

SCHOOL STORE

TRIOCUP AT THE BEAN

MILES OF MOVIES

WYNTON MARSALIS

SANDWICH METAPHYSICS



THE PIONEER

FEC REPORT: A RETURN TO FULL TUITION

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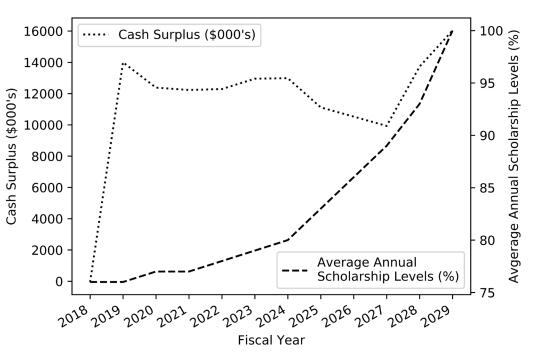
On January 15, 2018, the Free Education Committee of the Cooper Union, or FEC, released a comprehensive plan that proposed a method to return the Cooper Union to a full-tuition scholarship model by 2029. The plan estimates a much closer deadline than the previous estimate of 2039 from the January 2017 Progress Report. The plan is described as "multi-pronged," requiring a focus on fundraising and expense management. Through small increments over the next ten years, the plan hopes to raise the average annual scholarship level of 76% to 100% by the 2029 fiscal year.

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The plan mentions that if more than 5% of the financial goals are missed, then the plan must be adjusted accordingly, which, in an "extreme case," could involve reducing scholarships for future students. Nevertheless, the FEC report states that approximately \$250 million is required in order to return to a full-tuition scholarship model.

To accrue these funds, the plan calls for a reduction in the average scholarship for graduate programs from 66% to 25%, increasing rentals by 3%, and reducing costs associated with severance payment, all within the 2019 fiscal year. In the 2020 fiscal year, the plan calls for an increase in dorm pricing to \$15,000 per year, reducing rental costs at 30 Cooper Square by half, reducing expenses through increased operating efficiencies, and updating employee benefits plans to a more cost-conscious one, for an estimated \$1.2 million in savings.

The plan also contains a secondary set of initiatives, should the core plan not come to fruition. Titled "Bullpen" in the plan, these AFSHIN KHAN (CE '19)



Graphic by The Pioneer. *Data from "Recommended Plan to Return to Full-Tuition Scholarships" by the Free Education Committee, 2018.*

initiatives include the sale of the Stuyvesant-Fish House, where the current president resides, renting the first floor of the Foundation Building to another party, and even selling the residence hall. However, the plan acknowledges that bullpen ideas "have downsides and will only be pursued if those downsides are reduced or eliminated."

The FEC report states that approximately \$250 million is required in order to return to a full-tuition scholarship model.

The truth of the matter is that the plan proposed by the FEC has inherent risks. For instance, on the matter of increasing dorm rates to \$15,000, many first-year students may choose not to live in the dorms. Why pay the market rate to live in the dorms, when you can pay the market rate and live elsewhere?

The previous cost for dorm-living was \$12,300. In other words, students could previously live near-

by Cooper Union at a discounted price. With this plan, the FEC runs the risk of losing future dorm-students. Similarly, by reducing the amount of scholarships available for graduate students, many students may choose not to attend Cooper Union for its graduate engineering programs. The decrease in applications to the program may also negatively impact Cooper Union's reputation.

Although the FEC acknowledges these risks to both Cooper Union's finances and reputation, the FEC provides a layer of protection against them. For example, the FEC hopes to increase annual ancillary revenue by \$250,000 by means of the newly established online store, and improving the continuing education program for maximum profitability.

However, the FEC mentions that a risk with this initiative is that the expected revenues may not materialize. As a safety-measure, the FEC hopes to minimize initial investment until proof of concept has been established. The FEC plan outlines the pros and cons of 13 initiatives in this manner, allowing the committee to determine whether the initiative would go in the "Yes", "No", or "Bullpen" category. In the end, the FEC determined seven initiatives would be included in the proposed plan, two initiatives would not be included, and three initiatives would be considered bullpen initiatives. Reducing rental costs at 30 Cooper Square was the only initiative that was ambiguous. It was decided to be included in the recommended plan, while at the same time, considered to be part of the bullpen. The complete FEC plan can be found on the official Cooper Union website.

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The FEC's plan to return Cooper Union to a full-tuition model outlines the benefits and downsides to each of 13 initiatives. It is now left to the Financial Monitor to review the plan, and the Board of Trustees to vote on it on March 14, 2018.

MIXED REVIEWS ON SCHOOL STORE

GABRIELA GODLEWSKI (CE '19)

The student voices have been Union Center for Design. As of were available for \$10 and sweat- The Cooper Union is all about. Not

Brandon Quinere (CE 19)

Yuqiao Wang (ChE '19)

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

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

heard: many students of all three schools at The Cooper Union are disappointed in the new Cooper Union Merchandise Store.

impromptu merchandise The store that ran out of fomer Dean Stephen Baker's office retired when he did in June 2017. For an entire semester, The Cooper Union did not sell their merchandise, which consisted primarily of t-shirts and sweaters of various designs, pennant flags, scarves, and stickers. The Cooper Union Merchandise Store opened in December 2017, offering a variety of items ranging from t-shirts, sweaters, sweatpants, ties, doggie jackets, mugs, and even a leather varsity jacket. The images and phrases currently featured on the shirt are designed by the Cooper now, the store exists only online with the hopes of a more permanent, physical presence in the works.

When the Cooper Union pop-up store showed off its products to the student body, many students stopped to look at the products. In general, the store opened to mixed reviews from the students. For one, they said, while they liked the variety of the objects on sale, they were disappointed that the store was only displaying the products and that if they wanted something, they had to buy it online.

At the pop-up store, students expressed disappointment in the prices of the merchandise. Before the pop-up store, T-shirts shirts were available for \$25. Now, t-shirts are being sold for \$25 and the embroidered sweater option is currently going for the very affordable price of \$95. Some students made clear their disdain at the designs, with one student remarking that the Throwback Collection featured "the ugliest typography they have ever seen" and another student stating that the Green Camp shirt was "disrespectful to Green Camp."

Perhaps the biggest snub was felt by students from the art school; they expressed that they had many designs they could have offered but were never asked.

In general, the students feel as though the merchandise store does not properly represent what asking students at the art school for help in contributing designs to the initial line up leaves a pretty big untapped resource and passes up opportunities to allow Cooper students to contribute to their school. While the students are aware that the profits from the store are going to support our own scholarships, many question if this is the best way to raise money for Cooper. Raising money through merchandise is a smart move, but the merchandise store is more comparable to an institution more like New York University than Cooper Union.

While the store is new and experiencing growing pains like many new things, the good news is The Cooper Union has a store and lots of time to make it better.

SANDWICH METAPHYSICS

ABDULLAH SIDDIKI (EE '18)

The opinions in this article are those of the author alone and do not represent the views of The Pioneer as a whole.

The internet may very well be the greatest invention in human history. Information is power and the internet is now an indispensable infrastructure that connects people to information. It empowered the common person more than any invention since the washing machine. On the internet you can connect with someone on the opposite end of earth, access a trove of information surpassing that of any physical library, alter world changing elections, or create decentralized currency that holds value relative to money backed by economies of sovereign nations. But perhaps most important of all, on the internet you can share ideas. The internet is a hub for ideas, discussion, and debate. And while some of these ideas can lead to the toppling of oppressive tyrants, as they did in the Arab Spring of 2010, some debates are more... frivolous. In the past the internet has debated over the color of a dress, how many holes a straw has, whether or not water is wet, and the most interesting to me... whether or not a hot-dog is a sandwich.

I propose that we begin to believe in the spirit of a sandwich.

Is a hot-dog a sandwich? The debate rages across social media, blogs, barber shops, and the Cooper Union labs and studios at 1:55 a.m. The debate has essentially been boiled down to two approaches. The first are those who formulate a rational, facts based, technical analysis about what physical elements constitute a sandwich. Those who take this approach will find that such an investigation substantiates the hypothesis that yes, a hot dog is indeed a sandwich. As a matter of fact, the esteemed Merriam-Webster dictionary itself published an article discussing and comparing the definitions of the words "sandwich" and "hot dog" and decisively concluded that the definition of a hot dog meets the conditions necessary for one to be considered a sandwich. "We know: the idea that a hot dog is a sandwich is heresy to some of you. But given that the definition of sandwich is 'two or more slices of bread or a split roll having a filling in between,' there is no sensible way around it. If you want a meatball sandwich on a split roll to be a kind of sandwich, then you have to accept that a hot dog is also a kind of sandwich," asserts the article. This approach is very convincing: it appeals to the logos, it is safe and it is precise, it constructs a calculated fortress, safeguarding its constituents from the fear of the ... indescribable. As for those on the other side of the coin, something doesn't sit well with that approach. Their argument on the surface is much simpler and evidently much weaker. All they can say is, "A hot dog is not a sandwich because ... a hot dog is a hot dog." The engineer in me is so drawn to the former approach. I understand how mathematical theorems are



proved, it is comfortable and inviting, it is familiar. But there is a seemingly ineffable objection to this looming in me that I can't ignore. A hot dog is absolutely not a sandwich. I know it. But how do I prove it? The evidence is there and it is not on my side. How do I explain a feeling which doesn't lend itself to reason?

There is a seemingly ineffable objection to this looming in me that I can't ignore. A hot dog is absolutely not a sandwich. I know it. But how do I prove it?

No matter how you slice it (perhaps diagonally, or right down the center), the physical breakdown will lead to the conclusion that a hot dog is a sandwich. To present my argument, the analysis must transcend beyond the physical into the metaphysical. And yes, we are still talking about sandwiches. To understand this argument, one must take on faith that physical entities have metaphysical counterparts, alternatively, "the spirit of things." Perhaps the most intelligible example is that of a human being. Many believe in the soul of a human. They believe that while we have physical bodies, while we walk and we breathe and we touch, there is an innate ethereal presence attached to each and every human. Under this pretense, even if physical science advanced so far as to create a biologically equivalent human clone, they would not be able to create a soul for it, and it would innately be less human or not human at all. Similarly non-sentient entities too have a soul. A rug, a floor mat, and a prayer mat are physically not different from each other. They are all simply pieces of cloth that you put on your floor, yet we know not to wipe our feet on our rug or pray on our floor mats. In this

vein, I propose that we begin to believe in the spirit of a sandwich. If this leap is taken, the once daunting fortress of the technical argument becomes not only vulnerable, but meaningless. But taking the leap is not so painless. Logical conclusions are inclined to follow rational definitions. And after all, even once you've taken the leap, it still won't have been proved that a hot dog is not a sandwich. Yes that's right, I haven't proved that a hot dog is a sandwich. And I have no intent to. Just as if I asked you to write down what a human soul is on a piece of paper, there is no way to put into words what is considered the spirit of a sandwich and what is not.

This begs the question: If there are no words to describe what is and what isn't a sandwich, then how do you know if a hot dog is a sandwich or not? The answer is no different from what I mentioned when the argument was introduced. I just know. Just like I know that a cream cheese bagel isn't a sandwich but a bacon, egg, and cheese on a bagel is. From this point follow a few questions: Is the understanding of what a sandwich is or is not something innate? Is it not possible for someone to think that the spirit of sandwiches encompasses hot dogs and for another to disagree?

I am a religious person. I believe in a single God, the most High. I believe in the souls of humans. Not everyone sees the world the same as me, some believe in many gods, some believe in none. Some believe in a divine energy but not God. No matter what you believe, the actuality of the unseen remains unchanged. The existence or nonexistence of a God or Divine presence remains unaltered by the amount of people who believe or don't believe in it. Similarly, the truth about what is encompassed by the spirit of a sandwich is not altered by what you or I believe is considered a sandwich. The spirit of a sandwich isn't a sentient being that can reach out to us through holy books and prophets. There is no sandwich messiah. No, not even Guy Fieri or the Turkish butcher who sprinkles salt with alluring charm.

No matter what you believe, the actuality of the unseen remains unchanged.

So where does that leave us...? My once unequivocal position changes from "a hot dog is not a sandwich," to "I believe a hot dog is not a sandwich." This conclusion is simply a result of spiritual intelligence. And anyone is free to disagree with that on spiritual bases. But don't tell me a hot dog is a sandwich because it is a filling placed between two pieces of bread. Tell me you believe a hot dog is in the spirit of a sandwich, and I will respect that. Tell me you took it on faith.

The author would like to acknowledge Minh-Thai Nguyen. "UGHH I'm so mad right now!"

TRIOCUP TEST RUN AT THE BEAN

OLIVIA HEUIYOUNG PARK (ME '20)

TrioCup, the lid-less, spill-resistant, user-friendly, and economical paper cup by three Cooper Alumni Austin Wong (ME '17), Tom Chan (ME '17), and Daniel McNulty II (ChE '17), had its first commercial trials at the Bean at 3rd Avenue and Stuyvesant, next to the Cooper Union Residence Hall.

Ben Ma (ME '18) and Tom originally conceived the TrioCup during Invention Factory 2015 with the vision of reducing waste and preventing spills. The idea was further developed in Spring 2017 in Engineering Entrepreneurship, where the trio not only modelled the cup but also learned to manage a startup. With help from their mentor Lee Kim that summer, they joined the Competition Open IDEO, and won the New Plastics Economy Innovation Prize. The European Competition helped the team gain confidence, and the prize of \$100,000 also provided them with the money to operate.

At the end of August, with the help of Eric Chan, the founder of Ecodesign, a manufacturable version of the TrioCup was created. Although the design has changed a lot from its original form, the TrioCup maintains its ultimate goal of reducing plastic waste and preventing spills. The most recent design features a three-flap fold that is easily openable and carried, and is spill-resistant even when dropped from chest height.

TrioCup has gained great visibility not only in the New York City area but also in England, where BBC mentioned it several times for its goal of sustainability. They will be officially trying out the cups at "Neighbor's Cafe" and the "Starwood Hotel" near Brooklyn Bridge Park. The team aims to start circulating in NY coffee shops, to change the world, one cup at a time.

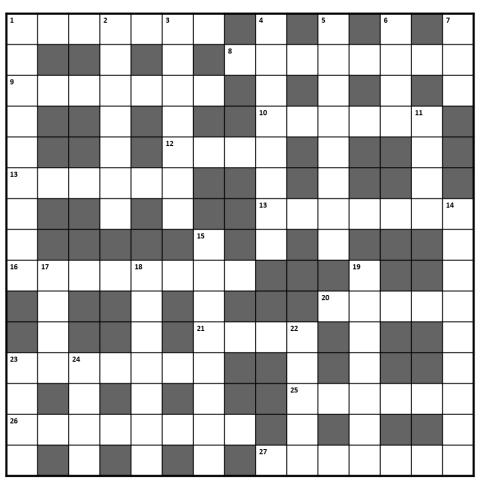
TrioCup is open for suggestions on their website, www.triocup.com



Photo by Olivia Heuiyoung Park (ME '20).

CROSSWORD

EVAN BUBNIAK (ME'21) | MICHAEL COLELLA (ME '19) | GEORGE HO (BSE '19)



ACROSS:

- 1. Old farmer's book 8. Haruki 9. Breed of dog 10. English social class, farmer 12. InDesign file extension 13. New York supermax prison 14. To comply 17. Supposedly why some toilets flush the other way 21. Chinese bear
- 22. Club of oil-rich countries
- 24. E.g. Nostradamus, Muhammad
- 26. Athena's epithet
- 27. Not Diagon Alley, sounds like 28. Volt tackle

DOWN:

1. No clutch 2. Paint, glass 3. Commutative group 4. 19 down's spouse 5. Why carrots are orange6. 6. Laura signed a petition for this 7. Python package manager 11. Dark genre 15. Capital of Somalia 16. Addictive alkaloid 18. Smell 19. Ancient Greek musician, looked back 20. Ice cream flavor 23. Beverage in laminated foil pouches, first word 24. "I burn, I ___, I perish!" 25. Fantasy race

MILES OF MOVIES: PADDINGTON 2

MILES BARBER (CE '18)

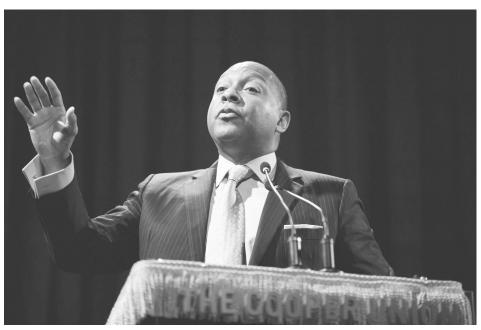
Paddington 2 is the sequel to the delightful Paddington from a couple years back. For those unfamiliar with the classic British character, Paddington is a sentient talking bear who, after being separated from his Aunt Lucy, immigrated to London and was adopted by the Browns, an adorably dysfunctional British family.

This time, Paddington decides to get a job so that he can purchase a gorgeous pop-up book of London for his Aunt Lucy, who has never been to London but always wanted to go. Unfortunately for Paddington, another person is after the book. That person comes in the form of Phoenix Buchanan (Hugh Grant), a delightfully vain actor who, now past his prime, is determined to reclaim his fortune by



MARSALIS SPEAKS IN GREAT HALL

MATTHEW GRATTAN (BSE '19)



Courtesy of The Cooper Union/Photo by Marget Long.

As a renowned trumpet player and composer, Wynton Marsalis's reputation preceded his speech in the Great Hall two weeks ago. Nonetheless, his skill as an orator was a surprise to the packed auditorium.

Marsalis, who is the artistic director and a founding

in a movie," Marsalis repeated often during his speech, "When she tells you something-listen-because she knows what she's talking about, and she's gonna be for real, and she's gonnatalk right through you."

stealing the pop-up book. *Image source: IMBDb.*

This film is simply a delight from start to finish. I can't tell you how many times I smiled while watching Paddington 2. From its warm colour palette to its bright lighting, this film is such an optimistic film whose central character and surrounding family have hearts of gold. Everything that they do seems so honest and uncynical that it was incredibly refreshing, especially for a sequel.

Hugh Grant completely steals the show in a role it seems he was born to play. His vanity is personified by the dozens of pictures of Hugh Grant strategically placed all throughout his house for maximum comedic effect. He has a room full of costumes on mannequins that he talks to with various accents; it's all comedic gold! To

make things even better, his over-the-top character is perfectly in place within a story that, for all intents and purposes, is a screwball comedy with a dash of adventure.

The story may be a little too ridiculous for some, but embraces the comedy and fills in the gaps with heart. Add in colorful characters, a blend of animation styles, pure optimism, and a touching ending and you have a really delightful film. The only thing that takes away from this film is an overuse of computerized effects, which at times were a bit distracting. Apart from that, this film is near perfect.

Grade: A

member of Jazz at Lincoln Center, spoke of his experiences growing up in Louisiana in the 1960's, like attending a predominantly white school in an otherwise segregated South.

Marsalis retold his childhood through stories about his late mother: Though their relationship often seemed strained, he expressed gratitude toward her in retrospect. The speak was poignant but also comedic at times. "Don't mess with my mama; you ain't ever seen something like her on TV or



Courtesy of The Cooper Union/Photo by Marget Long.