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Faces of Cooper: Zinoviy Akkerman

TENSAE ANDARGACHEW (ME '15)

The Cooper Pioneer: Where are you from?

Zinoviy Akkerman: Russia. [Well,] it's a bit more complicated [than that]. I was born in what is now Moldova and then I went to the Novosibirsk State University and got stuck there already. So Novosibirsk is Siberia, Russia. So I came here from Russia – proper Russia. Siberia even.

TCP: Can you tell me about your educational and professional background?

ZA: [My] education [was at] Novosibirsk State University. On the outskirts of Novosibirsk there is a very famous little township [campus] called Akademgorodok, with about 20 what would be called in the United States, national laboratories. And there is a university, a famous one, we used to be in. Actually, we [were involved] in research, etc. So that was my educational background pretty much. And after [doing research at] the university, I worked there for 22 years and got my PhD there. And [I] worked [there] on materials research – semiconductors, insulating materials, or what we often called dielectric materials, stuff like this, optical properties etc.

TCP: When did you first learn about Cooper Union?

ZA: 2004. [To be] very specific - hadn't heard about before. I was just uptown at City College. [I heard about it here] and then I went here for a job interview and lo and behold have been here ever since.

TCP: What brought you to Cooper Union? When did you start working at Cooper?

ZA: [I came here] in 2004. That's when I started working at Cooper. And what brought me here actually, [was that] I was switching my career to teaching and I started teaching. There was an ad that I had seen and I applied and, as I said – actually, without any problems I had been accepted to teach here. I didn't have too much trouble fighting for the place [job] but it was very nice and very unexpected. I like it very much here.

Photos by Henry Wang (ME '15)

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

ZA: My role in the department in Cooper currently is pretty much to support Professor Wolf's lectures. In the beginning, I was teaching a couple of courses – I taught Modern Physics. But after a while, and certain developments I am just teaching, supporting I should say, Professor Wolf's teaching electricity & magnetism and mechanics.

TCP: How much do you like your job at Cooper?

ZA: [I like it] very much. It's probably the nicest job that I had. I am teaching at different places, but Cooper is certainly the best place to come to teach. For a simple reason – because of the students.

TCP: What advice would you give to Cooper students?

ZA: Oh, that's hard. Basically [the advice I'd give is] to use the opportunities that are given to them pretty much because they have very good faculty that teach them, they have very good courses here – their future is very bright. So better don't screw it up.

TCP: Who is your favorite professor at Cooper? Why?

ZA: Well I don't interact with many [so] I cannot say anything about them. But I can certainly see that the students are taught well. [Though, again] I don't have too many to compare [to].

TCP: What are some of your hobbies?

ZA: That's complicated. Pretty much, I read a lot. And I used to spend more time, [though] lately less, trying to develop some new problems in physics and this is very difficult. So physics problem composition I should say is still a hobby but, it's a low yield hobby because it's very hard to come by something new after three hundred years of Newton

TCP: Do you have any closing remarks?

ZA: I pretty much said what I thought when I talked about the students and what advice I can give to the students. Maybe I should end on a sour note – my closing remarks are certainly the high school education in the United States should be improved because even the good students that are accepted to Cooper Union lack certain technical abilities. Is it good or bad? [It's] hard to tell by the way, but I think it's more bad than good.

So I think that this comes from very spotty, nonsystematic, high school education – very regional and not standardized. O.K. I admit that it's hard to standardize some of the disciplines, some of the subjects in high school but physics and math certainly should have certain standards that go beyond just the multiplication tables. Unfortunately, this is wishful thinking.

New York Maker Faire

SAIMON SHARIF (CHE '15)

The World Maker Faire 2012 occurred on September 28th and 29th at the New York Hall of Science. It wouldn't be an overstatement to say many Cooper students attended Maker Faire. About 90% of students acknowledged they attended when Professor Wolf conducted an informal survey in physics lecture. Their motivation for attending was likely the same as the majority of the public. Maker Faire is ridiculously cool. Between 3D printers, life size mousetraps, ice cream eating competitions, Phineas & Ferb kites, there's no reason to not make time for Maker Faire.

Beyond being entertaining for a day or two, Maker Faire serves the higher purpose of engaging both the public and children in science and engineering. A bit reductionist perhaps, but the more we engage the public in these fields, the more likely funding for them will increased. Furthermore, I can safely say that many of my fellow classmates would not have gone into science or engineering if they had not been exposed to the fields at a young age. We, as students, should present our projects as makers and inspire the next generation while passing on our passion for engineering and science.

Foreign Exchange Students at Cooper

YARA ELBOROLOSY (CE '14)
HINDI KORNBLUTH (CHE '13)

Despite its small size, Cooper Union still manages to offer students a foreign exchange student program. This year, Cooper Union has five students from abroad studying here for either a semester or a year. Two are from Germany, two are from Spain, and one is from Iceland.

Cooper Union has also established connections with universities at these three countries that allow students from Cooper to study abroad during the summer. We were able to briefly interview three of the students: a junior civil engineer, a senior chemical engineer, and a senior mechanical engineer.

Alejandro Lanuza: Junior Civil Engineer. From Spain

The Cooper Pioneer: What school/year did you come from?
AL: The University of Burgos and I am in my third year. It is technically four years but you have to do a master's degree because without it you can't sign projects so most likely you won't get hired. The master's degree is a two year program.

TCP: Why Cooper?
AL: My university has a student exchange program. Every year there is a vacancy and students can apply. There are other universities affiliated with the exchange program but that involves having other students from the universities coming to my university as well. For example, if I was to study with one of those universities, they would send another kid to study at my university. It doesn't have to be the same degree but the numbers have to match, more or less. With Cooper, it is just our university sending students over and Cooper decides on whether to accept each student.

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Faces of Cooper: Jamshed Bharucha

MARCUS MICHELEN (BSE '14)
SAIMON SHARIF (CHE '15)

It has been about a year since Cooper Union's dire financial situation was revealed to the community as a whole and a little more than a year since President Bharucha assumed his position. Over the course of this year, he has received much indignation as well as praise from members of our community. However, not many members of our community have much knowledge about Jamshed Bharucha: the man. We interviewed President Bharucha for our Faces of Cooper series to get a better understanding of this interesting man.

The Cooper Pioneer: First, where were you born?
Jamshed Bharucah: In Mumbai, which used to be called Bombay.

TCP: What did your parents do?
JB: My father was a civil engineer. A structural engineer. My mother is a musician. They met at the University of Michigan where he was studying engineering, he had come from Mumbai. My mother came from Albany, New York and she was studying music and the rest is history, or biology or chemistry!

TCP: What instrument did your mother play?
JB: She played organ and piano and she conducted choirs. She also composed some music.

TCP: What was your educational experience?
JB: My educational experience was mostly at a school that my parents helped found called The Bombay International School. They and several other couples in the city, many of them bi-national couples, all kinds of combinations got together and said they weren't happy with the schools in the city because they were too traditional, exam and memorization focused. They were single sex. They had the old caning and hitting with the ruler kind of stuff. The boys were caned and the girls were hit with rulers.

So they started this new school called the Bombay International School. And I was the guinea pig and my sisters. I started in that school in first grade and went all the way through. I was in the first class to go through all the way as the school increased. And it was fabulous.

"[I] very quickly got seduced by the liberal arts" - JB

The primary and middle school were based on an American curriculum and high school was based on a British curriculum. It was University of Cambridge O levels. We had to decide starting in the ninth grade between the sciences and the humanities. I picked sciences and it was pretty rigorous. Physics, chemistry and math every semester with a few other elective courses.

I was very much interested in science and my favorite subject was physics, so at one point I thought I would do physics. Then I went to college for a year in India and got some more science and then I started as a freshman at Vassar College and very quickly got seduced by the liberal arts. I studied philosophy and music and majored in biopsychology.

Then I went to graduate school at Yale for philosophy because I was interested in the mind and body problem, which is what I was after when I majored in biopsychology, to put together the biological and the psychological. But then, while I was in graduate school in philosophy at Yale, I missed the scientific side of it so I finished up my master's degree, went to Harvard and got a PhD in cognitive psychology. Today the field would be called cognitive neuroscience. I did a lot of music on the side.

TCP: What did you do your thesis on?
JB: My PhD thesis was on cognitive models on the perception of music. So I was able to combine music with it.

TCP: While you were in grad school, what did you think you wanted to do?
JB: I wanted to teach and do research, so I was pretty clear about that once I started graduate school. That doesn't mean I was assured of getting a job. It's not easy for PhDs to get academic jobs and back then it was really touch-and-go. I think had I not gotten a tenured track job, I would have gone into computer programming. I did a lot of programming on the side, but I was lucky. I got a job teaching at Dartmouth and I worked my way up.

TCP: Did you teach psychology at Dartmouth?
JB: I taught psychology and helped found the department of psychological and brain sciences, which had previously been psychology but we made it more biologically oriented. When I got into administration I helped the department get an MRI machine. It was the first non-medical school MRI machine in the country, for teaching and research which even undergraduates could use to scan their brains and email brain images to their parents.

"Had I not gotten a tenured track job, I would have gone into computer programming" - JB

TCP: How did you end up at Tufts?
JB: At Dartmouth, I rose up through a number of administrative positions including deputy provost and dean of faculty. Tufts asked if I'd be interested in being Provost. I thought about it and thought it would be a great opportunity. Tufts was poised to get to the next level. I was looking for institutions that are ready to take that next step. Boston was a big attraction after Hanover, New Hampshire. And I took it.

TCP: Compared to Boston, how do you like New York City?
JB: Oh New York is amazing. The East Village is where everything is happening, right? This is, right now, Cooper Union's location, the most exciting place to be a student. As a faculty member, I'm essentially a lifelong student so this is a great place to be.

TCP: Is the house on Stuyvesant Street your first New York City residence?
JB: Yes. It is not Jesse's (my wife) first New York City residence, but it is mine.

TCP: Who do you live there with?
JB: Jesse Papatolicas, my life partner who I just married two weeks ago and our two dogs Charles and Hudson. Charles because of the Charles River and Hudson because of the Hudson River since we moved from Boston to New York. Jesse is the first lady of Cooper Union. You should get to know her. Interview her. She's very nice and a person of considerable accomplishment on her own.

"[I live with] Jesse Papatolicas, my life partner who I just married two weeks ago and our two dogs Charles and Hudson" - JB

TCP: In the little free time that you do have, what do you like to do?
JB: I like to listen to music and play music. I also like to play chess on the computer. It's quite addicting and if I start on the low levels of difficulty, I get really happy that I can win. So then I turn up the difficulty and it kills me. Then I decide to go on to do something else. I run two or three times a week and I go to the gym a couple of times as well.

TCP: Is music still a big part of your life?
JB: It is.

TCP: Do you go to concerts?
JB: We were at a concert last night. We'd like to do more of that and that will happen when things settle down a little bit more. Mostly what I like to do is play on an amateur basis with other people in the city. Ideally, I like to do that once a week or once every two weeks. We play string quartets at people's houses, which is what I used to do. But things are a little bit busier now. I'd say a maybe year from now that will start to become more of a routine.

"Mostly what I like to do is play on an amateur basis with other people in the city" - JB

TCP: What do you like to do when your job becomes stressful?
JB: Jesse and I like to go for walks. On weekends we sometimes take long walks. We've walked over the east river sometimes. We walk the dogs. We go to concerts. We check out some of the New York City restaurants. It's amazing. We have friends over and family over and the other things that I mentioned, like music and chess. Don't get me wrong, I'm not great at chess. I know some students are really good, but it's good for relaxation.

TCP: Do you have a favorite place to eat around here?
JB: Yeah. There are two restaurants that we like because they're owned by a friend of ours whose name is Jehangir Mehta who's also from Bombay. It's his own special fusion cuisine. One restaurant is called Mehtaphor. And the other is called Graffiti. They have a little bit of an Indian touch here and there but he combines Indian with Spanish, Indian with American, and it's really quite wonderful. We like the Italian restaurant on 11th street between Broadway and university place.

"For Cooper students, it would be a great opportunity to learn things outside of the classroom" - JB

TCP: Do you have any advice that you'd like to tell to Cooper students?
JB: I know that it's a very demanding curriculum at Cooper Union and that's one of the great qualities. I'd say even while you excel academically, find ways to broaden your perspective. Involve yourself in other activities, be they origami or Steve Baker's athletics. He welcomes everyone even if they may not be serious athletes. Go to Great Hall events. We had a brilliant lecture last night on the U.S. Constitution, free. The Great Hall is one of the great assets. For Cooper students it would be a great opportunity to learn things outside of the classroom.

Financial Update: Jamshed Bharucha

MARCUS MICHELEN (BSE '14)
SAIMON SHARIF (CHE '15)

There are many rumors circulating that concern the future of Cooper. With anxiety surrounding the upcoming meetings of the Board of Trustees growing at uncontrollable rates, we reached out to President Bharucha to give us a more clear picture of Cooper's future.

The Cooper Pioneer: The last Board of Trustees meeting was on September 19th. Could you summarize the outcome of this meeting?

Jamshed Bharucha: The outcome was to set the stage for the next meeting (the December meeting) by setting out the timeline I had communicated to the deans and the faculty of the three schools. November 15th would be the date by which the faculties of the three schools would agree on a plan to go forward. I would integrate those plans and take them to the board meeting in December. That was basically the outcome of the meeting - a timeline.

The board would then digest the plans. including my own recommendations, and they might take some time to do that. So there won't be an announcement in December, but in the New Year at some point we would announce any decisions that might have been made. At the board meeting, we talked about the three criteria that should be considered in the strategic planning that the faculty are engaged in.

The first is maintaining academic excellence. Cooper Union has the finest student body, bar none, in my opinion, and that is our great asset. Together with the excellence of the education and the excellence of the faculty, Cooper has an unparalleled learning community.

The second point is vision. The plans should be not just to solve a financial crisis, but an opportunity to position our schools and programs for the future. The future of the city, the future of the country, the future of the world.

"Cooper Union has the finest student body, bar none, in my opinion, and that is our great asset" - JB

The third is that the plans must be financially sustainable. All three go together and I'm happy to elaborate on any of those. So the board discussed all of those pieces, what might a vision be like, what constitutes sustainability, and why.

TCP: Is the financial sustainability criterion specifically just quantitative or is it also based on reliability?

JB: Sustainability has to include an assessment of the risks of that plan. Any plan has risks. And any plan has pros and cons. A lot of people come in every day telling me what the cons are and what the problems are about any given option, but a lot of people also come in with solutions and plans that are not only viable but very exciting. I think we need to focus on those.

TCP: In the event that the Board of Trustees decides to close one of the three schools, what would happen to current and incoming students?

"Obviously we're in a tricky situation. We have to be mindful of all possibilities" - JB

JB: I said when I spoke in Rose Auditorium a year ago in October, quite forcefully, "I'm not here to close a school." I'm a teacher, I'm an educator. I'm here to ensure that Cooper Union thrives. Thriving, to me, means that we continue to operate and we do so in a vibrant way.

Obviously, we're in a tricky situation. We have to be mindful of all possibilities, but we have already stated in April that the class coming in the fall of 2013 would be admitted without any alteration of our policies and that would see that class through. Should any of our current policies change, they would only affect classes beyond that, except for the master's degree in architecture. That degree, which is well established and attracts top students from around the world, would have a change in policy, starting in the fall.

TCP: I understand that it's your role to make sure the schools do not close, but it is my understanding that in December, it is the purpose of these financial plans to decide whether the three schools are going to stay open. Is this correct?

JB: It's more complex than that. It's more subtle than that. The goal is to stay open, to survive and to thrive. In order to do that, the plan has to be sustainable. It's almost axiomatic that if the plan is not sustainable, it cannot be sustained. I've said and I believe very deeply as a faculty member that the faculty is at the core of our educational enterprise. I don't think any faculty member would disagree with that. I cannot impose a plan, nor can the board, and I have made it clear to the board that neither of us could impose a plan over the objection over the faculty ; it won't work because the faculty are teaching the students. The faculty have to believe and support not only the educational programs that they provide, but also the philosophical basis of those programs.

So the purpose of the faculty focus this fall is for the faculty to find where they can agree on a model that has these components. Faculty agreement on a sustainable model has to be a foundational assumption, it seems to me, in order to be sustainable because you can't have a successful institution if it is operating in a state of dissent.

Lincoln said: "A house divided cannot stand." It's the same thing at Cooper Union. Obviously there's going to be disagreement, and not everybody is going to support every piece of every plan, but I think the faculty of each school must (and they are doing so with admirable commitment) come together to support a plan that is appropriate for that school. It's also not a one-size-fits-all. Engineering is quite different from Art, even though we are a union.

I want to work very hard to find ways for greater collaboration between the schools, to bring the advancement of science together with the advancement of art. But the fact of the matter is that you are enrolled in a particular school and there's a curriculum Even as we try to bring the schools together, it's really the faculty of each school that understands best what's appropriate for that school. Faculty support for a viable, strong solution that is academically excellent, visionary and financially sustainable is the goal here and is a prerequisite for what we do.

TCP: If one of the schools fails to meet one of the three criteria, however, what would then happen?

JB: It's my job to make sure that it doesn't happen. I'm not just waiting until November 15th. I'm working with the deans and the faculty. We've provided them with the resources in terms of expertise and consultants to cost out various plans and to look at the benefits and the risks. I'd say that this point, all three schools have bought into the process. We are committed to making something that works.

"Faculty support for a viable strong solution that is academically excellent, visionary and financially sustainable is the goal here" - JB

So there's no point talking about the "what-ifs". We can talk about all kinds of "what-ifs" but I think we're here to make it succeed. I would say, as of today, we're already at a point where the faculty are engaged in constructive dialog. Obviously if a school comes up with a plan we think is not viable, then I think the first thing we do is go back to the school and say, "this is a problem. Let's try and fix it together."

(continued on next page)

KenKen

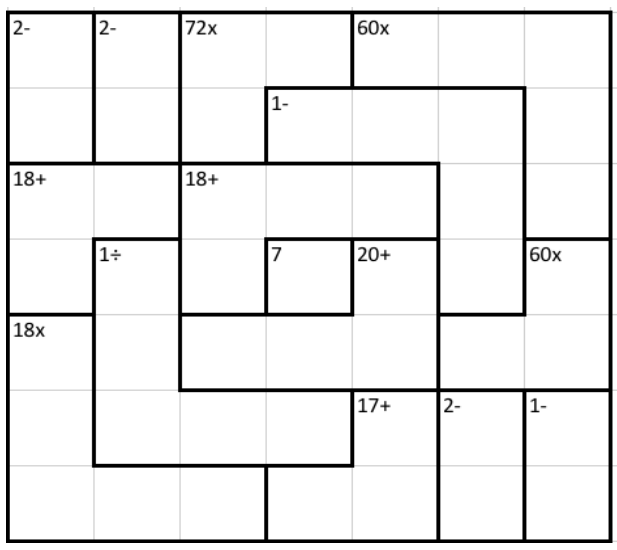
MARCUS MICHELEN (BSE '14)

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 7. 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 "2-" rectangle in the top left corner can be filled in with a 7,5; a 6,4; a 5,3; a 4,2; or a 3,1 (or the reverse of those numbers).

The solution to this puzzle will be released next week. The solution to the previous KenKen is below.

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



Cryptoquote

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.

XLHU SMX SDELNY APG ELBELESG,

SDG ILEZGPYG ALW DICAL YSIJEWESU, ALW

E'C LXS YIPG AOXIS SDG BXPCGP - AHOGPS

GELYSGEL

Financial Update: Jamshed Bharucha

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As long as there's that will to engage in vigorous civil discourse and overcome differences, we'll find solutions. Will they be easy? No. If you've seen some of the financials, you'll see why. We can't be sanguine. There might still be pockets of our constituencies who feel that there are solutions that don't involve difficult decisions, or who feel that the financial problems are caused by this or by that, by the building or by an administrative bloat or so on and so forth.

I think you'll see if you actually go through the numbers, that there is a long standing disconnect in the budget that goes back at least forty years that was greatly exacerbated in the early 1990s because of the falloff of the rent streams from the Chrysler building. That has been overcome through the years because of super-charged stock market returns, because of selling assets, because of borrowing, and now we're at a point where there are no stock-market returns and we don't have that many assets left to sell.

We've borrowed a lot of money and now it's time to say, "Let's make it sustainable." The principle source that has funded the Cooper Union since the Chrysler building was built in the 1930s does not keep up with inflation, even with the lowest assumptions about inflation. Expenses are exponential, because of inflation. Higher education inflation is around 4% to 5% annually.

"We've borrowed a lot of money and now it's time to say, 'Let's make it sustainable.' "- JB

Even if we assume a 3% inflation, which would be the consumer price index for items other than healthcare, and then 7.5% a year for healthcare. Remember that benefits are roughly 9 million dollars out of our 60 million dollar budget. If the healthcare benefits are growing at 7.5%, you've got an exponential function where the expenses are compounding by a blended inflation rate that's 7.5% per year for healthcare expenses and roughly 3% to 4% for other things. We can talk about shutting down this, or cutting that cost, and we're looking at all the possible ways to cut cost.

But in the end, cutting costs brings down the y-intercept and shallows the exponential growth; but eventually the exponential function catches up. On how Cooper Union is funded, there are many funding sources, but the main one is the Chrysler building. There are two components to that: the rents and the tax equivalencies. The rents are on a step function with a flat portion of the step that goes for ten years. Now the next step up is 2018-19, when we get a big boost in rent. But there's a mistaken belief out there that that solves the problem.

The reason it's mistaken is that after that it's flat again, the exponential cost function eventually overtakes that no matter what assumptions you make about spending cuts. The following step-up in 2029 is so small as to not be able to mitigate inflation, and you've got a situation of mounting deficits as far as the eyes can see. Actually this problem was known as early as 1969. It's just that the institution took a number of steps: they closed

"If we wait too long, it becomes harder and harder to do something that's visionary"- JB

Green Camp, they closed the physics programs, they sold the Bowery Bar, got rid of the Cooper Hewitt museum.

Those were all well-intentioned decisions to try to preserve the full-scholarship for all enrolled students. But as I see it now, we are at a point where we have to come up with a sustainable model. We have the time to do it while preserving academic excellence and being visionary. But if we wait too long, it becomes harder and harder to do something that's visionary.

TCP: I don't want to go too far into the "what-if", but is it true that regardless of what happens with the Board of Trustees decision later this year or early in 2013, that all current students would be able to finish their education at the Cooper Union?

JB: Yes. All current students would be able to get degrees from Cooper Union, assuming they meet the requirements.

TCP: Last year, it was announced that the engineering grad school would start charging tuition. Where are with that plan now, exactly?

JB: Actually, that wasn't quite accurate. The announcement was that we are going to lead with the hybrid model which was, and still is, the idea that the more revenues you can get from programs other than the undergraduate programs, the smaller the problem becomes. If you ever do have to go from 100% tuition scholarships to something less than that, the burden is greatly lessened by these other programs. The architecture graduate program will start contributing to their revenue target. If the engineering faculty decide that that's not the place to go, that there are maybe other ways, then that's an option. We have not actually decided that engineering master's program will start charging tuition. It may happen. It may not happen. There may be new programs. There may be changes in our current policy. All of that is part of the planning process under way.

TCP: Do you have any closing comments that you would like to say?

JB: I do. I think that it's really important to remember that in spite of all this, Cooper Union has a brilliant future. I assure all of our current students and former students that your degrees will be ever more respected and worthy as time goes on. We will overcome these challenges, not without controversy, not without difficult decisions. Anybody that tells you there is a straightforward path forward, I believe, does not understand the problem. It is complex and only can be understood if you're prepared to understand the complexity. But we will overcome it.

The community is coming together as we've gotten more information out, through FAQs and other means. [Vice president] T.C. [Westcott] has met with people and continues to, and I meet with people every day to facilitate communication. Cooper has a brilliant future.

New York City is going through a renaissance. It's the most exciting time in New York City's history in easily half a century. I go to lots of meeting at the mayor's office and with business leaders and educational leaders in New York. As you know, the mayor has launched this technology initiative to make New York a leading technology innovation city. New York is already a design center.

We at Cooper have, in some sense, many of the ingredients: we have a school of engineering, a school of art, a school of architecture and a faculty of humanities and social sciences.

If we can bring those together in exciting ways, which we will, we can position ourselves within this new New York renaissance, particularly since we're in such a hot neighborhood as well as being one of the most exciting institutions contributing to the city, the country and the world.

I see this as opportunity - not without a lot of hard work and not without some bumps in the road. I can assure you that whatever plans we announce in January, they're going to need modification because whenever you're doing new things, you learn as you go along. We will come out at the end an even stronger institution. We will attract the very best students. We will provide an exciting education.

Looking back people will say that this was opportunity seized in the wake of a crisis. I hope that people will join me in doing that. I do think that in terms of the discussion in the community, understandably, there was anger and indignation because it was quite a bit of surprise that Cooper Union had these challenges.

But I think that as we go forward, the tone has become a lot more positive and constructive as people approach it from the point of view of "how can I learn

"We will come out at the end an even stronger institution."- JB

the facts" and "how can we brainstorm solutions" and "how can we come together".

Even though we might have differences, in a civic debate, however vigorous, if we can have those conversations as we are having now, in a constructive and respectful way, we should be able to demonstrate to the world that the country should be able to solve its problems. We are an educational institution. We can set an example for how people can come together, and perhaps our politicians can follow our example.

Peter Cooper wanted students to learn how to engage in democratic civic discourse, which means disagreeing vehemently but respectfully, based on fact and reason. People ask me, given all the protests, what motivates me, I have one word answer: it's the students. Every time I get to meet with the students, whether it's on Cape Cod with the athletes, whether it's with the origami club or the class that I teach, or meetings that I have with students, I'm reminded of that. That's why we're here, is for the students. That's why we will succeed.

Foreign Exchange Students at Cooper

(continued from page 1)

TCP: What are the differences between studying in NYC and studying in Spain?
AL: Here the classes are more focused on practical applications while in Burgos it is more theoretical. The things you are taught here you will use in your future careers and work environments. In my city, there are 200,000 people and the university has about 11,000 students.

TCP: Is NYC what you expected it to be?
AL: I thought it was going to be cleaner than it turned out to be. The ideas I had of NYC came from the movies I've watched that were filmed in NYC. I love the atmosphere, the people, and the friendliness of the city.

Halldis Thoroddsen, Senior Chemical Engineer. From Iceland, here for the year.

TCP: How did you hear about Cooper?
HT: When I was looking for an exchange program from the University of Iceland I just went through the list of schools they had for chemical engineering and one of them happened to be Cooper.

TCP: Why did you pick Cooper?
HT: Mainly because of the location. You don't get the opportunity to study in New York City often.

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TCP: What are the biggest differences between Cooper and your home school?
HT: Midterms! Almost all of our finals are [worth] 100%. My school is also bigger, it's like the biggest university in Iceland (they only have 4). But mainly the program is the same.

TCP: How are you enjoying New York?
HT: I really love it here!

Blanca Quiralte, Senior Mechanical Engineer. From Spain, here for the year.

TCP: What school/year did you come from?
BQ: I came from ICAI, an engineering school from Madrid, Spain.

TCP: Why Cooper?
BQ: When deciding which school I wanted to go to, I did some researched and I found that Cooper was a very good engineering school. It was a great opportunity for me and it would open many doors for me in the future. I also thought New York was a plus in my decision. So I guess the school's reputation and its location made me choose it.

TCP: What was the biggest difference between NYC and home city? Biggest similarity?

BQ: The biggest difference I can see is the absolutely amazing culture cocktail NYC has. The biggest similarity is the dynamic of the city, how you can always find something to do.

TCP: What do you think of the experience so far?

BQ: I think it will be a unique experience, not only in an academic but also in a personal way. I want it to make me more of a professional and more skilled person.