded nonstop with the daily global volume exceeding \$11 billion last month, there are bound to be exploitable inefficiencies in the market that only large financial institutions can take advantage of. In this article, we discuss a few of these opportunities and how they may be acted on by big firms.

Many of the investment opportunities found in these markets are direct consequences of the activities of the majority of the user base. For instance, a sizeable amount of people simply buy Bitcoin under the assumption that the price will go up so that they may sell and take profit. This is an example of directional investing, where payoff relies on the price of the asset moving in a single direction.

Another significant group of users are

those who use the currencies for purchases on darknet markets. These users find value in the anonymity of transactions using cryptocurrencies. Since the prices of the products/services they purchase on the darknet are often pegged to the US dollar, these market participants have little interest in the exchange rates of the currencies they use and will buy and sell in a manner suited for their darknet transactions.

Both of these groups tend to not care about the execution of their buy or sell orders; they are interested only in entering or exiting their position at roughly the quoted price. In this situation, bigger players can provide liquidity to the market, readily buying and selling inventory at the market demand to profit on the small spread between the bid and ask price at that moment. This sort of activity is known as market making, and it can only be done by large firms such as Goldman Sachs because they have the capital and expertise to turn a respectable profit on these small spreads.

Another opportunity comes about as the result of a widespread ignorance of how to short cryptocurrencies. The overwhelm-

ing consensus on the increase in price of cryptocurrencies means the potential profitability of short trades increases with every upward tick. However, the complex structure of cryptocurrencies as foreign exchange instruments makes the short trade more complex for the average investor. Only experienced market participants can take advantage of both sides of the trade, making money in any market condition.

It’ll be a while before we decide if cryptocurrencies hold any intrinsic value, but until then, there is no denying the profitability of the opportunities we have described. As the media-fueled hype train keeps on rollin’, other banks will certainly jump on-board as well. It’s difficult for these firms to ignore potential trading opportunities with news of one Bitcoin going for 10,500 USD on a Zimbabwean exchange (twice the world average price of around 5000 USD). Now before you try to open an account with the First Bank of Zimbabwe, there are many obstacles in the way (i.e. a flight to Zimbabwe) that only a Wall Street giant can overcome—and walk away in the black.



THE CLOISTERS

GABRIELA GODLEWSKI (CE '19)



Photos by Gabriela Godlewski (CE '19).

One of the main reasons I write about museums for *The Pioneer* is so the students of Cooper, especially the students new to the area, can get to know some engaging local spots when they want to take a break from academia. Normally, these places are pretty close to Cooper for convenience sake.

This article is going to be a little different. I recently visited The Cloisters as part of my art history class. Located in Washington Heights, it's definitely a ways from the East Village, but by all means it is worth a visit.

The Cloisters is a faction of the Metropolitan Museum of Art and primarily dedicated to medieval European art and architecture. Not only does The Cloisters host an extensive collection of medieval European pieces from paintings to tombstones to religious artifacts, but the building itself was designed to look like a medieval French castle. There are several outdoor areas, including a garden dedicated to species of plants used in medieval medicine, magical practices, and cooking.

The museum was founded through the combined efforts of George Grey Bernard, a sculptor and collector passionate about medieval art, and John D. Rockefeller, millionaire and philanthropist. Bernard had an extensive collection of medieval art and sold parts of his collection to Rockefeller, who then purchased a plot of land in Fort Tryon Park and donated it to the city. The museum was built on top of this land to house the collection, with construction concluding in 1939.



I visited The Cloisters on a class trip to view a few pieces that we had discussed extensively. Getting to The Cloisters from the train station involves walking through Fort Tryon Park, which offers a breathtaking view of the Hudson. The interior of the museum was stunning, not only because of the art, but because the architecture was truly reminiscent of medieval European architecture. It felt like being in a castle, and reminded me of the castles I saw in Poland. The works were equally as stunning.

The Cloisters boasts a collection of hand-woven tapestries and medieval clothing as well as hand-painted altar pieces, statues, stained glass windows, and illuminations with pages smaller than my hand. An entire room was dedicated to unicorn tapestries, with each tapestry portraying a scene in an unfortunate encounter between humans and an unlucky unicorn. A lot of the paintings had motifs of gardens or plants, and the outdoor areas of the museum seemed to pay tribute to such works

The weather was perfect for enjoying the outdoor portions of the museum. I thought it was very cool to be surrounded by plants specifically chosen for their ties to the time period so heavily explored in the Cloisters. The trees in the garden were also grafted in such a way that they looked like the way trees were often portrayed in medieval illuminations and illustrations. The entire experience was eerie, surreal, a little bit nostalgic, and all-around fascinating.

Although Fort Tryon Park isn't the most convenient location relative to The Cooper Union, it was refreshing to get out of the East Village and go to a place closer to nature. Tickets are pay-as-you-want, and the crowds were small on my Friday visit. My favorite part of the museum was the garden itself. Not only will the visit call for a pleasant stroll through the park, but there will also be access to all the beautiful artworks the museum has to offer. Putting the books down and setting aside a portion of the weekend to visit the Cloisters is a worthwhile decision that I highly recommend while the fall weather is still here.

To find out more about the museum, including special exhibits and hours, visit [www.metmuseum.org/visit/met-cloisters](http://www.metmuseum.org/visit/met-cloisters).

MILES OF MOVIES:  
“BLADE RUNNER 2049”

MILES BARBER (CE '18)

“Blade Runner 2049” is the sequel to “Blade Runner,” an incredibly influential 1982 science fiction film that didn’t gain traction until many years after it was released. Since then, its dirty futuristic setting has influenced nearly every science fiction film and its exploration of what it means to be human has become more and more relevant as artificial intelligence gets more and more prevalent in our society.

Enter “Blade Runner 2049,” a film about K (Ryan Gosling), a blade runner tasked with hunting down older models of synthesized humans called replicants that have gone rogue. His encounter with a replicant in the first scene of the movie leads to the discovery of something that could completely alter the world’s perception of synthetic life. It also has a profound impact on K himself as the implications directly affect his identity.

That’s all I will give you in terms of plot details. The story in “Blade Runner” was incredibly simple, allowing for more time to be devoted to the greater themes and aesthetics. In “Blade Runner 2049,” the story is much more involved. It is, in a sense, a mystery film investigating something that happened quite some time ago and understanding its implications on the present. Once again, this film investigates what it means to be human, but by adding some new wrinkles. It also explores a species’ autonomy and what it might mean for a species of artificial humans to be accepted as an equal or superior race.

The first half of this film, in which the mystery and how it ties to K is really the focus, was incredible. The storytelling was riveting and emotionally powerful as K goes through some deep character exploration. Ryan Gosling delivers a fantastic performance that gave his character authenticity and depth—every emotion I felt for this character was reflected on his face.

But towards the second half of this film, the focus starts to loosen. There are a few plot points that derail the central story a little bit and, though the end of the film does



Source: IMDb

bring it all back together, the road getting there is a bit of a mess. There was some out-of-place humor, questionable story logic, and a sense of uncertainty as to where the film was going.

As expected from the combination of director Denis Villeneuve and cinematographer Roger Deakins, this film is gorgeous. It’s a technical marvel where every frame is artwork. The colors alone in this film are so vibrant and colorful, making this world incredible to look at without sacrificing the realism. Just as in the original, the world feels lived in and authentic. On top of the incredible production design, the film utilizes a great combination of practical and special effects to produce what I thought was a seamless blend.

Overall, the film was a visual marvel. The story was a lot more involved in this sequel, and the first half was riveting. Unfortunately, the second half was less focused and featured some out-of-place humor. The score, also, was very loud and bombastic when it didn’t need to be. I would still absolutely recommend this film, especially for fans of science fiction, but just know that the second half is overlong and really drags the movie down.

Grade: A-

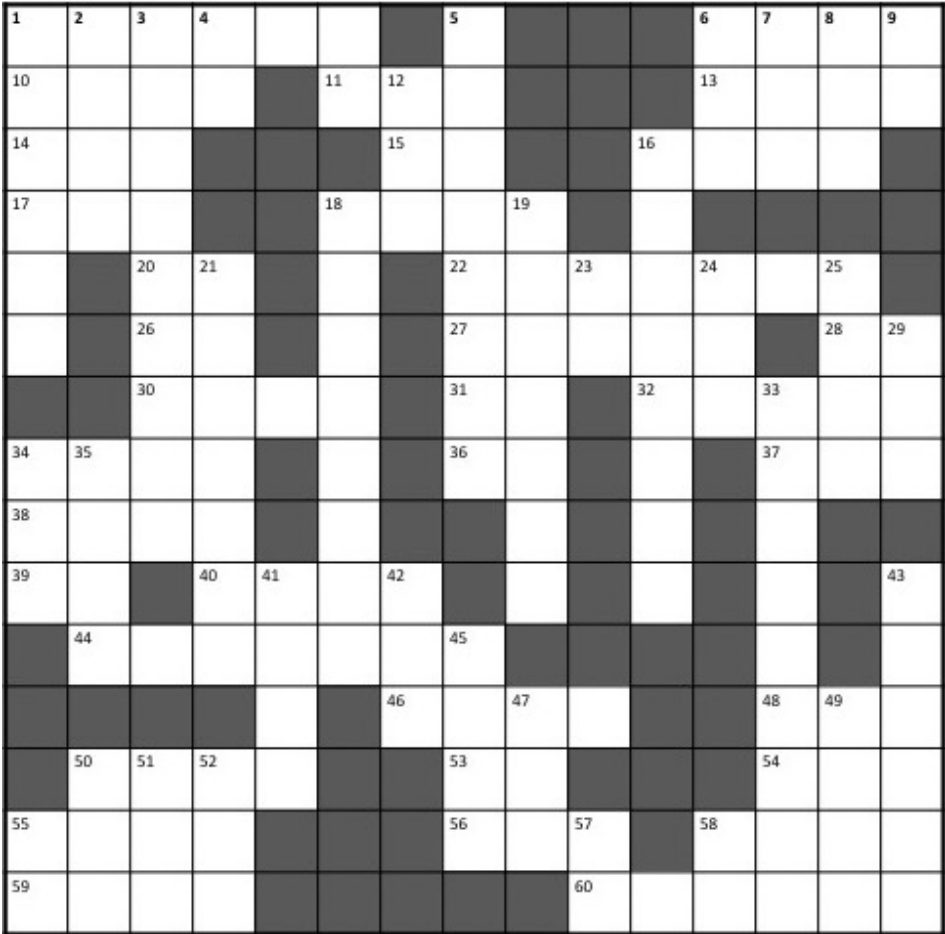


NEXT STAFF MEETING  
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ISABELLA PESTOVSKI (ME ‘19)



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14. Learn about this by taking CAE  
15. Adobe \_Design  
16. ”Mad Max: \_\_\_\_ Road”  
17. Both a student council as well as course code  
18. MechE Department Chair  
20. “Gorgeous” singer  
22. First name to 19 down  
26. The \_\_ Crowd  
27. The Freshmaker (singular)  
28. \_\_ *Mice and Men*  
30. Pointless currency  
31. Popular teenage clothing brand  
32. Before beta  
34. New Cooper coffee spot  
36. What’s up? \_\_  
37. Steal  
38. Short-lived Irish paramilitary organization  
39. Popular calculator brand  
40. 1-877 \_\_\_\_ 4 Kids  
44. Meth  
46. 2016 animated film about talented animals  
48. Association of Energy Engineers (abbr.)  
50. Wolf’s Doppler frequency problem solving method  
53. Born (French)  
54. Instant payment notification  
55. A lot  
56. Barbie’s other half  
58. Captain Hook’s bo’sun  
59. Previous clue is missing one of these  
60. How to get rid of mistakes
- DOWN:  
1. Cause and \_\_\_\_  
2. Cooper clubs get donuts exclusively from this guy’s place  
3. 1998 rom-com starring Nicole Kidman and Sandra Bullock, “\_\_\_\_ Magic”  
4. 2017 thriller currently in theaters  
5. Last issue’s movie review  
6. World’s fastest bird  
7. Data compression file format  
8. \_\_\_\_ Fieri  
9. Interjection  
12. Famous South Korean car company  
16. EE Department Chair  
18. The \_\_\_\_ of wakin’ up is Folgers in your cup!  
19. Call 1-800-\_\_\_\_ Your certified cleaner!  
21. The ability of an organism to live under narrow range of environmental conditions  
23. Sumerian father of the sky  
24. Popular chat abbr.  
25. \_\_-\_\_, a pirate’s life for me  
29. \_\_Lab  
33. Shouts  
34. Tiny amount  
35. Long poem  
41. Requests  
42. Cooper club that hosts Culture Show  
43. “I wish I was an Oscar Mayer \_\_\_\_”  
45. *Legend of Zelda* protagonist  
47. 52 across, feminine  
49. Foil, sabre, \_\_\_\_  
50. Parent Teacher Association  
51. An atom with net charge  
52. Fin  
55. \_\_-ha moment  
57. Noble gas  
58. South Africa

OLI’S SWEET MESS: NY FROST FACTORY

OLIVIA HEUIYOUNG PARK (ME ‘20)



Photo by Julius Freyra (CE ‘21).

It seems like the weather in NYC simply skipped autumn and decided to “fall” into winter. But whether you want to fight the blazing sun or the seemingly unstoppable wind, ice cream is always there to comfort you.

Taking a slight detour from our usual shops of East Village and near the dreaded Bobst Library, a frequent destination for Cooper students especially during mid-term season, we visited “NY Frost Factory,” an “authentic Taiwanese” dessert shop from ingredients to machinery.

This shaved snow ice is located on Macdougall Street in between Bleecker Street and West Third Street, neighboring Saigon Shack, Artichoke Pizzeria, Playa Bowls, Kati Roll Company, by CHLOE, Pommes Frites, and more. Rather than being milk-based like most ice cream, this shaved snow is water-based which gives it an un-

believably light yet creamy texture—filling you up but also not leaving a heavy, thick aftertaste.

With 11 base flavors (a handful of them are vegan!), numerous toppings, and complimentary drizzles, the combinations are endless. Although they do have pre-created combinations for \$7.25 you can build your own for just \$5.75, with an additional \$0.50 per topping. They also give a student discount of 15% off, AND stamp cards. Each order comes with a bucket full of shaved snow and a generous serving of toppings,

probably enough for two or more people to share.

After grabbing dinner or a quick munchie, or if you are just craving that refreshing, sweet treat, visit this small and charming shop for some amazing authentic Taiwanese shaved ice.

*NY Frost Factory  
106 Macdougall St.  
Monday-Thursday, 2 p.m.-11 p.m.  
Friday-Saturday, 12 p.m.-12 a.m.  
Sunday 12 p.m-11 p.m.*

HIP OR HYPED? ROUND K

ISABELLA PESTOVSKI (ME ‘19) | MORGAN WOLFE (ME ‘19)

This week, Morgan and Bella visited Round K to try their specialty drink, the Matte Black Latte. The owner of the cafe, Ockhyeon Byeon, put his own twist on the goth food trend by using coconut ash instead of activated charcoal powder to give his drink its distinct black color. The drink is made with cacao powder, almond milk, and espresso in addition to coconut ash.

Upon first sip, the latte tastes like a mocha but it is definitely sweeter. The drink is also topped with a whipped-cream looking substance which, in actuality, is thick like pudding. In spite of a slightly grainy texture—possibly from the coconut ash—the topping did taste good. As we poked at the topping skeptically, we were instructed to “take off the lid and dip it.” Not quite knowing what this meant, we used our straws to mix this substance into the drink,

which made it sweeter and thicker. The Matte Black Latte at Round K is definitely a unique drink you cannot find anywhere else. It also tastes really good, even though it’s not like a classic latte.

We were overall impressed with our experience at Round K. The espresso beans were ground fresh for each drink right in front of us! The Matte Black Latte is vegan too, so it’s a great option for those who don’t consume dairy.

The shop is really cute and has a nice atmosphere, with an open seating space in the back and jazz music playing in the background. The shop wasn’t crowded the afternoon we visited, but more people came in as the day wore on. The shop is also known for its breakfast and is most likely more popular in the morning.

The drink is expensive (\$6.50 per Matte Black Latte) so it may not be ideal for an everyday coffee fix, but it’s a great place to go on a cool coffee date or catch up with friends and family who may be visiting the city. It’s also perfect for a ~spooky~ Halloween treat!! All in all, we both think the drink tastes good and is a fun twist on a classic beverage.

Final verdict: Bella and Morgan both say HIP!

*Round K  
99 Allen St.  
Sunday, 9 a.m.-10 p.m.  
Monday-Wednesday, 8 a.m.-10 p.m.  
Thursday-Friday, 8 a.m. - 12 a.m.  
Saturday. 9 a.m. - 12 a.m.*



Photo by Morgan Wolfe (ME ‘19).