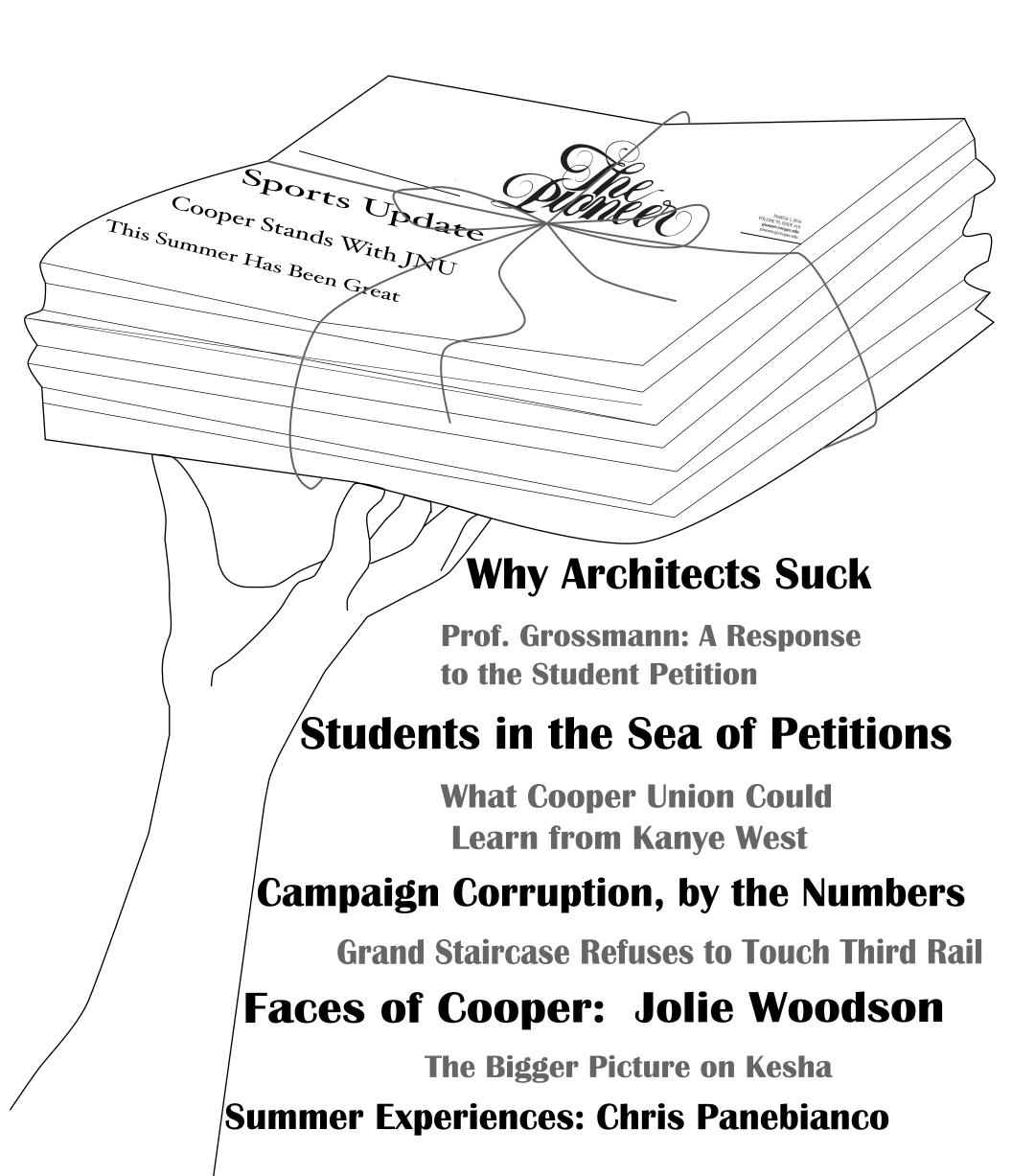


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WHY ARCHITECTS SUCK

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your work the integrity it needs. The work we produce cannot be cryptic or without position. Take authorship over your work; it's the surest way that you are personally invested to what you're dedicating your time. An earnest

school-wide.

what you're dedicating your time. An earnest approach to architecture is also the surest way that we're invested in the work of each other. When you're racing towards the decision that you need to make, you're in conflict and competition with the arguments of those around you. The argument towards the creation of an

atmosphere of active debate is, within itself,

what we should be responsible for constructing

We are in crisis. The students at the Irwin S.

Chanin School of Architecture have given up

any boldness for the sake of inter-scholastic

diplomacy. The artistic voice of my colleagues

is lost in the fog of computation and aesthet-

ics. And critical discussion, in total, is lost due

to energy being dedicated to being fashionable;

Trends are not going to give your practice in-

Earnest communication and criticism will give

"Trends are not going to give your practice integrity!"

We architecture students are known for our lack of existence outside of the foundation building, which results from our commitment to our work. The stereotype of the sleepless architect is something to embrace. Be proud of being tired! It means that you're working hard, you're experiencing New York, and, ultimately, you're being consumed by architecture, the noblest monster. We are being lazy, however. We students, myself included, have not put adequate effort towards having an architect-trustee. Our representation in JSC meetings is also terrible. Do we have our tails tucked between our legs because we lost the tuition battle?

We're recovering from the tuition battle poorly and there are losses to other battles imminent. We use our minority status, our acceptance rate (now blown), and our workload as excuses not to fight for our place in student governance. There should be an architect-trustee. It has been said, there should not be another engineering student represented to the board of trustees, and it's not appropriate for the next representative to be an artist.

"We're recovering from the tuition battle poorly and there are losses to other battles imminent."

It's the time for an architect! Architects are responsible for coordinating structure and culture. Why not the same for our beloved institution? Friday night at a post-lecture dinner, I probed two second-year students and one freshman about the position of an architect. I asked them to consider the position of the artist, who sits from afar observing, reflecting, and reacting to society. In addition to these activities one cannot ignore the role of the architectprofessional, who is responsible for articulating spatial concepts and schmoozing with potential clients. Reminding them of the architecture of our studio, the architect-artist, and the architect-professional, I received an interesting collection of three responses. One, given by a student who is a native New Yorker, was that all the distance is good in providing an enclave, a safe place where ideas can grow. The second response was that the distance between the studio and society is not especially true and the architecture students are connected. And the third response, from a first-year student, emphasized the distance between years within the architecture school and avoided the problem of the studio's interiority.

Architects are creatures of multiple lives. Since we're responsible for communicating both in drawings within the practice and with words and images to those outside, we have an instinctive approach that is suited for institutional problems. Structural considerations require two key skills: the analytic eye and the conceptual hand, which is the physiological composition of an architect. Artists are not of the same physiognomy, because their practice requires distancing oneself from society.

The recent evolution of the institutional status has come to a place where an engineer-trustee is irrelevant. Consider the example of the Rubix cube as demonstrative of design thinking. Many feel pride in 'solving' a Rubix cube, organizing the squares so that each face is singular in color. However at this moment, the only thing that can happen to the object is repeated disorganization. In then end, the Rubix cube always embodies the same problems it had before, because its operation anticipates problems. For the engineer, fixing the problem requires that the end product is a static object. Institutions—their structures, cultures, and corruptions-are ever changing. Architects are trained to work with time and space as both a parameter and an artistic medium. Rational thought mandates an architect-

"There should not be another engineering-trustee"

We have an interim president, a new dean, and are just as capable at rising against as we were five years ago; it's the perfect time to manifest. We are so "busy" with work and trends that we are approaching a banal status; the studio is becoming a non-place. It was glorious for architecture students to be in the news on a regular basis. I implore you to use both your anger and your virtú to make this school present! \Diamond

WHAT COOPER UNION CAN LEARN FROM KANYE WEST

BRANDON QUINERE (CE '19)

Robert Godkin (ChE '18) Matthew Grattan (ChE '19) Tuesday is usually my des-Asanté Mills (Art '19) ignated day to plan out the rest of my school week; I Olivia Heuiyoung Park (BSE '19) can prioritize my assignments so that I am not over-Anthony Passalacqua (ME '18) whelmed with too much to do on a given day. I was Michael Pasternak (ME '17) having a good track with Brandon Quinere (CE '19) Tuesdays so far, until I was unfortunately presented

How could this happen? Better yet, why did it happen on the day before the exam for the Calc section I apparently wasn't in anymore?

"Enter Kanye West. Impeccably timed with mine"

That night, I found myself in the company of some other students, reflecting on the matter and how others were affected much more severely, more so than me. It was amazing that our school could stay quiet about this scheduling issue, yet only act on it after students were settled in. Has no one set a precedent on

how to voice issues as they arise so that no one gets royally screwed?

Enter Kanye West. Impeccably timed with mine, Kanye had a stressful week of his own, predictably using Twitter as a means to vent. But between the sneak peeks of his third Yeezy collection and that infamous Bill Cosby tweet, what was perhaps most significant about his feed during this period were the tweets regarding the release of his latest album, The Life of Pablo, which was set to be released at the end of that

The creation of Pablo was documented heavily on the account, especially with photos of a notepad detailing the album's tracklist and title. A simple Google image search of "Kanye notepad" reveals the album in its many different forms, as tracks were moved around and potential studio collaborators left their mark on the page. The quick and admittedly sloppy marker scribbling on the page suggested urgency on Kanye's part to complete the record on time.

Here he was, an artist who is perhaps the biggest perfectionist in music, planning his seventh LP in the same way you would out-

line a project for a class. Kanye made sure to share this rushed process with anyone who cared to see it. Even after hyping Pablo for months, he still chose to update his fans about the obstacles he faced lastminute, just mere days before they were to expect the album.

"Has no one set a precedent on how to voice issues as they arise so that no one gets royally screwed?"

If Kanye West can publicly disclose any issues surrounding an album to his potential music buyers, then any attentive institution should have the decency to do the same with their customers. Cooper is guilty of doing this far too late, consequently having to deal with the complaints from us, their paying customers, for not doing so in a timely manner.

If there is a scheduling problem, students should be notified immediately. That way, proper measures can be taken on the their part to fix it before the new semester starts, consider-

ing spring classes are registered well before winter break. Students were not even aware there was an issue until they were suddenly notified. Communication is key, and it has the Kanye West seal of approval.

Of course, it is unfair to compare a botched album release to a messy scheduling error. Yet a somewhat minor issue for some turned into a major inconvenience for many because of a lack of communication, something that was, in contrast, used positively by Kanye. This is not my way of asking for a completely transparent system, since I have no business in other students' schedules. Even so, anything would have been better than receiving an unexpected e-mail with a rather blunt subject line, weeks into the semester.

The Great Calculus Crisis of 2016 has been averted, but Cooper could definitely take a page out of Kanye's notepad on how to properly notify those affected about last-minute changes, just in case there's another occurrence. Because if you catch me on another Tuesday in the near future receiving a sudden burden like this again, well, this is way too much, I need a moment. ◊

with an e-mail one Tuesday that would not only shake up the rest of my week, but the rest of my semester.

"Your Calc II section has changed" the subject line read. I had heard about other students having their schedules switched suddenly but I thought I was safe, considering I was actually registered for my section and not waitlisted.

OPEN LETTER TO STUDENTS

PROFESSOR ATINA GROSSMANN

Addressed to all Cooper Union students, both those who signed and, those who did not sign, the recent Petition to the HSS Faculty.

While I definitely think that the tone of the petition was not helpful in terms of building the strategic alliances we will need to meet complicated challenges I *do* think that the HSS searches and the student petition offer an excellent opportunity for us—faculty and students—to focus on the critical substantive issues and to make some very important points about how these very real needs can only be fulfilled *if*:

a) the Board of Trustees and the administration provide HSS with the resources to attract and retain a diverse full-time faculty that can teach a diverse curriculum. And,

b) the three schools are willing to adjust their curricular and credit requirements to make it possible for the students to actually take advantage of the newly diverse curriculum that we would hope to create.

Therefore, to the student petitioners: Right On! (to use a phrase from my past): On to more (more strategically phrased) petitions, to the Board of Trustees and administration and to their own schools.

This is an opportunity for the students to really think through what kind of an institution Cooper Union is, why they chose to come to a school with such a limited number of humanities and social sciences offerings. After all, HSS courses presumably are where many of these issues can be addressed critically and thoughtfully and in an academic context; that's why the petition is addressed to HSS and not to the other schools which of course have similar problems in terms of attracting and retaining a diverse faculty. (Just look at the Engineering School! Moreover, ironically, given the focus on HSS, the example in the Pioneer referred to the Art School).

This is also the moment to think about what needs to be changed in the Cooper Union curriculum and structure as a whole, and within each of the three pre-professional schools, to assure that students here can in fact have—within the (hopefully expanding) limits of their demanding majors—a rich diverse educational experience with an exciting, academically excellent, and diverse set of faculty.

How do we claim the money and resources to attract such people (having worked my heart and body out on these searches, I know how very difficult this is)?

How do we make space in the curriculum so that potential new faculty could really have the opportunity to teach the diverse perspectives they would bring? And how do we find or create space in the curriculum—and crucially—within the credit structure decreed by the three schools to assure that students can really take advantage of these opportunities?

These are difficult questions and they are truly worth debating:

What are you as students willing to sacrifice in terms of your own major to have the kind of curriculum the petition demands?

What is the institution willing to sacrifice and to invest, to make the provision of such a curriculum possible?

I would love to meet with the students to engage in that discussion. I would be happy to take up the demand for a community-wide meeting. I am sure some of my colleagues would as well. I look forward to our ongoing conversation.

Atina Grossmann Professor of History HSS

HUMANITIES FACULTY RESPOND TO STUDENT PETITION

ANTHONY PASSALACOUA (ME '18)

On the February 22, the students of Cooper Union brought a petition to the attention of the Humanities and Social Science (HSS) faculty. The students have, to word it bluntly, accused the HSS faculty of endemic racism. They have called for an increase in the diversity of the faculty, and for an increase in the geographic scope of the classes.

"If the Cooper Union does not adjust to the new faculty in a way that lets us take full advantage of their strength, than it does not matter much who has been hired."

The faculty responded quickly to the petition, with Dean Germano releasing a statement on behalf of the faculty two days later, on the February 24. In the statement, Dean Germano stated that one of the ways to make "Cooper a stronger place, for students, faculty, staff, and alumni" would be to increase the number of "diverse faculty, who bring diverse backgrounds, new courses, and new ideas."

He goes on to make clear that no kind of discrimination has ever been tolerated at the Cooper Union. He stressed that "classes must be safe and welcoming spaces for all students." The issue of discriminatory comments, even of the micro-aggressive variety, is on the minds of our faculty.

However, Dean Germano's campus-notice email was not a collective response from *all* HSS faculty. *The Pioneer* reached out to the other full-time HSS faculty individually for their thoughts on the student petition. Official responses were provided by both Professor Sonya Sayres and Professor Atina Grossman, while other faculty reacting either unofficially or not at all, depending on their time constraints.

Professor Grossman's response particularly speaks to the point that this goes above and

beyond issues of just who is being hired. If the Cooper Union does not adjust to the new faculty in a way that lets us take full advantage of their strength, than it does not matter much who has been hired.

Professor Sayres' first response: "what took you [students] so long" to organize on this issue. She continued, saying that it is inherently difficult to increase the diversity of the curriculum. Scholars who have invested years into learning, Greek or Latin for example, need to learn languages like Arabic and Chinese in order to continue to expand their understanding of their chosen areas of expertise. Further, changes in the curriculum also have to be able to survive in the long-term, because "if the faculty we hire like it here, then they will likely spend the next thirty years of their lives here."

Professor Sayres gave an example from a number of years ago, when the HSS faculty "tried to do it from a globalist perspective," that is, "to interrogate the Eurocentrism" of the curriculum and expand. The HSS faculty used a global perspective text for all four semesters of core HSS. While this worked for a short amount of time, "it always disappears" and the faculty go back to the way they were teaching. Scholars have been hyper-focused since they began their careers in higher education, and that's quite different to the demands of a curriculum that provides an expansive, "globalist perspective."

A theme of the reactions has been some degree of shock. Many of the HSS professors are women who finished their formal education and earned their PhD's during a time when it was rare for even a white woman to do so. Understandably, to be now accused of systematically keeping minority groups from being represented amongst the faculty comes as quite a surprise.

All of this said, the faculty does indeed seem committed to increasing diversity. The shortlisted candidates for the three full-time faculty positions are beginning their visits to campus this week, and all students will be invited to lunchtime talks by the candidates. \Diamond

STUDENTS IN THE SEA OF PETITIONS

OLIVIA HEUIYOUNG PARK (BSE '19)

February might have been short of days, but it definitely wasn't short of active voices for change. Opinions on topics such as gender neutral bathrooms, diversity for humanities faculty, and unfair schedule changes have made appearances in the forms of petitions, as most of us are aware. Students' voices should be heard, changes are good, and petitions, when done right with the right language and attitude, can do both very effectively.

I don't hate petitions. I think it's important to be a part of some movement or call for change – especially at a college I'll be spending the next few years of my life in. This is why I personally was part of actively distributing and delivering a specific petition. But, I was startled, if not bothered, by some of the things I've heard in the process. Some students just didn't care about the issue as it didn't affect them directly, while some students said that although they agree to parts of a petition, they do not agree to all of it. Some even said that they were pressured into signing some petitions because they didn't want to be "that kid."

"Some students just didn't care about the issue as it didn't affect them directly"

Petitions are, or should be, written formats of the voices of students, accurately embodying the whole population addressed. As it is in a written format, the language of petitions plays a huge role in the way it is delivered. It

shouldn't be an angry complaint letter with accusations and blame, and should be written free of assumptions of what YOU think others want – it should be written with the acceptance that there will be opposition to it. Petitions should also have specific and concrete proof to back the accusations and demands, and should be free of too extreme, all-or-nothing phrases; petitions should be engaging, identifying, and encompassing, especially when it is a call to change some existing system.

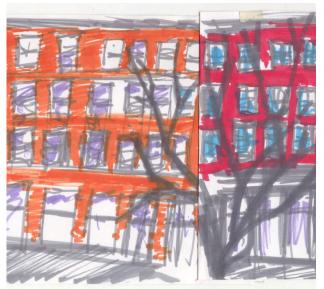
In my opinion, the three recent petitions did a decent job in doing this. The student voices were heard, and modes of active change are either already implemented or are in the process of doing so. Although these petitions were successful in starting changes and gaining more interest, I feel like it could have been even more effective with clearer language and attitude.

It's crucial to keep in mind that people will have varying levels of agreement and thought, and it's possible that some might agree to only specific parts of the written petition. If this occurs, don't try to pressure the person to sign the petition because they agree with parts of it – be open for discussion and explanation, and clearly mention that if they do not agree with all of the demands in the petition, they are welcome to not sign it. When writing, try to be very specific so that the purpose of the petition is clear, while also keeping in mind some might disagree. And that's okay! People shouldn't feel like they'll be "that kid" for having different opinions or for disagreeing with your petition; listen and understand different opinions regarding the topic.

It's easy to simply conform to the majority out of fear of re-

jection. Everyone has different opinions, and those differences are why Cooper Union is as diverse, rich, and unique as it is. We, as students of Cooper Union, should provide a safe environment for everyone to openly discuss, disagree, and explain their own opinions. No one should feel pressured to agree to something they don't, and everyone should be ready to "agree to disagree." \Diamond

"It's easy to simply conform to the majority out of fear of rejection"



Artwork by Zhenhoao Huang, provided by The Saturday Program

FACES OF COOPER: JOLIE WOODSON

TOBY STEIN (CE'18)



Photo by Toby Stein (CE '18).

The classic interview question, tell us a bit about yourself:

So you know my name, my name is Jolie Woodson, and I've been working at Cooper Union for just over seven years assisting engineering students in their career development. I am originally from Long Island, but I've been living in New York City for the past 15 years. I'm married, and have two cats, Betsy and Eloise.

How did your educational and career path lead to you to Cooper?

I studied at New York University getting a degree in Psychology and Metropolitan Studies, and then immediately after graduating I did some traveling around Asia for a few months. My first job was working in admissions and recruitment at a CUNY system for a school in the Bronx called Lehman College. Then, I

transitioned to another CUNY school, Baruch College, where I ran a professional mentoring program for students and then I came and started working here at Cooper.

What is your favourite thing to do at Cooper?

My favorite thing to do at Cooper is definitely talk to students. It's my favorite thing to do because you the students are amazing; you're an interesting hardworking and impressive group that is incredibly inspiring, and because of that my favorite thing is to talk to students. Luckily, there are quite a number of students, and just one of me, so I get to do it quite a bit.

Assuming that all students read the weekly emails, and attend all the prep events, what is the one thing that students should do, actually?

"The one thing that every single student should do, actually" is ask themselves what they want. It all boils down to trying to figure out what you want, not what you think you should do, not what other people before you did, not what your parents tell you to do, but to think about what you actually want. Because once you have an idea of a direction that you want to go in, and I am not looking for something super specific, it's just that once you have that idea, everything else gets much easier. I find that oftentimes people are challenged in seeking out opportunities because they are not sure what they are looking for. I understand that as college students you guys are trying to figure that out, but if you can do little things to figure out what you want, it goes a long way.

In five words, what is the best general life advice you have for us college students?

Forget about your GPA, please.

Outside of the Cooper community, what other passions or hobbies do you enjoy?

Other than replying to all of the emails, I spend a lot of time with my family. A lot of my family is local, and so I generally visit them. My grandmother is 95, and as she lives on Long Island, I get to visit her pretty much every weekend. But my grandmother isn't a typical grandmother, she has a smartphone and a tablet, an Instagram account, and she sends me text messages, so she's certainly hip, but also old. Beyond family, my husband and I enjoy traveling. We don't travel every weekend, but we certainly like to take one big trip every summer. This summer we are planning to go to both Iceland and Scotland, as last summer was a trip to Peru.

When you went to NYU did you know about Cooper?

I learned about Cooper, and I know that this is now kind of weird, when Bill Cosby spoke in the Great Hall. NYU students were invited or something like that, and

I came to the Great Hall to hear Bill Cosby talk. I remember at the time thinking "this is so cool," granted now I feel a bit weird about it, but as this was a long time ago it was still really cool. That was my first time at Cooper. In fact, despite being from Long Island it was the first I had heard of Cooper

Who is your Cooper Idol?

See, there have been so many amazing people, and I can't just pick Peter Cooper because that would be too obvious and boring. Have you ever gone to take a test and just not had the answer, and then you start to get stressed out by not knowing? That's where I'm at right now; this has really stumped me. You know what? I'm going to go with the first person that honestly came to my mind: Frankie. He's friendly all the time, always in a good mood and always talks to people. Obviously he keeps everyone well fed which is important and he's one of the only people that I don't think I've ever seen in a bad mood. That's kind of amazing, so I'm certainly going with him; he makes me smile even when I'm kind of grumpy, so I guess it's Frankie. ◊

SPORTS UPDATE

HOSSAM SALEH (ChE '18)

Cooper's athletic teams have been training hard and participating in multiple competitions for the past couple of months as they prepare for an intense training trip to South Carolina for spring break.

For the past 25 years the South Carolina trip has been dedicated to improving teamwork and individual skills. This trip has appeared to be extremely successful as scholar athletes are given the opportunity to work together on and off the field. Initially this trip was made for the men's varsity tennis team in which daily 9-hour practices, instructions, competitions, and chemistry work are focused on. Dean Baker comments, "Tennis is our most successful team and we now invite other teams to be part of this trip. We now bring the men's volleyball team, the golf team and some basketball players. They all put a lot of time, energy and commitment to getting better and the heaviest bag they bring on the trip is their book bag." Not only is this trip used for team practices and studying, it is also a mid-semester breather where students spend time together and relax after an intense week of midterms

Current coach and graduate mechanical engineering student Anthony Assal comments "The tennis team at Cooper Union always has great expectations of them to be the best at what they do, and this year is no different. I am honored to watch them develop themselves and to put all the effort they do in improving their game and their character. We have a new chapter in tennis this season and I am looking forward to how everyone will rise up to the occasion to

bring the scholar and the athlete to the court." Following the trip to South Carolina, the men's tennis team will continue their season with games against Sarah Lawrence, the Culinary Institute of America, The New School, and Webb Institute.

The soccer team ended their outdoor season undefeated with victories against the Culinary Institute of America, Vaughn College, Webb Institute, The New School, Kings, and Sarah Lawrence College. With the end of the outdoor season, the Cooper soccer team prepares for next season by participating in the Urban Soccer Indoor League. Andrew Peña (CE '18) comments, "The team has been staying in shape and preparing for next season. Once the indoor season ends, we will be moving outdoors to compete in the annual alumni game. The team is looking great and I am looking forward to next season; hoping we will pick up some freshmen who can make as a big of a contribution to the team as this year's freshmen did."

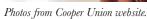
The women's basketball team concluded their 2015/2016 season with a loss against Sarah Lawrence College. The team was led by captains Nina Berlow (CE '16), Jamie Chan (ChE '16), and Kayla Weg (CE '16)—all seniors who played their final games in a Cooper jersey. When asking about her basketball experience at Cooper, Jamie Chan commented, "Never in a million years did I think I would ever play basketball, nevertheless be playing college basketball. Yet, it's turned into something I ended up relying on. Basketball was my outlet after a stressful week. When I look back at

my last four years at Cooper, nothing compares to the camaraderie of the team. It's more than just winning a game. It's about the hours we spend a week together learning how to play this unfamiliar game and most importantly, learning it together. Our team chemistry and perseverance exceeds anyone we have ever played against. The future of the team is bright. The upcoming trips will be an amazing experience for all of players to learn what Cooper Union basketball is and I'm excited for their upcoming season!"

The men's basketball team ended their season with a record of 6 wins and 4 losses. The Cooper team concluded its season by making it to the finals of the NASBI Tournament located in Providence RI, only to lose to The New School by a narrow score of 66-64. Following the end of the season, Matt Haeusgen (ChE '18) comments "We started the year off in Cape Cod training the week before classes started, and then kept up the intensity by having two practices a week on Fridays and Saturdays, and an optional shooting practice on Mondays. Having all of these practices and going on trips to Cape Cod, Florida, and South Carolina have allowed us to come together and work well as a team. Even now, after the season is over, we are still practicing, getting ready for the next season."

Keep an eye out for more updates on current season games as well as information for team tryouts for the 2016/17 season. \Diamond







SUMMER EXPERIENCE: CHRIS PANEBIANCO

MATTHEW GRATTAN (ChE '19)

Last summer you interned at Genentech in San Francisco, would you like to elaborate more about what you did there?

Chris Panebianco: I worked with Genentech's process development division. What that means for chemical engineers or engineers in general is working on how to develop lab-tested processes for large-scale manufacturing. I was working with their bioreactor division, which involved working with different materials for their cell-lines to make them grow more efficiently on a small scale and then they would scale that up for large scale manufacturing. The cell-lines were derived from Chinese hamster ovaries and were genetically modified to produce monoclonal antibodies, which would be used for therapeutic drugs mostly for cancer.

How did you hear about the internship position?

So I knew about the organization from a Cooper alum who was a senior when I was a freshman. I reached out to her because she did an internship there and then began working there full time. She sent me some more details about the specific internship position she applied to. I sent my resume to her and then applied online. It was really helpful to skip the preliminary steps. I waited about a month and got a call for a screening interview and then just kept going through the interview process.

Did working with bioreactors relate to things you have learned at Cooper?

The work I was doing at Genentech was with cell culture, which is not a traditional chemical engineering skill set. I had taken a class on tissue engineering at Cooper and learned the basics of cell culture. In addition to that I did a research project on the subject. So having those skills was really helpful just for the core skillset they wanted, but in the process development position, they were looking for more general engineering skills. For example, as opposed to simply setting up experiments, I'd be looking at things like "Oh, why is my bioreactor reading things incorrectly?" I'd have to go through what is called root cause analysis—basically asking why a problem is happening.

That and the general knowledge of just getting things

done. At Cooper the biggest thing you'll learn is how to work with harsh deadlines and how to get what you need done. Genentech was pretty lax; I was supposed to be there eight hours a day, but I was able to leave early sometimes if I had to as long as I got my things done. I was also fine being a little outside of my comfort zone. For example, I would go to team meetings, where they would talk about higher-level biology topics that I haven't learned at Cooper, but I read papers and talked to my boss and other people and I'd get the information. So I think those general skills you have from Cooper are important, as opposed to the very technical cell culture topics, which are a lot easier to teach.



Photo provided by Chris Panebianco (ChE '16).

Do you have any tips or advice for students who want to get an internship this summer?

The biggest thing is starting early and being persistent. I started the hunt my freshman year with the Center for Career Development. I'd meet with Jolie Woodson, I got a resume together, I found organizations I was interested in, and I applied and got rejected. Overall the experience was good because I had a template to work with. I think that

the Center for Career Development is honestly the best resource for Cooper students to start thinking about career paths.

Going into sophomore year I applied to a similar set organizations and they remembered me. Since they knew who I was, and they were more inclined to accept me. Same thing for junior year. So going through those steps and continually speaking with the same organizations allows them to keep seeing what you're are doing and how you grow, which are good qualities for them.

I also mean persistence in the sense that Professor Davis told us at the beginning of senior year: once you apply to that one-hundredth job, you'll start getting callbacks. And that was my winter break this year, I easily applied to a hundred positions. You don't know what you're going to get a callback for, so throw your hat in the ring for as many things as possible if you're interested in them. Just try to keep a good pace at working through these things.

I heard that you recently accepted a position at the National Institute of Health in Washington DC. Congratulations! Can you tell me a little more about that?

Sure! The position I will be working with is called a postbaccalaureate program, which is meant only for people who have just finished their undergraduate degree, and it's kind of a bridge to graduate school. I'll be doing a one year research project in regards to tissue engineering and stem cell research for growing eye tissue. And again, the specific skill set they were looking for-working with cell culture—were things I had developed at Cooper and then further developed at Genentech. Now I'll continue to grow in those areas, since that's the path I am interested in. But overall, they were looking for engineering and problem solving skills on that team, since they already had a bio expert. From there, I'll either segue into graduate school, or I might bridge into a fulltime position similar to the work I did at Genentech with bioreactor research. Personally, I'm using this experience to test the waters in research, since I have knowledge from Genentech of what industry is like. Hopefully by the end of my year term in DC, I'll be able to figure things out one way or another. ◊

CAMPAIGN CORRUPTION, BY THE NUMBERS

MICHAEL PASTERNAK (ME '17)

Campaign finance reform and Washington corruption is the defining issue of this election cycle. On one side, we have the socalled "establishment." This includes the likes of Hillary Clinton, a prior contender for the Presidency and a recent First Lady, Senator, and Secretary of State, as well as Governor Kasich and Senator Rubio, one of which has an immense amount of government experience and another whom has the full backing of the Republican Party. On the other side we have longtime Senator Bernie Sanders, who is quite unpopular with the Democratic Party itself, having only recently officially joined it and netting only five representative endorsements, but who is the most popular Senator in the United States among his constituency.

Donald Trump occupies the principle antiestablishment position on the right, having no government experience whatsoever and with the leadership pledging to distance themselves from him if he wins the GOP nomination, he is the most "pure" antiestablishment vote out there. Some might ask about Cruz, but since he both engages in all of the "establishment" fundraising and lobbying schemes and is reviled among all of his colleagues and opponents, I would argue hating Ted Cruz is perhaps the most bipartisan issue facing the nation.

A lot of people can generally see a difference; Trump and Sanders have a manner of speaking that is very authentic: they typically say what they want to see with conviction and with little attention paid to things like focus groups and the audience in front of them. They both have noticeable accents, look extremely different than the other candidates, and seem pretty pissed. A lot of Americans seem to feel those qualities represent them and are supporting those candidates at an unprecedented rate, financially.

So what is it that has everyone so angry, really? Is it simply "class warfare?" Turns out it really, really isn't. Corruption is not a new factor in politics. It's been around since the first governments were formed and it looks unlikely to ever completely go away. As they say, "power corrupts," and governance requires power. However, a healthy and successful American democracy has historically relied upon a push and pull between special interests and the wider public which, in recent years, has been knocked way off balance.

There are two large changes in recent years, which have shed light on the power of money in politics. The first is the Supreme Court case Citizens United v. FEC. The case decreed that money is a form of free speech; or rather that free speech cannot be impugned if money comes with it. The upshot of the decision is that campaign financing was opened to corporations and not just their composite individuals and all caps were lifted on contributions. The law stipulated that there could be no direct collaboration between campaigns and these new super-PACs, which were the organizations created to use the new corporate money, but a number of loopholes have emerged, rendering those rules worthless.

The other effect was that campaign finance was brought out of the shadows. In the past, millions of dollars were still funneled into campaigns through organizations called 501(c)'s. These allowed contributions capped at a high rate to be funneled into campaigns by individuals. There were a number of loopholes that made sure money still found it's way into races and friendly politicians' pockets. The other clear warrant for corruption comes from gerrymandering, where districts are redefined to give incumbents a voting advantage. Essentially, gerrymandering aims to

isolate voters that lean towards the opposition candidate among districts that heavily lean towards friendly candidates. This creates a situation in which the popular vote has little to do with who is in control of congressional districts. It's flagrantly undemocratic and so obvious that it's easy to get angry about it.

Now here's the controversy: does taking money from special interest groups mean you are corrupt? Can one prove that government officials are directly compensating large donations with friendly policy? The answer isn't a simple yes or no. We can, by and large, prove that special interests are treated better on account of what amounts to legalized bribery, but individual events are incredibly hard to pinpoint.

Now to get nerdy. According to a New York Times article shortly after the 2010 elections (it was updated to say not much has changed) the average winner in a state election spent \$310,000 more on canvassing and advertisement than the average loser. After those elections, we immediately saw an increase in something referred to as Regulatory Capture, which is when industries control the regulatory bodies that are meant to provide a check on them. According to a Brennan Center report from 2014, the four states that tracked outside spending in both 2010 and 2014, Connecticut, Maine, Michigan, and Wisconsin, saw those spending levels increase by a factor of 20 (Connecticut), 4 (Maine), 4 (Michigan), and 5 (Wisconsin) from 2010 levels as a result of the decision.

Relatively unknown names with big ambitions have financed outside groups that spent heavily on races for statehouse, mayor, and even school board. At the state level, it is possible for a single funder to dominate the discourse and machinery

of politics in a way not seen at the federal level. What this functionally means is that the government is now actively working to support special interests and large corporations instead of serving to rein them in. Most of us have already seen the effects, whether it be shoddy internet providers, nuclear plants being unfunded, or regulations strangling a small business we are close to in favor of a larger competitor. It's all a part of a bigger, deeper issue with how our system is run.

Now, there is an exception to this. In presidential politics, spending encounters diminishing returns. As more money is spent on ads, people start seeing ads multiple times or become annoyed and oversaturated. This is most clear in the campaign of Governor Jeb Bush, who despite massive spending was never able to break away as a contender in this year's election. The same trend held true in 2012, especially during the general. What this boils down to is that in presidential politics, money isn't as influential and that means the future President is uniquely capable of leading campaign finance reform.

So what can you do to make that happen? Register to vote! Alex Rybchuk (ME '17) and I will be setting up a table and carrying around ungodly amounts of voter registration forms. Take a couple minutes to fill it out and hand it back to us and you'll be registered as a voter in New York! After registration, which ends March 25th, show up to the polls on April 19th or fill out an absentee ballot earlier and vote without even leaving your house! This election could very well be the difference between 20 years of record low turnouts and a revitalization of our democracy. I urge everyone to be a part of it. \Diamond

COOPER STANDS WITH JNU

KAVYA UDUPA (BSE '19)

American college students started to really exercise their First Amendment right to freedom of speech in the 1960s, in protest of the Vietnam War. Similarly, students from all over the world have used this right to free speech to express their views on issues in their own campus or, on a larger scale, national and global issues as well.

Likewise, in New Delhi's Jawaharlal Nehru University (JNU), students were arrested for exercising their right to free speech and taking the less popular stance by protesting certain controversial issues in India. On February 9, 2016, students from JNU's Student Union protested the deaths of Maqbool Bhat and Afzil Guru and this protest was what caught both national and international attention.

Maqbool Bhat founded the terrorist group Jammu Kashmir Liberation Front and was arrested in Pakistan for leading the 1971 hijacking of a passenger plane to Lahore, Pakistan. Bhat escaped to India where he was captured and sentenced to death for his crimes; he tried appealing his conviction, but the petition was rejected. Afzil Guru was convicted of being a key conspirator in the terrorist attacks on

the Indian Parliament on December 13, 2001. He was sentenced to death for his crimes and though he appealed this decision, the sentence was reinforced by the Indian Supreme Court and Guru was executed in 2013. Both men were supporters of Kashmir's right to self-determination which the JNU students also supported, so as a result, the students protested their deaths. On a larger level, the students were voicing their dissatisfaction in how the Indian government has handled and is currently handling the sovereignty of the Indian state Kashmir.

JNU Student Union's president Kanhaiya Kumar was arrested on the charge of sedition for what many officials claimed as "anti-nationalist" beliefs and this is what sparked protest literally all over the world. The student union is affiliated with the Indian Communist Party, which came out to support the students after Kumar's arrest. Many JNU students also protested for the Delhi police to leave the campus and release Kumar. Many students believe that Kumar's arrest is a direct infringement on a student's freedom to dissent, whereas various politicians in India believe that the government has the right to punish anyone who advocates anti-nationalist slogans.

"It really struck a chord because I've come to realize that to be an activist in India is life threatening, which is regressive to any society."

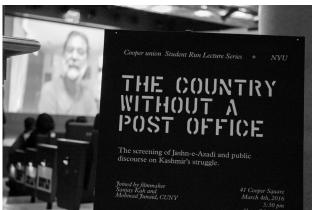
Anamika Singh (Art '17)

Colleges all over America are protesting what is happening in JNU as well. Cooper Union, along with NYU, joined the protest by holding a sit-in at Washington Square Park on Saturday, February 27. The event brought awareness to what was going on in JNU and to show support to Kumar and his fellow protestors. Each person who attended the event was given a packet consisting of various passages that were presented in the rally. The students first presented a translation of the speech that Kumar was arrested for, followed by an Urdu poem Bol Ke Lab Azaad Hein Tere, which tells the readers to not be afraid to voice their opinions. They also presented an excerpt from a suicide letter of student Rohith Vermula, whose

death sparked an outcry in colleges all over India for a better treatment of Dalit (lower caste) students. This is in protest of the caste system that, though it is officially eradicated by the government, still exists socially.

NYU and Cooper students continue to bring awareness to what is going on at JNU by hosting various events. On March 4, 2016, Cooper student Anamika Singh (Art '17), a key coordinator of the sit-in in Washington Square Park, organized a screening and discussion of Sanjay Kak's film Jashn-e-Azaadi/ How We Celebrate Freedom. The film describes the reality and consequences of the turmoil in Kashmir and sheds light to why the JNU students protested what was going on in the state.

Singh recounts "my involvement with JNU comes from a rather simple place of rejecting fear. When I began hearing about JNU, it really struck a chord because I've come to realize that to be an activist in India is life threatening, which is regressive to any society." Basically, the NYU and Cooper students wanted to show how college students are voicing their opinions in India and how it is not wrong for them to share what they believe in.





Photos by Christine Huh (Arch '18).

Ultimately, JNU students, together with students from other colleges all over the world, are all voicing that it is not right for the government to arrest people for voicing what they believe in. In democracies like India, the freedom of speech is given to each citizen and, as a result, each citizen should be able to exercise this right. ◊

GRAND STAIRCASE REFUSES TO TOUCH THIRD RAIL

MATTHEW GRATTAN (ChE '19)



Photo by Winter Leng (ChE '18).

Building is the Grand Staircase, which stretches from the ont noticed this nuisance, give it a try. It is a tricky game first floor lobby to Frankie's café on the fourth floor. It is also arguably the most hazardous. The staircase has notoriously been the site of few slips and falls, some of which have been caught on security camera. In one particular video from 2011, a student begins to fall down the stairs but is fortunately caught by another student, preventing serious injury.

In a 2009 architecture review published in the New York Times prior to the opening of 41 Cooper Square, the author Nicolai Ouroussoff, writes that a "subtle but important problem is the depth of the treads on the grand staircase." Besides being "hard to sit on," Mr. Ouroussoff, remarks that, "they gave me vertigo when I began my descent from the third floor."

At its widest, the staircase measures around 20 feet. According to Professor Wolf, the Campus Safety Coordinator, "if you were to look up ordinary code requirements for staircases, there's only so much width you can have before you need [additional] handrails." The Grand Staircase goes 'far beyond" that limit. So how has it evaded having a third handrail down the center? Technically, it's an ornamental staircase designed by the building's architect Thom Mayne from architecture firm Morphosis.

Additionally, the side handrails already in place do not run orthogonally to the stairs. That is to say if you are using the handrail, you might find that the railing is angled inward or outward from the staircase, which forces you to ascend or descend at an awkward angle. This poses a potential tripping hazard for those who depend on railings to negotiate stairs.

If you have ever used the hand rails, you might have noticed that the metal rods, which support it, stick out at odd angles and force you to

One of the most iconic features of the New Academic pick up your hand to move past the support. If you have to play.

> The stairs themselves are constructed from polished concrete, which is nearly too slippery for conventional use. For those who know a little physics, the polished concrete stairs have a measured coefficient of friction just above the minimum acceptable limit, "but that was on a dry day," added Prof. Wolf.

> Furthermore, since the grand staircase is ornamental, it cannot be used as a means of egress in the event of an emergency. In fact, gates will drop down to block access to the grand staircase and route people to the proper exit staircases.

> Despite its ornamental status, there have been initiatives to install a third rail for quite some time now. Both a recent interview with Prof. Wolf and an interview with former Vice President T.C. Westcott in the February 2012 issue of The Pioneer suggest that there were concerns about safety seemingly since the staircase was constructed.

> Plans for the third rail seemed to gain momentum in early 2012. According the interview with former Vice President T.C. Westcott, the "worst case" scenario was that the new handrail would go up "in the summer" of that year. In

March 2012, the official grand staircase handrail design by Thom Mayne was published in The Pioneer alongside exceedingly creative student designs. (You can find the designs published in The Pioneer at pioneer.cooper.edu in Volume 91, Spring Issue on pages 7 and 12.)

It seemed that finally the Grand Staircase would have a functional waterslide, or a grinding rail for skateboarders, or at the very least a safe and easy-to-use railing down the center. However quite apparently, such was not the case. According to T.C. Westcott in The Pioneer's follow-up interview from October of 2012, Cooper at that time was still "on the eve of getting the final certificate of occupancy" for the New Academic Building. Because obtaining a final certificate of occupancy is a lengthy process, which requires there to be no open work permits (among several other things), the administration was hesitant to file such an extensive work permit. That final certificate of occupancy is still pending even today, according to Professor Wolf in an email.

The paperwork was not the only impediment to the third rail. According to an interview with Prof. Wolf, The Cooper Union reached out to several engineering firms to contract Thom Mayne's handrail design. All of them turned down the job. The issue is that the potential rail would ideally have to be tied into the steel underlying the grand staircase, but that steel is difficult, expensive, and time consuming to access. A suboptimal alternative would be to drill holes in the preexisting concrete, install the railing, and backfill with more concrete. Extensive use would cause this alterative solution to wobble over time.

According to Prof. Wolf and confirmed by Jody Grapes, former Cooper Union Facilities Director, the third hand rail was ultimately turned down because the job itself was complicated and expensive and the Cooper Union administration at the time was "not eager to delay [the final certificate of occupancy] for the building by opening another job that would have to be filed."

Since Cooper's final certificate of occupancy for 41 Cooper Square is still pending, any new plans for a handrail may have to wait until later. Until then, let's hope there will either be very few tumbles or very agile Cooper students. ◊

THE BIGGER PICTURE ON KESHA

KAVYA UDUPA (BSE '19)

Today is March 7, 2016. Ninety-six years since the Nineteenth Amendment was passed and women were granted the right to vote. Fifty-three years since the Equal Pay Act was passed and women were guaranteed the same salary as men who held the same position. Despite these monumental jumps in gender equality, women, like Kesha, are unable to comfortably pursue their careers because they live in constant fear of being sexually harassed or assaulted in their respective workplaces.

For those of you who don't know, Kesha is in a legal battle with her producer, Dr. Luke, who she accused of drugging and raping her. Kesha wants to stop working under Dr. Luke because of what he has done to both physically and mentally harm her but this is in violation of her contract. The court ruled that she cannot break the contract she has with Dr. Luke and his label, Kemosabe Records, which is owned by Sony. The problem right now is that Kesha does not have any physical proof, like hospitalization records, that Luke sexually assaulted her and as a result, New York Supreme Court Justice Shirley Kornreich stated that Kesha is essentially trying to get out of a contract that is typical to the musical industry. Sony has offered a compromise in that they are allowing her to work with other producers but Kesha is not comfortable with the idea, as she will be working in close proximity to the man who assaulted her.

It is understandable that the court wants hard evidence in support of Kesha's claims to rule in her favor, but it is still unsettling that there is such a large emphasis on there being proof to support her claims. I am not saying that numbers are not necessary statistics and records are very important to the American legal system as it provides legitimate support for claims that may seem controversial. Kesha claims that Dr. Luke threatened to ruin her career if she ever revealed that he was sexually assaulting her, yet she still had the courage to file a lawsuit against him. I realize it may be controversial for me to say this, but I feel that there is legitimacy to her claim and that this appeal to pathos cannot be ignored because of the lack of hard evidence.

Kesha's story is not unique; yes, she is a celebrity and yes, she has the likes of Taylor Swift and Lady Gaga supporting her, but ultimately, what is happening to her is happening to millions of women across the nation. So many women face sexual harassment and/or assault in their workplace and so many women are unable to be open about what they are going through on a daily basis. Why? Because these women either do not have the money and resources to explain what is happening to them and hire a decent lawyer to support them in court, or they simply do not have the courage to be open as they are afraid of the consequences. Kesha had the money and resources to appear in the public eye but she is definitely facing negative consequences for doing so.

Ultimately, Kesha's assault has made singing and producing music, something she loves, a living hell. She has made it very clear that she will not continue producing music if she is unable to break from her contract with Sony. How can we, as a society, tell women to be open about their experiences regarding sexual assault when Kesha's life is literally falling apart because she had the courage to be open with what happened to her? The court ruling against her has proved what so many women feel; there is no point in going to court or being open about sexual harassment when the judicial system and society in general are so hung up on hard evidence, like records or numbers, for proof. In order for such an issue to be recognized as the epidemic it truly is, we as a society need to be able to discern when and where physical evidence is truly needed. We need to prove to women, like Kesha, that their communities welcome, and ultimately believe, every word they say in regards to their assault. ◊

"TALENT" SHOW REVIEW

TOBY STEIN (CE '18) | PHOTOS BY SAGE GU (CE '19) & SIMON SHAO (ME '19)

Let's talk talents. Now I know what you're thinking, this is Cooper Union, we don't have talents besides art, architecture and engineering, but let me tell you something, you are certainly mistaken; we have many talents, some of which will be discussed in this article! In classic fashion, the familiar faces of Gavin Kaplan and Sam Zhang opened the show on Saturday March 5 with their educated humour consisting slapstick comedy and poop jokes.

After their introduction, where Gavin asked the question we've all been wondering: 'are they siblings or are they dating?', Clarisse and Justin Poserio serenaded the audience back to their childhood with familiar renditions of Hakuna Matata, The Kim Possible theme song and The Fairly Odd Parents intro. After a brief interruption by Chris Panebianco demonstrating his strength and pizza eating skills, we were brought back to action with arguably the most impressive performance of the night. To say that Joe the Juggler did not drop the ball would be an understatement, as, well for one, he did not drop a single ball, but beyond just that, he also managed to enthrall the audience with his humorous juggling routine set to catchy music. What came next was a cascade of impressive performances: musical firstly Gene Lam courting the audience with a composition of her own, followed by Sam Zhang and Jessie Wu's compelling performance of "Anitra's Dance". Gene's performance was met with approval, as more than one audience member was heard saying "ok, we get it, she's good". Similarly, Sam and Jessie's performance did us all a public service teaching all of Cooper what an oboe sounds like. Who knew?

Done with the musical performances, fear not because the trio of Calvin Liu Maureen Anyanwu, and Peter Wang set the stage on fire with their smooth, sexy and specific moves. Gavin and Sam warned us all that each year Calvin and his associates try to seduce us, and yet, the warning fell on mute ears, as more than ten people reported a warmer auditorium after the trio's

performance. Soon after Josie Lomboy's performance of Adele's "Hello" reminded us that underneath the façade of pop music, Adele's piano masterpieces reign supreme.

A perennial powerhouse, the juggling club then stormed the stage performing a variety of juggling feats involving pins, balls, and multiple people. Last, and almost certainly least, came the fine gentleman of Pen15. Performing for his multiple wives, Kenneth O'Neil's fingers danced across the piano keys as Howie Chen strummed both the strings of his bass, and our hearts. Alternating between drums and vocals were Anthony Traina and John DiBattista, enthralling the audience with their strong arms and smooth

Suffice to say, the talent show was, yet again, a huge hit, and this time, it was for a great cause. After the show, Sam was quoted saying "it'll be bigger and better next year", certainly the case, as Sam and Gavin are graduating and thankfully won't be back next year. ◊

THIS SUMMER WAS GREAT (CONT'D)

EMMA FAITH HILL (Art '17)

(Countinued from next page)

Since the media is often the main way in which a figure or event becomes an icon, it has a major influence over what we deem "visible" or "real" in the physical world. In some ways, media like movies, online platforms, memes, and news sources are writing our history.

Lulu: "We both find this kind of hilarious, and you can also call it kind of lazy, idea of there being justification in repetition. Like an idea becoming real and becoming whole by being presented over and over again until it's beaten into you"

It feels like it would be an injustice to their work to write all of this with such a serious

tone and not mention the crucial role of humor; The strange and comical is quietly running the engine in many of their pieces. History, memory, and symbols like guns, cars, and landscapes are loaded with heavy content but their refined sense of humor keeps the work at a level that is approachable. For instance, one of Jasper's paintings featured a Shithead-esque figure in the foreground with dark shadowy planes looming and a shape of jutting pink behind it. It seems like the figure is in the midst of an existential crisis, as the form is in a completely undefinable space. But then, the painting is titled Club, and a little bit of space appears for you to step back an smirk along with the piece. ◊

MILES OF MOVIES

MILES BARBER (CE '18)

Zootopia is the latest Disney film and the first in two years. Disney Animation took last year off, theoretically to make this film a winner. That paid off. Zootopia is about Judy Hopps, a rabbit who wants to make a difference in the world. She's also strongly against prejudice and stereotyping, trying her hardest to combat these two by becoming Zootopia's (it's a city) first rabbit police officer. Unfortunately, her dreams are slowly crushed by the ridicule she faces as a rabbit officer in a world full of huge animals. That begins to change, however, when seemingly normal animals begin to go missing, with reports of their sudden, vicious attacks. Judy gets a lead on the case when she tracks down Nick, a sarcastic fox, and their story gets going.

Zootopia isn't amazing because it has great humor, a fantastic story, suspense, and real heart. It's amazing because it delivers a very relevant message through all of those things. Moreover, Zootopia's story highlights some of the inherent difficulties presented in confronting the unclear issues of prejudice and stereotyping. The movie does such an excellent job of showing how the characters of Judy and Nick have both suffered from these issues in two, scary and heartbreaking scenes. It also shows just how differently they handled their situations. It's important to note the use of "scary" when I described the scenes, because stereotyping is incredibly scary for its victims. Zootopia amazed me with its lack of pulled punches, something so many family films do. There are so many times when this film could have been less impactful by cutting away from a scene or lessening it, but it never did.

There is really great suspense in this film,









the likes of which I didn't expect and haven't seen in quite some time. The humor was really on point too. There is a scene featuring Nick, Judy, and a pen that had me absolutely in stitches. The humor was everywhere it needed to be in the film, and many of the jokes were recycled to great effect.

I also happened to really like the animation of this film. The city of Zootopia has several different zones, acting as different types of environments. They all look amazing, and the scene in which the city is first introduced looks spectacular. These are really just icing on the cake for me, because this film won me over with its maturity and subject material.

The only thing I can say that wasn't up to par in this film was its musical score. There are a few scenes in this film that would have been much more effective without any music at all, such as the scene in a warehouse that is supposed to be tense, but is nearly ruined by the music. Still, this issue far from ruins the film for me. I left this film with a huge smile on my face and was very impressed in almost every way. It is definitely the best film Disney Animations has put out in some time, and is a film I look forward to seeing again. ◊

Total: 9 ½ / 10

THIS SUMMER HAS BEEN GREAT

EMMA FAITH HILL (Art '17)

On February 23 the seventh floor of the Foundation building was taken over by Art school Juniors Lulu White and Jasper Marsalis' thirty-some pieces. The work presented took on many, many forms; large to small scale oil on canvas paintings, plaster paintings, a drawing on computer paper, embroidery framing transfer photos, and sculptures in the window, on the floor, and resting on the architecture of the lobby.

In Lulu's work the concept of symbols is presented through the use of common imagery such as pants, checkers, ducks, and dogs. These images and symbols are often isolated in the forefront of the composition, lending themselves the immediacy of visual learning tools such as icons or signage.

Lulu: "What I like about using these icons repeatedly is I think of using them as these enigmatic symbols that are indicative of some experience that is not necessarily shown. It's like when you think of a memory—what does your brain exclude in the formation of the memory? I think of these objects as figureheads for something you remember as a way to collect back the information you took out of the experience"

History and memory are often formed from a singular perspective. When the past is presented as an object, like a memory, made of composed fragments it becomes negotiable and unclear. Symbols have often been used as tools to navigate and chart this kind of enigmatic past. From hieroglyphics to temporal memes, images have helped to record events, actions, and the everyday (which can prove to be the most confusing of all).

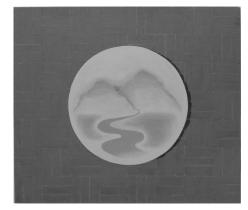


Reflections on history and memory are tightly built into Lulu's "marker pieces." There were three markers presented in the show, each one a sandy colored mountain shape standing a few inches off the ground with the help of national park green legs. Appearing from each mountain shape, is a common image such as plants or a checker pattern. The images that appeared on the forms felt like they had been pressed into the material many, many ages before. Yet, the symbols used are common and contemporary.

Lulu: "I was thinking about places where there are signs set up that are suppose to inform you of where you are and make you think about a history while you're there, to inform the space, but it's only one history and it's suppose to define your experience there. Like a trail, like a nature trail, and there's some state funded sign that's been put up and its always like these colors, like this national park green"

The effect of these pieces is a mixture of past and present; as you walk by you may miss the image within the frame, but with a second look you may observe the information it presents. Parallel to Lulu's works which prompts connection between visual

language as a learning or remembering tool, Jasper's work proves to use symbols as a tool for discovering his own world.



Jasper: "This piece Lookin is actually apart of a narrative, or a world, I guess that doesn't really have a clear explanation. It's not like my hopes are that someone will look at this and be like, 'oh, yeah!'. It's this huge story I can go back to and for me internally, it's this thing to build paintings up. So this guy sitting in the car smoking a cigarette is Shithead's cousin (points to work on another wall), because they both have the same head shape and the guy whose in the car is also that guy in the car (points another work above the elevator."

The repeated forms in Jasper's work, such as the palm tree or Shithead's form, are a way to navigate the enigmatic world he is building. The world featured in this show exudes energy like that of a wasteland or if a middle-schooler's sketchbook got poignant, poetic, and possessive. I say possessive in the grammatical sense that Jasper's forms and shapes claim the object or image they work from. For instance, Jasper repeatedly uses the form of guns in his paintings and sculptures, but they are never crisply clear. In fact, on the opening night, Saskia Bos, Dean of the School of Art, referred to one of his "shooters" as a dolphin. To me, this interaction highlights the ever-shifting images you may observe in Jasper's shapes and forms.

A common tie between both Lulu and Jasper's use of symbol is how they pare down their images to the necessities of the form they are depicting. The pants on one of Lulu's "markers" only requires the shape of a rectangle splitting in two for you to recognize them as pants. Both artists' work does not accurately describe the object they are presenting, but rather depicts the essential elements necessary to "read" or understand the shape or form.

Jasper: "A suffix that's very important to me is "ness"—like happiness or madness. Those things suggest, not like, I'm mad, but more like, it's on the brink. Like madness is a value kind of, so when I'm making something I think about that. Like, "gunness."

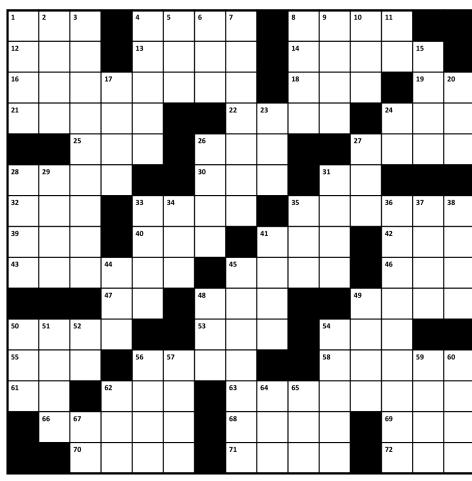


Lulu: "When you have a memory playing out in your head you really think about what it is. It's not necessarily an accurate three-dimensional space—it's like a table and a chair and the thing on top of the table and that's just like a generic example and somebody's voice and maybe a time of day but you're brain isn't going to be able to actually re-create that unless you have some crazy like genius photographic memory. But the memories that play out in your head usually involve a limited set of elements. Those are the things that orchestrate that memory playing out in your head"

The idea of "ness" seems especially con-

CROSSWORD PUZZLE

TOBY STEIN (CE '18)



ACROSS:

39. French shooting range

41. Tech support Cooper

43. Crossword will have

fewer errors, we have a

28. Lifeboat

30. EE class

vour father

email

new...

40. Female deer

42. Flightless bird

45. Port direction

31. Prefix to negate

- 1. Determines speed of light in a material
- 4. Family
- 8. Indonesian island
- 14. Absorb information
- 16. Change in hand
- 18. URL ending
- 21. To change, to edit
- 22. Latin, therefore
- 24. Jack and the Beanstalk
- 25. Top level bond rating
- 26. What you say standingg
- homophone
- 1. Ancient tribe from South
- 4. King of the snakes
- 5. KONY 2012 army

- 10. Jet
- 11. Sports holding place
- 15. Require

nected to Lulu's interest in memory. Lulu's

works depict unrealistic spaces that call

upon something real. In Middle School In

a Dusty Place, Lulu lays down a pattern of

reddish orange brick with a hovering circle

overtop. Within the circle is a very basic

landscape. Nowhere in the work is there

text or a specific depiction of geographic place; but the work's spirit seems attuned

to that of the west coast or the dull visuals

and colors one sees in a grade-school. The

piece includes only four visual elements:

the brick pattern, the circle, the drop shad-

ow, and the generic mountain landscape.

Each parts plays a specific role in creating

the overall mood of the painting(/memory).

While talking to Lulu about the effects of

repetition, she brought up many results

such as finding variation, gaining stability

by returning to something, as well as so-

- 23. Fishing gear

- 32. Baseball stat 33. Unattractive 35. Exclamation toward
- 12. Gun supporting org.
- 13. Whale

- 19. Phone home

- giant excl. Pt. 1
- at 21 across'
- 27. NBA guard, Jason

America

- 2. Vocal
- 3. Abrahamic belief developed in Jamaica
- 6. College Basketball
- Conference 7. To do without clothes
- 8. Online journal
- 9. Built for speed
- ___ messing up my internal clock
- after an injury
- 17. Cooking direction 20. Wahlberg's teddy bear

lidification.

- 46. Text abbreviation, my
- life sucks 47. Above

DOWN:

- 24. Jack and the Beanstalk giant excl. Pt. 2
- 26. Unused
- 27. Opens doors
- 28: Neural Network
- 29. Desert like
- 31. US 19.3 trillion dollars
- into...
- 33. St. Marks noodles West
- 34. British archaic
- exclamation 35. Nominated into as one
- all time
- 36. Tom Brady accused for..
- 38. "___ Noted" expression
- 41. Ernie's counterpart 44. The best type of tater
- of the greatest of 37. Gun's projectile

- 48. Gooey street material
- 49. Scheme
- 50. To joke
- 53. NY time zone
- 54. Party in Boston
- 55. North south streets
- 56. 51 contains aliens. Duh.
- 58. Italian Vodka brand
- 61. Us
- 62. Prefix, -thermal -bar -late
- 63. Give me just the
- 66. Himalayas homeland
- 68. Korean: Tree, Latvian: house
- 69: Always watching
- 70. No. 71. Eve's partner
- 72. Gallium Nitride

45. Layered Italian noodle

- dish 48. Golf peg
- 49. 1 down's country of
- origin
- 50. Mandible 51. Childhood show
 - Stevens"
- 52. Compass bottom right
- 54. Channing 56. Right away, abbrv.
- 57. Stage persona Boy/Girl"
- Exclamation
- 60. Printer Blue
- 62. Wall St. debut
- 64. Skater exclamation 65. Doctor's organization

Lulu: "When you are shown something over and over and over again it forms meaning and you just except it because it's there all the time and it's ever present"

Our digital life is often one of our primary ways of gaining knowledge about what is happening in real life. For instance, we are in the midst of a presidential election and our timelines, online news sources, blogs, and social media platforms are flooded with statuses, videos, pictures, and memes of the current candidates. When we are exposed to their images over and over again they become (for better or worse) icons. These icons take on a crucial role in how we view the world, and weigh a great deal on how we form our thoughts, opinions, and memories of histories.

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