Editor-in-Chief Saimon Sharif (ChE '15) Assoc. Editors Joseph T. Colonel (EE '15) Caroline Yu (EE '15) Logistics Manager Taehyeun Park (EE '15) Artistic Director Taylor Woods (Art '15)



CONSEQUENCES FOR THE PING PONG BALL DROP

MARCUS MICHELEN (BSE '14)

On December 3, 2013 students from all three schools dropped over 2,000 ping pong balls down the Grand Staircase in protest of the proposed changes to the Code of Conduct. While the event did not injure anyone, five students were called to a judiciary hearing by Campus-Wide Safety Coordinator Alan Wolf. In a judiciary hearing, the accused are brought before a panel of three students---one from each school---and two administrators along with the complainant. This panel decides the punishment given to the accused.

Two of the students---Maja Griffin and Martina Cox, both Art '17--- accepted 50 hours of community service as a punishment, rather than having to attend the judiciary hearing. Two other students---Harrison Cullen (BSE '15) and Pete Halupka (Art '15)---attended the hearing and received 45 hours of disciplinary probation. The fifth student, Aaron Kuhn (Art '14), did not take part in the action and was falsely accused of doing so by complainant Wolf. In a statement made public by Kuhn, the student stated: "I wasn't anywhere near the site of the incident when it happened. I had nothing to do with it actively or passively. Actually, I wish I had." Kuhn later speculated as to why Wolf named him as a participant, listing one of the possibilities as "The administration is devoting so much time and energy to collaring and penalizing students for what was indeed a very silly and harmless action that they, in their exhaustion, have hallucinated my presence in the security footage."

In a statement read aloud at the judiciary hearing, Harrison Cullen notes that he and Pete Halupka "have prepared a petition to which thirty-seven members of the Cooper Union community have attached their signatures, thus formalizing their own involvement in the ping pong ball drop." In his statement, Cullen took issue to Wolf's complaints and questioned the Safety Coordinator's motives: "While it is possible that Alan Wolf's accusations are founded upon sincere concern for the students of the Cooper Union, his recent history as Campus-Wide Safety Coordinator contradicts this notion." Cullen cites Wolf's involvement in "restrict[ing] access to restrooms and water fountains while simultaneously blocking fire exits with private security guards, which occurred last May during the occupation" among other incidents. In a similar statement read aloud, Halupka closed with a statement to Cooper students: "We have to be reminded of what we value before we stand up for it. You compose this place. I was reminded looking at my peers in the hearing today that the students united will never be defeated." \diamond



Photo Credit: Vincent Wai Him Hui (Arch '15)

FACES OF COOPER: **BETSY ALWIN**

ANAMIKA SINGH (Art '17)

The Cooper Pioneer recently sat down with Betsy Alwin, a technician in the sculpture shop and adjunct professor in the School of Art.

The Cooper Pioneer: Where are you from? Betsy Allen: Mound, Minnesota.

TCP: Can you tell me about your educational and professional background? **BA:** I went to Undergrad at Viterbo in Wisconsin and Minnesota State University earning both a BFA and a BA in Spanish language. I studied for a semester in Madrid, Spain and went to Illinois State University to earn an MFA.

TCP: When did you first learn about Cooper Union? **BA:** From my roommate at Illinois State Spring Ulmer, who graduated from Cooper. **TCP:** What brought you to Cooper Union? When did you start working at Cooper? BA: Spring introduced Illinois State to Matt King, who was a shop tech at the time. He came as a visiting artist and encouraged me to apply for a job at Cooper. I started September, 2001.

TCP: What is your role in Cooper? What is your department's role in Cooper? **BA:** I am both a Technician in the sculpture shop and an adjunct in the Art School teaching Casting Techniques with my colleague, Andrew Wilhelm. As shop technicians, we make sure everyone learns how to use all the tools in the amazing shop in the Foundation Building and we make sure everyone can complete their projects safely. We are also often there for moral support.

TCP: How much do you like your job at Cooper? **BA:** I love this job!

TCP: What advice would you give to Cooper students? BA: Travel as soon as you can and often. See the world and experience cultures different from your own.

TCP: Who is your favorite professor at Cooper? Why? **BA:** Out of deference to my colleagues, I'll simply have to say...myself.

TCP: What are some of your hobbies?

BA: No hobbies. I have an art career that takes all the energy I can give it.

TCP: Do you have any closing remarks? **BA:** If you'd like to see my work, my website is www. betsyalwin.com

NEO NEW YORK

ANAMIKA SINGH (Art '17)

For the past couple of weeks, Cooper students have found themselves stopping near the large glass panels in the NAB that overlook the gallery space of LL1. Curious students and faculty peer down to see tables, projectors, stickers and quirky looking individuals at a convention of sorts. This is NEO NEW YORK, as the large label on the windows across suggests.

"NEO NY is focused largely on redefining visual thinking and conceptualization."

NEO NEW YORK is a Cooper Union-based workshop that aims to educate and assist creative students through a series of lectures, portfolio reviews and meet-and-greets, culminating in a final exhibition hosted on February 15th. Through an application process, NEO NEW YORK picked workshop participants, many of whom are Cooper students. NEO NY is focused largely on redefining visual thinking and conceptualization.

Workshops were headed by prominent designers, artists and innovators such as Paul Sahre, Maja Cule, Jake Yuzna, Alexandra Gorcyznski and Marisa Olson as well as the NY-based trend-forecasting group K-Hole. The Pioneer spoke to Virginia Commonwealth University Graphic Design student Michael Walker who attended NEO NY about his experience. Walker states, "I found my NEONY experience to be an engaging exploration of objects, methods, and ways of thinking. Collaborating with international students via a system of small groups created tiers of interaction; it made it so that I could focus intensely on one subject in my group and learn from the way other groups engaged with their subjects."

In a progressively virtual and visual world, workshops such as NEO NY at the Cooper Union truly work towards the advancement of Art, spearheading the changing ways that designers and artists define the way we perceive and depict. ◊

Vincent Wai Him Hui (Arch '15)





JAKE POTTER (ME '16)

EPISODE TWELVE





FACES OF COOPER:

IRV BRAZINSKY ALLISON TAU (ChE '15)

The Cooper Pioneer recently sat down with Professor Irv Brazinsky to discuss how he became interested in Chemical Engineering, what brought him to the Cooper Union, and his advice on learning engineering.

The Cooper Pioneer: Where are you originally from?

Irv Brazinsky: Well I was born in Manhattan right here at Beth Israel Hospital, and it's right across the street from where I went to high school at Stuyvesant. I think my parents were living in Manhattan at the time, and I moved to Brooklyn when I was two and a half. I didn't leave Brooklyn until after I graduated from Cooper Union, which was at age 21, and then I went to live in Cleveland for a summer. I've been around to some extent, I lived in Bethlehem, Pennsylvania for a year, I lived in Cleveland for a few years, and I lived in Boston for about ten years, and then I came back to Jersey. So, New York City area. But you could say I'm from Brooklyn.

TCP: Could you tell us a little bit about your educational and professional background? **IB:** [I went to] public school, first through fourth grades, Hebrew Parochial School, fifth through eighth, then Stuyvesant High School, Cooper Union undergraduate, Master's at Lehigh, and PhD at MIT. I worked for the National Aeronautics and Space Administration for a few years in Cleveland between Master's and PhD, then I worked for several companies after MIT: Polaroid, Celanese, Foster-Wheeler, and I'd say I have about twenty-five years of industrial and government experience. Then, about thirty years at Cooper Union, late career, no, mid-career.

TCP: So what made you choose engineering and what do you like about chemical engineering?

IB: Well, originally, for some reason, I remember wanting to be a chemist. And in high school, my classmate Jack Fried said, "Oh, you should be a chem. engineer, because you like math, you like physics, [and] chemists don't get into that," of course he was wrong, and then, he told me about Cooper Union. So here was the chance to go to a great school and be an engineer. So the fact that Cooper Union offered engineering, and there was a heavy math and physics component made me decide to go into chem. engineering.

"...he told me about Cooper Union. So here was the chance to go to a great school and be an engineer."

TCP: How do you think Cooper Union has changed since you were a student? IB: Well, in some ways it's

changed a lot and in some ways it's stayed the same. First of all, there's a master's program, there was no master's program when I was here. So that has led to research, and this research has filtered down to the undergraduate level.

TCP: What brought you back to Cooper Union and when did you start working here? **IB:** I started working here in 1985. Actually, what brought me back was, well, I was working in industry and I used to ride the bus with a guy name S.I. Cheng. We got to talk, and you know, I was coming out of New York and he was also, and it turned out that he was a professor at Cooper Union, so we had a lot to talk about. And then, he felt that I would fit in with the chemical engineering department, given my background, so he convinced me to apply to Cooper Union. So I applied, this was about 1984, and lo and behold, I got the job. I had to think long and hard about whether I wanted to change the focus of my career, from working in industry, doing design, and that's one of the reasons Cooper hired me. And it took me a while. It was a good career move at that point.

However, I couldn't leave right away, so I remember making the commitment during the summer of '84, but I did not come to Cooper until fall of '85. During that time there was a lot for me to finish up at Foster-Wheeler, which included three months in Dublin, Ireland working, basically, on Splenda. And we worked on the pilot plant to produce Splenda in a suburb of Dublin. After I came here in '85, I must have spent about ten years consulting for Foster-Wheeler. Mostly the process I consulted on was the decaffeination of coffee using supercritical carbon dioxide. When I first came to Cooper, I used to give a lot of problems in thermo on that, not so much anymore.

TCP: What is your role at Cooper? What is your department's role?

IB: Chemical engineering, I believe, was the last of the engineerings to be formed at Cooper, in the late '30s. Chemical engineering is a very versatile engineering, the others are too, but I believe chemical engineering is the most versatile. That's kind of the role of chemical engineering: to supplement what the others do. A lot of people originally didn't even think of chemical engineering as engineering. Industrialized chemistry, maybe, and that was the role in society.

The first few years I was here, '85 to '86, we had core curricula with curriculum coordinators. But we received a disastrous ABET review in '85; I was here for about a month, and I was really shocked and I didn't really know what was going on. And what they decided was that they would have more distinct departments. And they brought in a new dean, Eleanor Baum, and I think she's an expert on ABET. And after she came, the whole school did great. During my early years here, the chairman of the department was S.I. Cheng. He was chairman from when we reestablished departments, from '86 to '89, then he retired and I became chairman until this past year. Twenty-five years, that's long enough.

TCP: How much do you like your job here at Cooper? **IB:** I really like it very much. I look forward to it every morning despite my fivehour round trip door-to-door commute. I like the teaching, I like the research, and it's really good interacting with the students that we have here. You can see that some of them are really interested in what you're saying. And the research; I just came from a Cooper Cooler research meeting.

TCP: What advice would you give to Cooper students?

IB: Same thing I say in class: you're not here to learn how to plug into a series of formulas; anyone can do that. You're here to learn how to learn, [and] to understand what engineering is about. Engineering is very sciencebased, so pay strict attention to your math, physics, and chemistry courses. You get a lot of math, physics, and chemistry here; I think within each one of them, you're probably a couple of courses short of what you would need to get a degree at other schools. Pay attention. Learn, don't just memorize. And when you start getting into your initial fundamental engineering courses, which you do in each of the disciplines. Again, attack them not as a series of formulas, as you guys say, to plug into, but to really understand what you're doing and learn how to apply. Learn how to think like an engineer, rather than be a grind. Oh, and don't be afraid, when you go to grad school, to go for the best. Ultimately, what you can do because you went to Cooper Union is so good, and that will get recognized individually. So don't get discouraged. You've gotta keep your chin up.

TCP: Do you have a favorite professor or colleague at Cooper?

IB: I kind of like most of the professors here; I don't know that I should mention anyone in particular. Alright, I'll menand Dean Baker was the tion a few. Jameel Ahmad, and the reason I'm going to mention him is because, when I was deciding whether to come to Cooper Union or not—and I took six months I can't really do anymore, to make that decision when I was offered the job-Jameel Ahmad from Cooper Union I love Broadway theater came and gave a presentation at Foster-Wheeler. I was very impressed with him and I said, you know, maybe expensive. I should come to Cooper TCP: Do you have any clos-Union. Of course I didn't tell him at the time. And when I showed up I said, "remember Pioneer? me from Foster-Wheeler?" S.I. Cheng, well he's still alive, he's 95, and I really liked him very much. I still visit him occasionally in Toms River, NJ. I kind of like colleagues of mine that I had when I was a to Cooper Union, vou're student: Ellison, in physics, he going to get a good education has since passed away. When for that. I came here, we overlapped

by ten years, and he was a favorite of mine. John Bové, of course, was a tremendous favorite of mine. People always ask: did you have Professor Bové for organic? And I say no. He started teaching in September '58, and I graduated in June '58, so I missed him by a summer.

And then, of course, there's Dean Baker. He and I bonded almost immediately after I started teaching at Cooper Union, and here's why. I played one year of junior varsity and three years of varsity basketball for Cooper in the late 1950s. The varsity coach was Dave Tobey, who had also coached Savage University (a phys. ed. school) to two national championships in the late 1920s (equivalent to Division I today). The star of that Savage University team was "Honey" Baker, Dean Baker's father.

There are many others, but I just mentioned a few.

TCP: What are some of your hobbies?

IB: I do a lot of reading. I read a lot of history, military history, [and] a lot of United States history. Of course [there's also] sports; I can't really play anymore, though I used to play. In fact, in the mid-90s, we had intramurals and I played on the Chemical Engineering intramural softball team [for] two years. I was the second baseman third baseman. We won the championship each of those years. My hobbies used to be playing a lot of sports, which but I still swim for exercise. I watch sports, that's a hobby. music, [and] I love Broadway musicals. I still go to the theater, even though it's very

ing remarks for the Cooper

IB: The thing with engineering is that there are just so many problems in the world that have to be solved. They need very heavy engineering input. I think that if you come



KenKen is a Japanese paper puzzle by Tetsuya Miyamoto much like Sudoku, only it involves both math and logic. It roughly translates to "cleverness-cleverness."

Instructions: Like Sudoku, each row and column must contain the numbers from 1 to 6. The number in the upper-left corner of the bolded shape made up of squares is the number you need to get by using the operation next to the number. For example, the "20x" rectangle in the bottom left corner can be filled in with a 5,4 or a 4,5. The unique solution to the last issue's puzzle is reproduced below. This puzzle contains only one solution, which will be released in the next issue.

30×	20×		11	20×
24×		36×		
24×		96×	2-	
12+	1-			
		6×		

3	5	4	2	1
1	2	5	3	4
4	1	3	5	2
5	4	2	1	3
2	3	1	4	5

CRYPTOOUOTE

MARCUS MICHELEN (BSE '14)

A Cryptoquote is an encoded quote. It is encoded such that each and every occurrence of a letter is substituted with a different letter of the alphabet. Using clues such as frequency of occurrence and placement, the original quote can be found. For instance, the word xbdikcxxbz could be deciphered to reveal the word LONGFELLOW.

"U HN EMNMIIMO, MI CMNA XWEWIA KHV, OBHE U ACEHQGUCB EMKHV. U HN EMKHV OBHE U ACEHQGUCBAK VACEAIKHV MI CMNA DIARUMWC KHV."

- JWH WJYOZWB

Last issue's solution:

"It's over, it's over, it's over. It's over! - Roy Orbison"

- Roy Orbison