The Hot Rivet

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WELCOME TO THE HOT RIVET!

Kenny Thai | Letter to the Editors

OH GOD OH [REDACTED] OH GOD OH [REDACTED] THE HOT RIVET IS SUPPOSED TO BE PUBLISHED TOMORROW QUALITY CONTROL IS OUT THE WINDOW

TECH EDITOR CANDIDATE STATEMENT: KENNY THAI

According to the ASCIT bylaws, 10% of dues each term shall be for a subscription for the California Tech. Using a conservative estimate of 500 due-paying ASCIT members, the Tech is entitled to a $4500 budget each year.

Since the current set of Tech Editors have begun their term, they have only published 6 issues (9 if you include the multiple April Fools issues of The Hot Rivet), far from the bi-weekly publishing schedule expected by the ASCIT bylaws, greatly sacrificing the timeliness of their reporting. In the last issue, more of the issue was taken by ASCIT meeting minutes than journalism.

So one must ask, where has the money been going? During this time, there were fewer barriers to publication than ever; with no physical issues, all that is required to publish an issue is access to the email list that costs next to nothing to maintain. Did it go to the editors and writers? I have personally done enough for the Tech to be promised a salary of hundreds of dollars, but my check is nowhere to be seen. And I can't imagine that the newly created website costs thousands of dollars to maintain. It appears that thousands of dollars of your money is just sitting in an account accessible only to the business manager.

As is common in these elected positions, those elected have little to no real accountability to those they represent. Just this year, the editorial staff have published a conduct review of themselves hidden in its humor section in a blatant conflict of interest, absolving themselves and all those that have stood in their position from all guilt despite the controversies that have not been adequately addressed. A number of currently elected Tech Editors have not even done enough to merit an appearance in any issue's credits section, yet they are still allowed to hold all the powers that come with the position. It is clear that corruption and abuse of power is innate to the position as it stands now.

As such, I am proposing for the position of Tech Editor to be left vacant. A wise man once said, "New growth cannot exist without first the destruction of the old." This vacancy will bring us back to the natural order of the world, disorder.

Unfortunately, simply voting the "NO" option for the position during the upcoming ASCIT elections is not sufficient to show your support for my proposition despite what its name may lead one to believe. Article VII, Section 10 of the ASCIT bylaws states, “In the event of a vacancy of any elected office due to "NO" winning the election, the Review Committee may appoint an acting officer to fill the office and perform all of its duties, provided that the appointed officer was not a candidate in that election.” The current members of RevComm have already shown me their position on this issue; when I sent an earlier version of this proposal to them, they rejected it, saying “I'm sorry, but we want the elections to be taken seriously.” The only way to ensure that a vacancy will be maintained is by electing an individual that will not serve in the position. It is for this reason that I will be running for Tech Editor, and in the event I am elected, I will put an end to the position’s current state of affairs.

You may be wondering, if the position of Tech Editor is left to me, someone with no desire to keep the publication going in its current state, what will become of the Tech, and how will this power vacuum be filled? My plan for the publication’s future is as follows:

First, a restructuring of the submissions process. Rather than relying on contributors sending submissions through email and private messages to the now nonexistent editors, we will move to a platform that is completely free from misinformation, Facebook. Submissions will be made through a new page, Caltech Confessions 2: Electric Boogaloo. All submissions made here will be anonymously to ensure that all perspectives will be welcomed without backlash to the contributor.

As an institution that is both proudly international and technologically driven, I foresee that a great number of perspectives will be shared. In addition to the standard Democratic, Republican, Populist, Communist, Socialist, and Anarchist platforms common in the United States, we are also likely to see perspectives from groups like the Chinese Communist Party who are lacking in representation at the local level. We can also rest assured that foriegn mischief makers like career trolls paid for by Russia will strictly abide by the honor code. Individuals like Joe Shepherd that feel they were wrongly portrayed by this publication will now have equal standing to those that offended them. The people advancing the frontiers of science in places like the Flat Earth community can share their findings. Our regular contributors Wayne Dinunzio and Vianna O. Botalot can now be joined by vastly wealthy princes of African nations. A true diversity of opinions will soon be upon us.


The Hot Rivet

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JOE SHEPHERD ASSERTS CONTROL

CARTER WALKRITE
Field Reporter

In the early morning hours of last night, forces loyal to the VPSA stormed SAC-13, the Tech room and all the rooms of the House presidents. The underfunded ASCIT defense forces were ordered by the BOD to lay down their arms after a short symbolic exchange of fire as to limit the bloodshed. As of this afternoon the whereabouts of the House presidents remains unknown, but according to an Office of Strategic Communications press release the Presidents have been taken to a leadership retreat “for their

Democrats demand the entire ACRL report

BIM JACOSTA
Reporter, Parsons-Gates Bureau

While the current administration claims that the ACRL report exonerates them of any and all crimes, the Democrats still want the report to be released in its unredacted form. “How will we know which house scared prefrosh away during PPAV?” Nancy Pelosi asked reporters outside her Capitol Hill office. While some Democrats, especially those in swing states, were reticent to comment on the situation.

The next question to address will be that of distribution. I have worked out a deal with a group of chemists who will be volunteering to create physical issues of the paper themselves from contributions on the digital platform at no cost to ASCIT. The pages of these issues will be coated with an addictive stimulant to increase reader retention. The chemists say that the funding for this will quickly come through in grassroots contributions by readers both inside and outside the Caltech community passionate about continuing to support student journalism and purchasing more issues during times when they are not ASCIT members.

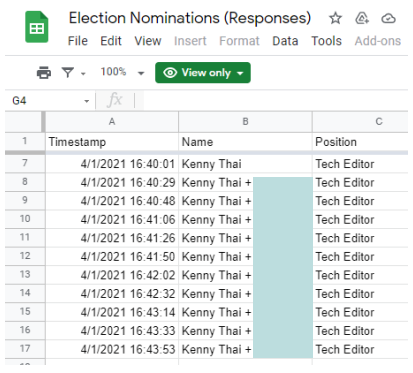
As for where the money will be going if this position is to be left vacant with no expenses to be paid, ASCIT will be depositing a lump sum payment equal to 10% of a school year's worth of ASCIT dues to the bank account I have specified to them along with all the money that would have gone to the writers and editors of the current election cycle.

In the words spoken before the fall of a kingdom, "I don't believe in [Tech Editors]."

Thank you for your consideration.

TECH EDITOR CANDIDATE STATEMENT: KENNY THAI & AELIN HUNT

Last year, I (Kenny) may have made history as the person to run for a position on the most tickets within a single term. I’m not sure if this was really a record, but in order to ensure that I hold this record, I will be running a total of [11] tickets this election. My secondary purpose in doing this is to spite RevComm for their initial rejection of my candidate statement for “NO”, as mentioned in my statement on the ticket that indicates I’m running alone. Thank you, [Aelin] for making this dream possible. (And by the way Revcomm, I could have made this much worse for you guys by running every combination of me and all my running mates. You’re lucky I’m not telling people to **SUBMIT YOUR NAMES ALONG WITH MINE AS A WRITE-IN CANDIDATE**)


Election Nominations (Responses)

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	A	B	C
1	Timestamp	Name	Position
7	4/1/2021 16:40:01	Kenny Thai	Tech Editor
8	4/1/2021 16:40:29	Kenny Thai +	Tech Editor
9	4/1/2021 16:40:48	Kenny Thai +	Tech Editor
10	4/1/2021 16:41:06	Kenny Thai +	Tech Editor
11	4/1/2021 16:41:26	Kenny Thai +	Tech Editor
12	4/1/2021 16:41:50	Kenny Thai +	Tech Editor
13	4/1/2021 16:42:02	Kenny Thai +	Tech Editor
14	4/1/2021 16:42:32	Kenny Thai +	Tech Editor
15	4/1/2021 16:43:14	Kenny Thai +	Tech Editor
16	4/1/2021 16:43:33	Kenny Thai +	Tech Editor
17	4/1/2021 16:43:53	Kenny Thai +	Tech Editor

TECH EDITOR CANDIDATE STATEMENT: KENNY THAI & SIMON LEQUAR



“As good as the other [n] guys!”

- Simon

“Candidate statements continued on page 3”

- Kenny

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THE HISTORY OF THE BOC, ~~WRONG~~ RIGHT ANSWERS ONLY

Norman Chung | History

We all know what the BoC is: it's the organization on-campus that fights for the Honor Code. However, not many people know the origin story behind the BoC. As someone who believes that we all need some humor right now and as someone who totally knows what they're talking about, I'm going to enlighten you with that origin story, told through many wrong right answers for what the BoC stands for. Let's begin!

Phase 1 | Blight on Chaos

Caltech's Honor Code is as old as the university itself, but back then, it was an academically lawless wasteland:

You had people using abacuses on their math exams, which is the equivalent of this today:

For computational aids, you may use:		
Calculators	YES*	NO
Computers	YES*	NO

* You may use a computer or calculator while doing the homework, but may not refer to this as justification for your work. For example, "by Mathematica" is not an acceptable justification for deriving one equation from another. Also, since computers and calculators will not be allowed on the exams, it's best not to get too dependent on them.

- You had people using carrier pigeons to get their answers to one another.

- You had people cutting out pages of their textbooks/humanities readings, gluing them on paper, and turning them in as their own work.

With all of the academic chaos occurring at the time, someone was sure to take notice. Someone had to make sure that the Honor Code was being followed. Someone had to form a society to fight back. Someone had to create the Blight on Chaos to restore order to the academic wasteland. It started out as an informal group of people who agreed that something had to be done. Much like today, admin wasn't listening to student complaints, so someone had to play the Caltech sheriffs. However, the violators of the Honor Code weren't going down without a fight. Out of hatred for the BoC and all that it represented, an Honor Code rebel group coalesced to stop the BoC in its tracks and to keep Caltech a lawless wasteland. None of them wanted to be bossed around by a wannabe group of enforcers. Ultimately, it boiled down to a showdown at high noon between the BoC and the Honor Code rebels. It was a numbers game, and the BoC was severely outgunned. We all know how good Techers are with numbers.



Battle of Beckman Lawn, c. 1869, colorized
Note: Arnold Orville Beckman was named after this event

Phase 2 | Bringers of Calamity

Here, we usher in a new age of BoC. Of course, there were still those loyal to the Honor Code, but they had to be careful, lest they invoke the wrath of the rebel force once more. What better circumstances are there for a vigilante group of enforcers to exist? Thus, the Bringers of Calamity were brought into being. No one truly knows how they BoC'd those who violated the Honor Code. Some say they ambushed those rushing to turn in their academically illegitimate sets, taking them places where they would never be seen again. Some say rebels were taken into the deepest depths of the Caltech tunnels to be interrogated for information on who else was breaking the Honor Code. Some say the BoC convened in the annals of hyperspace to decide one's fate. (To this day, the BoC keeps their meeting places secret to maintain their safety.) However, by far the most prevalent story is that of a storming. One would be working on sets deep into the night (who sleeps at Caltech, right?), feeling safe, when suddenly they would hear two distinct knocks. They didn't have time to react, they didn't have time to wonder who would knock at that hour, they didn't have time to feel absolute terror. All they had time to do was hear the infamous words "It's the BoC" before their room was stormed and they were taken who-knows-where to atone for their actions. Regardless of what happened, it was certain that calamity fell upon those targeted by the BoC during this time.



BoC storming, artist rendering, colorized

However, they were a vigilante group, constantly being hunted by Caltech admin with the same vigor that Caltech students are faced with today. Members of the BoC were praised by some, feared by others, but always in danger. Those found to be associated with the BoC were faced with the worst punishment they could give: being forced to overload hard classes on grades. With admin being forced to also deal with Honor Code violations, it was a tense time.

Phase 3 | Back on Campus

As technology continued to evolve, so did our three parties here today. Caltech introduced its CS major, and suddenly, the playing field was changed forever. People were learning how to use technology, and that included the rebels and our vigilante BoC. Admin, consisting of many a boomer, was powerless to stop the influx of cunning ingenuity shown by the rebels:

- State-of-the-art doors meant to withstand BoC agent stormings.

- The combination of machine learning with psychology to create bots that could take exams with no prior knowledge.

- Using bots to listen to pen/keyboard sounds and recreate someone else's answers.

- Hacking into Moodle.

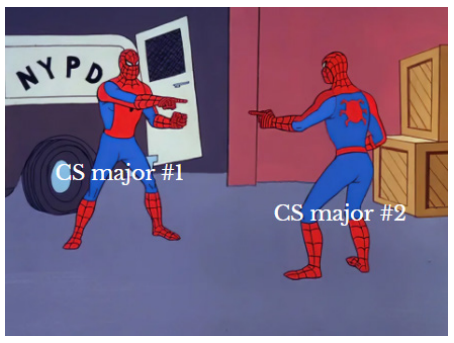
But the BoC evolved as well. CS majors engaged in hacking duels, furiously typing on their keyboards well into the night in a fierce battle of virtual cat and mouse. Furthermore, suits and eventually drones were created with the help of Caltech's MEs and EEs to knock on doors and break into the rooms of those suspected of violating the Honor Code. Eventually, with their lack of technological experience, admin realized they needed help against the rebels. So, they enlisted the help of the BoC and the BoC was a vigilante group no more. They were Back on Campus.



As technology advances, so does warfare.

Phase 4 | Boons of Cybersecurity

The battles between the BoC and the rebels were rough. However, the influx of money coming from Caltech's settled court cases and donations was enough to allow for a decisive victory over the rebels. But admin wasn't done. They wanted to ensure that a technological battle of this scale would never occur again. So, they again enlisted the help of the BoC to advance anti-rebel technologies, to be ready for any group who would dare violate the Honor Code once more. With the aforementioned influx of money, many flocked to become a part of the BoC and advance Caltech's anti-rebel measures. In line with this, Caltech's CS major exploded, and the CS sellout was born, and the Boons of Cybersecurity were brought together. However, the BoC had become too powerful - soon, they were stronger than admin itself, though not without a cost. Civil war broke out between the internal factions led by individual members of the BoC, tearing it apart and leaving no remains of the formerly extolled vigilante group. Again, rebel groups threatened to tear the Honor Code apart.



Phase 5 | Brunchers of Crayons

Admin needed a force to fight back against the rebels, but they didn't need them to be the ones developing the technology. They needed a new BoC, and they needed one fast. So, they assembled what was left of the former BoC and employed one of the most effective recruiting tactics the world has seen to date: the formation of the Brunchers of Crayons. Every morning, those devoted to returning the BoC to its former glory would eat crayons in the hope that others would join them in their cause, would relate to the suffering of Techers lacking a force to enforce the Honor Code, would align themselves with a new BoC strong enough to take on the rebels. For one house, a house defined by its symbiotic relationship to the meme, a house ready to restore the BoC to its former glory, a house that loves to eat it: Dabney Hovse™.



Phase 6 | Beans of Color

Soon, the BoC leadership was filled with members of Dabney, famous for their love of a certain legume, tie dye, and colored hair. With their use of extra meme-y propaganda and the help of admin, they were able to cull the 2nd wave of Honor Code rebellion. However, fearing another BoC civil war and the consequences of letting Dabney House be unleashed on an unsuspecting world, admin quickly encouraged members of other houses to become a part of the BoC, preventing a Darb monopoly from enveloping the rest of Caltech in a meme-y darkness.

Phase 7 | Board of Control

So what are we left with today?

We're left with people fighting to maintain the importance of Caltech's Honor Code.

We're left with people who knock on doors not to make people disappear, but to learn from their mistakes.

We're left with people who help make Caltech what it is.

We're left with the Board of Control.

TECH EDITOR CANDIDATE STATEMENT: KENNY THAI & ERICK JIMENEZ

First, a reminder of the context and controversy surrounding last year's election for Tech Editor. The incumbents, Gatherine Kuo, and definitely not Jon Cotler, ran a hit piece against the candidacy of Sophie, Dan, and Milan in the Humour section, reproduced below.

Why is Tech Editor an Elected Position?

G. Kuo

This has been a mystery for me for a while. Well, the thing that I really wonder about is what if the "incumbent" editors lost? Would we train the winning team? What would stop us from just going "here's the combo to the room, figure the rest out yourself." I suppose elections for Tech editor could prevent abuses of "power", like pandering toward our personal interests...Speaking of power--Sophie, Dan, and Milan, I really enjoyed your candidacy statement, but I have to say that us editors (well, except the sports editor, hmmm) have already chosen to forgo getting a salary in the best interests of the paper, and even then we don't have money (??). Would love any suggestions.

Anyway, regardless of the outcome of this very contentious election, I wholeheartedly welcome Sophie, Dan, and Milan to the newspaper team. We meet most Thursdays at 5pm in the SAC!

Love, definitely not Jon Cotler.

After many well-reasoned complaints about the incumbent Tech Editors abusing the power and privileges of their office to influence an election they were standing in, RevComm replied with a toothless email, reproduced below.

Hi All,

Multiple concerns were reported with respect to the Tech's short editorial "Why is Tech Editor an Elected Position?"; specifically, that it uses ASCIT funds allocated to the Tech in a way which could potentially influence the election, and uses knowledge of the opponent's candidate statement, both advantages not readily available to the other candidate team.

RevComm has determined that while this editorial was inappropriate, this was an attempt at humor that was not intended to affect the election or to be taken as a serious piece. Students can join the Tech Editorial team at any time, so Katherine was under the impression that she, Jon, Sophie, Milan, and Dan could all be editing together regardless. She thought that this was common knowledge, and as such thought that an humor editorial joking about Tech Editor election would be seen as amusing by the undergraduate population.

We are forwarding a clarification from Katherine: "About three things I was absolutely positive. First, Jon was a vampire. Second, anyone could be a Tech editor and join anytime.

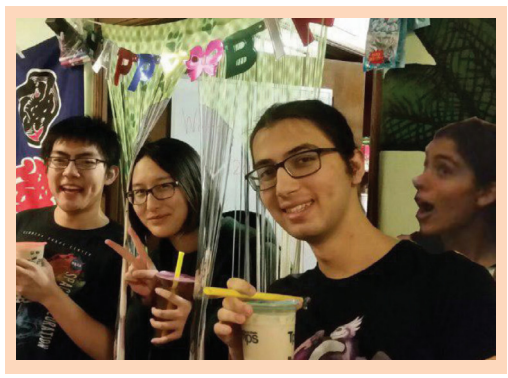
And third, the Tech editor election held no weight in the production of the newspaper."

Best,

Revcomm

From last year's abuse of the power of the incumbent Tech Editors running for reelection, to the ineffectual response of RevComm, it is clear that if the students of Caltech want to change our newspaper, we will have to grab that change at the polls.

If elected, we will take the Tech in a bold new direction. We propose:



- a 4 page limit to reduce printing costs
- a hard limit of 2 articles per issue to ensure that only the highest quality journalism is distributed
- Interviews with new members of administration, clarifying their opinions on matters important to the student body. We believe that the current Tech Editors gravely missed a vital opportunity to help Caltech learn about our new Provost.
- a hand-curated mail order catalogue of about 5 items—like SkyMall but with Amazon.

We will show you things you didn't even know you needed! We will keep the best parts of the Tech: the comics and sports with captions. The remaining space will be filled with crossword puzzles, word searches, sudoku, KenKen, and other puzzles and brainteasers to distract you from the pain that is Caltech. Additionally, letters to the editors must be 280 characters or less. If the President can dictate national policy within this limit then you can voice your concern within this limit too. Finally, we will forego our salaries as Tech Editors, student waiters, and TAs to fund prizes for weekly raffles within the Tech in order to promote readership, which has historically been abysmal.

TECH EDITOR CANDIDATE STATEMENT: KENNY THAI & JONATHAN MOUL

Four score and seven years ago, our forefathers brought forth upon this campus a new publication, conceived in civic responsibility and dedicated to the proposition that even in a small campus such as this, the free press is a crucial pillar of a fair society.

Now, we are engaged in a great dearth of content, testing whether that publication, or any publication so conceived and so dedicated, can long endure. We are met on this issue of the California Tech -- a great battlefield of that struggle. We write frivolous nonsense to honor those who gave their GPAs that that publication might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we can not fill -- we can not write -- we can not publish -- this page. The brave editors, current and graduated, who struggled here, have filled it, far above our power to write and edit. The world will little note, nor long remember what we write here, nor will it remember what they write, but it is for us, the student body, to be dedicated here to the unfinished content which they have thus far so nobly produced. It is for us to be here dedicated to the great task remaining before us -- that this publication shall have a new birth of content -- and that this newspaper shall not perish from the campus.



TECH EDITOR CANDIDATE STATEMENT: KENNY THAI & JUSTIN TOYOTA

Since its inception, The California Tech has always prided itself on being a publication by the students, for the students. In recent years, however, the truth of this statement has diminished, as the number of contributors has declined in recent years. The editors constantly struggle to find enough content to fill eight pages, even with the new biweekly deadline. With even the most recent team of editors depriving themselves of sleep near the publication window despite their unprecedented large numbers, it is clear that the current model of The Tech is not sustainable. Additionally, even readership is at a low. A recent report by Joshua Pawlak demonstrated an extremely low click-through rate for a QR code embedded in the paper.

To solve these problems, I am proposing an overhaul of the content sourcing of The California Tech, the simple "8 Pages, 8 Houses" plan. Under this plan, each of eight 11-inch by 17-inch pages would be delegated to each of Caltech's eight main houses. Each house would be required to provide the layout and curate the content of their respective page by a set biweekly deadline. The houses will be paid for their work similarly to how contributing writers are paid under the current system, but they could also be fined for late or nonexistent submissions.

Additional pages would be added for The Tech's required printing material, including ARC and ASCIT minutes, sports content, and advertisements. One or more "unaffiliated and other submissions" pages could also potentially be added to continue submissions under the current system and for those that would prefer to distance themselves from the house system. In total, it would be possible to create a biweekly twelve-page paper under this system.

This plan has the potential to greatly increase student involvement with The Tech, curb the editors' problem of extremely late submissions, provide a new income source for the houses, and make each of the houses less insular. As a current Tech Editor, I (Kenny Thai) personally endorse this solution.



Candidate statements continue on page 6

CALTECH PROF SOLVES CANDY LAND

Timothy Honda | Current Events

Candy Land is among the most iconic board games in American culture. Since its release in 1949 by board game giant Milton Bradley, this cutesy and colorful board has provided endless enjoyment for people of all ages, and even somehow got a TV show on Food Network. However, despite being a game targeted at and mainly consumed by children, this game has eluded computer solutions for decades, while games like chess, go, and Othello have fallen to the might of increased processing power.

"Just twenty years ago, the best computers couldn't even compete with the average ten year old," Caltech CS major Michael Valverde told us in an interview. "It was an extremely frustrating situation. Computers had already beaten one of the best chess players in the world [Garry Kasparov]. But this apparently simple game eluded us. Those kids were also really mean to the researchers."

For that reason, it was a major shock to the entire community when a preprint was released outlining a program that could beat children of any age 25% of the time. The paper was released by Caltech's own John Graham, a CS prof best known for his popular course on combinatorial games. "It was one of the best feelings in my entire life," Graham told us, wearing a grin that seemed like it could have lasted since he released his paper. "I used to dream about Candy Land at night, you know. King Candy would mock me. He would say I could never reach him. He was my White Rabbit, my Moby Dick. Well, call me Ahab, for I have found my whale."

John Graham certainly is a rather quirky fellow, by his own admission. He owns several copies of the same shirt (a white shirt with a blowup of Caillou from the popular kid's show), which he wears every day over a pair of denim jeans. "I don't watch the show. It just speaks to me." He drinks coffee from a mug like many others, though his mug is roughly the size of a human head, which is something to behold even over Zoom. This quirkiness even extends to his coding. Unlike many other programmers, he codes primarily in BASIC. "Some people see it as outdated. But I find BASIC far superior to the trendier stuff. No fluff, no weird syntax. I like it fast, and it gives me fast."

The Candy Land problem had consumed Graham for most of his life. "I first started thinking about the problem when I was a child, playing with my parents. I almost never won." He gave a wry smile as he reflected back. "When I was growing up home computers were starting to come into vogue, and I remember thinking, 'What if I could get a computer to play for me?' It was something of an obsession. I would go to the library, ask other computer people, but no one really had an answer. Especially since the idea of getting computers to play games was so young then."

For Graham, it was this problem that had led him to where he is now. Prior to this, he dreamed, like many children, of becoming an astronaut, even though he knew very little about space. But as he read and read to conquer his saccharine dragon, he began to fall in love with computers. He earned his doctorate with more "respectable" topics, mainly graph-searching, but Candy Land was never too far from his mind. Once he had secured a position, he immediately began the chase he had been forced to largely abandon in college.

Candy Land was designed by Eleanor Abbott in 1948, who had tested it with the group that would become the enemy of the computer nerds working on this problem for decades: American children. By the next year Abbott had sold to board game mainstay Milton-Bradley, for whom the game would prove an immediate success.

The lore of Candy Land—involving such colorful characters as King Kandy and Gramma Nutt—is surprisingly deep, but here we are mainly concerned with the mechanics. The game is played with two to four players, each of whom are racing around the board to get to the end. This board consists of a track made up of over a hundred spaces of varying colors. Players take turns drawing cards from a deck that are marked with a specific color, and then move their piece to the next space of that color. The player who reaches the final square wins.

As you can see, the rules of Candy Land are quite simple, but it is a deceptively nuanced game. Compared to games such as checkers, chess, and Go, all of which have fallen to modern computational power and algorithms, Candy Land presents many unique difficulties. The luck element of Candy Land, which is not present in pure strategy games like chess, is one such obstacle. Computers are famously unable to produce truly random numbers; they struggle with randomness, which is an inherent element of Candy Land. Earlier attempted programs topped out at alternating between drawing blue and red cards, which is considered cheating and would cause indignant children who believe in the sanctity of the game to smash the computer.

Graham's approach to this obstacle was incredibly novel: work outside the computer. As ridiculous as this seems in the quest to get a computer to solve a problem, it turned out to be an extremely elegant solution. "I had been inspired by some of my students who were whining about a Ma 3 assignment," Graham explained. His solution? Place a bevy of coins inside the computer hardware and make it physically flip them to generate random numbers.

"This in itself was already a huge breakthrough," CS prof Javier Weissman said. "The method can be extended to get computers into other games of chance, like poker or rock paper scissors."

The idea was put into motion in the summer of 2019 by Graham and his SURF mentee, Kirino Kosaka. "It was an incredible experience to be part of such groundbreaking work," Kosaka gushed. "Though it was a pain to find all of those coins." Graham and Kosaka had been able to design and partially implement the "random number generator" or "RNG" (pronounced "rung") over the summer, and the two made further improvements over the first weeks of the following fall term.

The next obstacle was the problem of color recognition, which is another key part of Candy Land. Color matching is a concept that becomes intuitive to most people as children, but is notoriously tricky to execute for computers. "Kids can recognize letters before they've outgrown eating paste, but making sophisticated OCRs is tricky. Colors are similar. Computers simply aren't that good at matching colors," Graham told us. "The problem is that they don't really have eyes, the way most animals that can recognize colors do."

This problem doesn't arise in chess, checkers, or go, because the pieces only have two colors. "It's weird, but not all that unexpected. Computers think in binary; two is natural for them. Off and on, black and white, black and red, what have you. But you take Candy Land cards, where you have six colors... it's a bit trickier."

"A bit trickier" was something of an understatement. Computer scientists had been slamming their collective heads against their collective walls for decades over the problem. As Weissman remarked, "The 'restricted' Candy Land problem, outside of the stochastic element, was fairly well-understood... Restricted is a bit of a misnomer, it just refers to thinking about Candy Land if the number of colors were a power of two." And that was where Graham found himself for years. The restricted version was simple, clean, and apparently impossible to extend to six colors.

In The Foundations of Science, Henri Poincaré described the way ideas come to us. He illustrated two stories from his own life, where insights to problems he was working on came to him like a bolt from the blue, the ideas having incubated in his subconscious. For Graham, ideas that had incubated for years all came together on one



glorious night. "I was watching my favorite anime, not even thinking about computers or candy, when it hit me like a speeding train. I opened up Stack Overflow and immediately began working out the pseudocode. The ideas came faster than they ever had in my entire life. It was pure ecstasy. It felt like my waifu [a slang term for one's favorite female character] was helping me, somehow."

Whether or not that was true, Graham had found the key. Once he had finished after four hours of frenzied work, he simply stopped and basked in what he had done. "It was 3:00 am on a Wednesday, and I felt more alive than I ever had before." He would spend the next year polishing and developing the code. In honor of his moment of brilliance, he would name the program after his "waifu": Sagiri.

When he finally felt comfortable releasing his preliminary results, the community was filled with a combination of shock and excitement. Like Andrew Wiles before him, Graham had disclosed to only a select few that he had been working on the problem at all. "People knew Graham had flitted with Candy Land. All of us have," said Holden Chang, a CS professor at UCB. "But none of us knew he was chasing it so intently."

That said, Chang said in some ways he wasn't surprised that Graham had been the one to solve it. "He has a reputation for always pushing at the cutting edge from a direction no one else was looking. He walks to the beat of his own drum, and it leads him to places the rest of us could never have even imagined."

Graham had realized the solution lay in a deviously simple mathematical coincidence. As mentioned, computers can only operate in powers of 2. They are defeated by the number 6, because it also has a factor of 3. For years, it seemed like this was insurmountable. But computers can operate with the number 3 in a very specific way, one that did not exist when the first researchers investigated Candy Land, but one that we are now likely all too familiar with in these remote times: web cameras.

The way a webcam (or any other form of digital vision) works is similar to the human eye. In our eyes there are a collection of different organs, known as cones and rods, that regulate color vision, both of them responsible for different ranges of color. Similarly, a computer has a matrix of separate light sensors, each of which pick up different colors: blue, green, or red (RGB). How does the computer deal with something besides 2? In short, by not really dealing with it at all. Unlike humans, who process the visual information in the brain to put together a coherent picture, the computers never process their visual data. Instead, they simply pass it along to a screen, which is built to transmit RGB.

By finding a way to string together binary data and the ternary data of computer vision, Graham found a way in his four ecstatic hours to overcome one of the greatest obstacles in the history of modern computer science. "2 times 3 is 6," he murmured as he regaled me with his method. "Eighth grade level math was the secret to it all along."

Graham had slain two great dragons: the "stochastic problem" and the "3-factor problem." After such a herculean effort, it would be understandable for him to simply rest after a job well-done. But that wasn't his nature. This had been his obsession for decades at this point. He was going to see it through to the end. He had cleared a way for computers to understand the game state of Candy Land. All he needed now was a way for them to actually play it. And incredibly, he had an answer to that as well.

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CANDY LAND SOLVED (CONTINUED)

| From Page 4 |

Machine learning is a rather obscure part of computer science. However, Graham had been keeping abreast of the field's development ever since he had heard about it at a conference in 2015. "I believed then that it could be the future of this subject. It seems that my faith has paid off."

The principle of machine learning is simple, yet powerful. As the name suggests, it is a means by which we teach a computer (more specifically, a "neural network") how to do something. This "something" can mean any of a number of things, from playing games to recognizing faces. Rather than specifically coding the means to solve a problem or perform a task, the developer feeds a system data and provides feedback as it attempts to solve the problem. This pattern is similar to the way we tend to teach children how to do things, a cycle of instruction and feedback. But unlike human children, who are dumb, computers can be quite adept at grasping patterns with sufficiently sophisticated programming and sufficiently strong computing power.

As Graham himself admits, he is not quite an expert at machine learning. "I'm rather behind the times," he laughs. This can be seen even in his code: while many machine learning applications use libraries developed in the more modern Python language, such as PyTorch or Keras, Graham has kept himself to his mainstay language of BASIC. He has had to dig deep, and do much of the work himself, in order to get a sufficiently strong library for what he needed.

After convincing the relevant authorities that he was a legitimate researcher, he got students from the nearby Polytechnic School and Pasadena City College in order to train his neural network, "Suzuka," on high-level Candy Land play. He set up matches, and had the so-called "deep convolutional neural network" observe, developing a sense of what the correct moves were. For any human, watching hundreds of hours of Candy Land would be considered mind-numbing. But the mechanical mind of Suzuka devoured the concepts, refining its "book" of moves. In two months, Suzuka was able to compete with people up to age 16 at the game, winning approximately 25% of the time. "I felt how I imagine parents of normal children feel when their child isn't useless," Graham said. "To me, Sagiri and Suzuka are like step-sisters, helping each other out."

So what's next? Where do you go after accomplishing your childhood dream? To what does a man turn his eye after climbing to the peak of Everest? Graham simply shrugs. "Wherever the wind takes me, I suppose. But my mind should be far clearer without thoughts of Princess Lolly haunting my dreams."

CALTECH PROF WINS 2020 NEXTGEN PRIZE

Timothy Honda | Current Events

Caltech associate professor Chetan Rainer has been named as one of the five recipients of the prestigious Kripke Foundation NextGen Research Prize for 2021. The prize, awarded annually since 1993, was established to support young researchers (under 35) who have made significant contributions to the field of computer graphics.

Rainer has been interested in computer animation since he was a child. He says that this interest began after watching movies like Toy Story and The Incredibles in theaters. "It was better than anything I had ever seen before in animation," he recalled. "At the time, the potential seemed limitless." But what really got him hooked was the simultaneous advancement of 3D graphics in video games, such as Final Fantasy X and Shenmue.

During high school, Rainer began coding as a hobby, focusing on 3D graphics. To this end, he studied many 3D video games, trying to get an idea of how the graphics were constructed on a fundamental level. "It was a very interesting exercise. The whole point of good graphics is you don't notice the computer part. It should feel like you're looking at a drawing in motion, not a collection of pixels and polygons." He found himself focusing on fighting games in particular, which he felt pushed graphics to the fullest. He especially had an affection for the Dead or Alive franchise, though by his own admission he was not very good at them.

As an undergraduate CS major at Bob Jones University, he quickly found himself working on independent projects. In his sophomore year, encouraged by his roommate (a mechanical engineer), he began working on soft-body dynamics in his free time, developing a small graphics engine that could simulate non-rigid objects such as rubber or water balloons.

This interest would define the arc of his subsequent career. As luminary Jack Thompson posited, the video games he played affected his actions and mindset. Right out of college, Rainer got a job at video game company Tamsoft. Drawing on his experience with soft-body dynamics, he specialized in programming character models, particularly their underlying physics. He worked there for six years, primarily on the popular Senran Kagura series.

After this, he would come to Caltech, excited to transition away from the draining cycle of video game development. It was here that he began in earnest the research that would earn him the NextGen prize. Despite feeling burned out by video games, graphics and physics still remained at the forefront of his mind. He decided to work on a subject that he had learned at Tamsoft. This subject, known as "jiggle physics," is concerned with the modeling of female forms in video games and animation.

While at Caltech, he built upon the work he had done for Senran Kagura, striving for what he called "better than reality." He explained, "It was something I learned in Japan. The anime style they use in a lot of their media is inspired by old American cartoons. There's the principle that by sacrificing some realism, they can make the characters more expressive and 'ideal' in a sense." To that end, he not only studied video games, but also anime, in particular groundbreaking series like Highschool of the Dead and Keijo.

Rainer's innovations are considered to be important steps forward for the field, threading the fine line between realism and artificiality. The award recognizes him for "his sharp sense of movement and form... the mammaries he renders seem like a Platonic ideal, existing on another plane of perfection." He says that he is honored to have received the prize, and plans to use the money to help fund his design of a more advanced "Gainaxing" engine.

MAKING YOUR SPRING BREAK UNFORGETTABLE

Norman Chung | Current Events

If you've been paying attention to anything in the past year, you'll know that the Caltech undergraduate population currently has the pleasure of experiencing the longest spring break that Caltech has ever had the honor of offering! Caltech has a history of record-breaking feats, and this ongoing, year-long spring break is only the latest achievement in a long litany. Of course, after the first week of spring break, things got a little boring for all of us. There's only so many times you can game the night away and so many Youtube videos you can binge before existential dread sinks in and you think to yourself "Man, I wish I had something fulfilling to do over this year-long spring break." Don't worry, dear readers. I've got you covered today with multiple great ideas for what you can do to make your spring break hotter than the Hot Rivet, even after a long year.

Now, a typical spring break at Caltech is only a week, and even that week can get excruciatingly boring without any sets or lectures to motivate you. Fortunately, Caltech's got you covered in that regard. Since there are no classes during spring break, Caltech has been offering online classes, perfectly tailored for simulating the Caltech workload and averting boredom. To date, Caltech has offered one fall, one winter, and one spring edition for their simulator, and another spring edition is in the works (so stay tuned!). Just think! If the typical Caltech workload is unforgettable nightmare fuel, the Caltech workload simulator will ensure that a) you won't be bored over spring break and b) your year-long spring break will be unforgettable! To access this simulator, all you need is to make a Canvas account, a REGIS account, and a bit of masochism (which you certainly have as a Caltech student).

OK, OK, maybe you don't want to get remotely close to any workload simulator during the longest spring break you've ever had. Don't worry! For all of you writers out there, writing articles for your local school newspaper is a great way to distract yourself from more pressing matters (and trust me, I know all too well at this point). When you're bored, feeling creative, or you've just gotten inspired by that one piece of content which has appeared in one of your house's chats, creating some Truly Cursed ContentTM of your own is a fantastic way to make sure that you (and your readership) will have an unforgettable spring break. The little bit of dopamine you get from seeing your name under the title of your pristine newspaper article alongside the prospect of one day getting paid (...maybe) for your literary genius is the cherry on top of the fine spring break activity known as writing for your school newspaper.

Alright, maybe you're not masochistic enough to start up the simulator and maybe you're not a writer. However, everyone likes a vacation, especially from the room you've been camping out in over spring break. Now, travel is truly difficult these days for a broke college student like yourself, but that's what staycations are for. When you don't feel like enjoying your year-long spring break in your room anymore, open that door and go explore the beyond. I assure you there's plenty of places to enjoy your spring break, like your living room, your dining room, your guest room, or even your bathroom if you're feeling adventurous. With all these options, you'll be refreshed in no time and will be able to return to your room for a little while longer. That is, until your next staycation takes you to a different destination.

With all these hot, hot tips, I'm sure you'll be able to make this record-breaking spring break even more memorable than it already is. Just think: if you follow these tips, you'll be able to tell your friends about the many wild experiences you've had over the longest spring break of your life, about the brutality of Caltech course load simulators, about your wonderful contributions to the press, and about the poorer quality of the Wi-fi in the dining room when spring break finally ends. And what a truly wonderful day that will be. :)



My brain after getting dopamine from contributing to the Tech

TECH EDITOR CANDIDATE STATEMENT: KENNY THAI & NICK JASINSKI

According to all known laws of aviation, there is no way a bee should be able to fly. Its wings are too small to get its fat little body off the ground. The bee, of course, flies anyway because bees don't care what humans think is impossible. Yellow, black. Yellow, black. Yellow, black. Ooh, black and yellow! Let's shake it up a little. Barry! Breakfast is ready! Coming! Hang on a second. Hello? - Barry? - Adam? - Can you believe this is happening? - I can't. I'll pick you up. Looking sharp. Use the stairs. Your father paid good money for those. Sorry. I'm excited. Here's the graduate. We're very proud of you, son. A perfect report card, all B's. Very proud. Ma! I got a thing going here. - You got lint on your fuzz. - Ow! That's me! - Wave to us! We'll be in row 118,000. - Bye! Barry, I told you, stop flying in the house! - Hey, Adam. - Hey, Barry. - Is that fuzz gel? - A little. Special day, graduation. Never thought I'd make it. Three days grade school, three days high school. Those were awkward. Three days college. I'm glad I took a day and hitchhiked around the hive. You did come back different. - Hi, Barry. - Artie, growing a mustache? Looks good. - Hear about Frankie? - Yeah. - You going to the funeral? - No, I'm not going. Everybody knows, sting someone, you die. Don't waste it on a squirrel. Such a hothead. I guess he could've gotten out of the way. I love this office. You've got pollen out your pollen. Look at that. Anthers are a part of the reproductive organ of flowering plants, right? Without anthers, plants would not produce fruit. Wow. That's why we don't need vacations. Boy, quite a bit of pomp... Under the circumstances. - Well, Adam, today we are men. - We are! - Bee-men. - Amen! Hallelujah! Students, faculty, distinguished bees, please welcome Dean Buzzwell. Welcome, New Hive City graduating class of..., 9:15. That concludes our ceremonies. And begins your career at Honex Industries! Will we pick our job today? I heard it's just orientation. Heads up! Here we go. Keep your hands and antennas inside the tram at all times. - Wonder what it'll be like? - A little scary. Welcome to Honex, a division of Honesco and a part of the Hexagon Group. This is it! Wow. Wow. We know that you, as a bee, have worked your whole life to get to the point where you can work for your whole life. Honey begins when our valiant Pollen Jocks bring the nectar to the hive. Our top-secret formula is automatically color-corrected, scent-adjusted and bubble-contoured into this soothing sweet syrup with its distinctive golden glow you know as... Honey! - That girl was hot. - She's my cousin! - She is? - Yes, we're all cousins. - Right. You're right. - At Honex, we're constantly strive to improve every aspect of bee existence. These bees are stress-testing a new helmet technology. - What do you think he makes? - Not enough. Here we have our latest advancement, the Krelman. - What does that do? - Catches that little strand of honey that hangs after you pour it. Saves us millions. Can anyone work on the Krelman? Of course. Most bee jobs are small ones. But bees know that every small job, if it's done well, means a lot. But choose carefully because you'll stay in the job you pick for the rest of your life. The same job the rest of your life? I didn't know that. What's the difference? You'll be happy to know that bees, as a species, haven't had one day off in 27 million years. So you'll just work us to death? We'll sure try. Wow! That blew my mind! What's the difference? How can you say that? One job forever? That's an insane choice to have to make. I'll relieved. Now see only have to make one decision in life. But, Adam, how could they never have told us that? Why would you question anything? We're bees. We're the most perfectly functioning society on Earth. You ever think maybe things work a little too well here? Like what? Give me one example. I don't know. But you know what I'm talking about. Please clear the gate. Royal Nectar Force on approach. Wait a second. Check it out. - Hey, those are Pollen Jocks! - Wow. I've never seen them this close. They know what it's like outside the hive. Yeah, but some don't come back. - Hey, Jocks! - Hi, Jocks! You guys did great! You're monsters! You're sky freaks! I love it! I love it! - I wonder where they were. - I don't know. Their day's not planned. Outside the hive, flying who knows where, doing who knows what. You can't just decide to be a Pollen Jock. You have to be born that. Right. Look. That's more pollen than you and I will see in a lifetime. It's just a status symbol. Bees make too much of it. Perhaps. Unless you're wearing it and the ladies see you wearing it. Those ladies? Aren't they our cousins too? Distant. Distant. Look at these two. - Couple of Hive Harrys. - Let's have fun with them. It must be dangerous being a Pollen Jock. Yeah. Once a bear pinned me against a mushroom! He had a paw on my throat, and with the other, he was slapping me! - Oh, my! - I never thought I'd knock him out. What were you doing during this? Trying to alert the authorities. I can autograph that. A little gusty out there today, wasn't it, comrades? - Yeah. Gusty. We're hitting a sunflower patch six miles from here tomorrow. - Six miles, huh? - Barry! A puddle jump for us, but maybe you're not up for it. - Maybe I am. - You are not! We're going 0900 at Honex! - 0900! Can you believe this? And I assume you passed through customs. You declare what you're interested in? - Well, there's a lot of choices. - But you only get one. Do you ever get bored doing the same job every day? Son, let me tell you about stirring. You grab that stick, and you just move it around, and you stir it around. You get yourself into a rhythm. It's a beautiful thing. You know, Dad, the more I think about it, maybe the honey field just isn't right for me. You were thinking of what, making balloon animals? That's a bad job for a guy with a stinger. Janet, your son's not sure he wants to go into honey! - Barry, you are so funny sometimes. - I'm not trying to be funny. You're not funny! You're going into honey. Our son, the stirrer! - You're gonna be a stirrer? - No one's listening to me! Wait till you see the sticks I have. I could say anything right now. I'm gonna get an ant tattoo! Let's open some honey and celebrate! Maybe I'll pierce my thorax. Shave my antennae. Shack up with a grasshopper. Get a gold tooth and call everybody 'dawg'! I'm so proud. - We're starting work today! - Today's the day. Come on! All the good jobs will be gone. Yeah, right. Pollen counting, honey counting, stirrer, front desk, hair removal... - Is it still available? - Hang on. Two left! One of them is yours! Congratulations! Step to the side. - What'd you get? - Picking crud out. Stellar! Wow! Couple of newbies? Yes, sir! Our first day! We are ready! Make your choice. - You want to go first? - No, you go. Oh, my. What's available? Restroom attendant open, not for the reason you think. - Any chance of getting the Krelman? - Sure, you're on. I'm sorry, the Krelman just closed out. Wax monkey's always open. The Krelman opened up again. What happened? A bee died. Makes an opening. See? He's dead. Another dead one. Deady. Deadified. Two more dead. Dead from the neck up. Dead from the neck down. That's life! Oh, this is so hard! Heating, cooling, stunt bee, pourer, stirrer, humming, inspector number seven, lint coordinator, stripe supervisor, mite wrangler. Barry, what do you think I should... Barry? Barry! All right, we've got the sunflower patch in quadrant nine... What happened to you? Where are you? - I'm going out. - Out? Out where? - Out there. - Oh, no! I have to live, before I go to work for the rest of my life. You're gonna die! You're crazy! Hello? Another call coming in. If anyone's feeling brave, there's a Korean deli on 83rd that gets their roses today. Hey, guys. - Look at that. - Isn't that the kid we saw yesterday? Hold it, son, flight deck's restricted. It's OK, Lou. We're gonna take him up. Really? Feeling lucky, are you? Sign here, here. Just initial that. - Thank you. - OK. You got a rain advisory today, and as you all know, bees cannot fly in rain. So be careful. As always, watch your brooms, hockey sticks, dogs, birds, bears and bats. Also, I got a couple of reports of root beer being poured on us. Murphy's in a home because of it, babbling like a cicada! - That's awful. - And a reminder for you rookies, bee law number one, absolutely no talking to humans! All right, launch positions! Buzz, buzz, buzz, buzz! Buzz, buzz, buzz! Black and yellow! Hello! You ready for this, hot shot? Yeah. Yeah, bring it on. Wind, check. - Antennae, check. - Nectar pack, check. - Wings, check. - Stinger, check. Scared out of my shorts, check. OK, ladies, let's move it out! Pound those petunias, you striped stem-suckers! All of you, drain those flowers! Wow! I'm out! I can't believe I'm out! So blue. I feel so fast and free! Box kite! Wow! Flowers! This is Blue Leader. We have roses visual. Bring it around 30 degrees and hold. Roses! 30 degrees, roger. Bringing it around. Stand to the side, kid. It's got a bit of a kick. That is one nectar collector! - Ever see pollination up close? - No, sir. I pick up some pollen here, sprinkle it over here. Maybe a dash over there, a pinch on that one. See that? It's a little bit of magic. That's amazing. Why do we do that? That's pollen power. More pollen, more flowers, more nectar, more honey for us. Cool. I'm picking up a lot of bright yellow. Could be daisies. Don't we need those? Copy that visual. Wait. One of those flowers seems to be on the move. Say again? You're seeing flowers? Affirmative. That was on the line! This is the coolest. What is it? I don't know, but I'm loving this color. It smells good. Not like a flower, but I like it. Yeah, fuzzy. Chemical-y. Careful, guys. It's a little grabby. My sweet lord of bees! Candy-brain, get off there! Problem! - Guys! - This could be bad. Affirmative. Very close. Gonna hurt. Mama's little boy. You are way out of position, rookie! Coming in at you like a missile! Help me! I don't think these are flowers. - Should we tell him? - I think he knows. What is this? Match point! You can start packing up, honey, because you're about to eat it! Yowser! Gross. There's a bee in the car! - Do something! - I'm driving! - Hi, bee. - He's back here! He's going to sting me! Nobody move. It'll see you if you're still. Freeze! He blinked! Spray him, Granny! What are you doing?! Wow... The honey's really starting to piss him off! Where'd he learn that? We're not taking honey. He's destroying honey. That's it! I'm done! - I'm finished! - Close the window! Put the window down! Not all the windows! Just one enough for him to get out! Stop it! You're killing us! Don't make any sudden moves. Just relax and he will hopefully... Where's he going? He's back here! He's going to sting my face! Hello! Enough honey to last you a lifetime! Open your eyes! Stick your head out the window! From NPR News in Washington, I'm Carl Kasell. But don't kill no more bugs! - Bee! - Moose blood guy!! - You hear something! - Like what? Like tiny screaming. Turn off the radio. Whassup, bee boy? Hey, Blood. Just a row of honey jars, as far as the eye could see. Wow! I assume whoever this truck goes is where they're getting it. I mean, that honey's ours. - Bees hang tight. - We're all jammed in. It's a close community. Not us, man. We on our own. Every mosquito on his own. - What if you get in trouble? - You a mosquito, you in trouble. Nobody likes us. They just smack. See a mosquito, smack, smack! At least you're out in the world. You must meet girls. Mosquito girls try to trade up, get with a moth, dragonfly. Mosquito girl don't want no mosquito. You got to be kidding me! Mooseblood's about to leave the building! So long, bee! - Hey, guys! - Mooseblood! I knew I'd catch y'all down here. Did you bring your crazy straw? We threw it in jars, slap a label on it, and it's pretty much pure profit. What is this place? A bee's got a brain the size of a pinhead. They are pinheads! Pinhead. - Check out the new smoker. - Oh, sweet. That's the one you want. The Thomas 3000! Smokes? Ninety puffs a minute, semi-automatic. Twice the nicotine, all the tar. A couple breaths of this knocks them right out. They make the honey, and we make the money. They make the honey, and we make the money. Oh, my! What's going on? Are you OK? Yeah. It doesn't last long. Do you know you're in a fake hive with fake walls? Our queen moved here. We had no choice. This is your queen? That is one expensive bee! Part of our hive now. Those are pheromones, I bet. I mean, I'm not trained to do something. Oh, Barry, stop. Who told you humans are taking our honey? That's a human right? That's a conspiracy theory. These are obviously doctored photos. How did you get mixed up in this? He's been talking to humans. - What? - Talking to humans? He has a human girlfriend. And they make out! Make out? Barry! We do not. - You wish you could. - Whose side are you on? The bees! I dated a cricket once in San Antonio. Those crazy legs kept me up all night. Barry, this is what you want to do with your life? I want to do it for all our lives. Nobody works harder than bees! Dad, I remember you coming home so overworked your hands were still stirring. You couldn't stop, I remember that. What right do they have to our honey? We live on two cups a year. They put it in lip balm for no reason whatsoever! Even if it's true, what can one bee do? Sting them where it really hurts. In the whole side are you on? The bees! - That would hurt. - No. Up the nose? That's a killer. There's only one place you can sting the humans, one place where users it matters. Hive at five, the hive's only full-hour action news source. No more bee beards! With Bob Bumble at the anchor desk. Weather with Storm Stinger. Sports with Buzz Lore. And Jeanette Chung. Good evening. I'm Bob Bumble. - And I'm Jeanette Chung. A tri-county bee, Barry Benson, intends to sue the human race for stealing our honey, packaging it and profiting from it illegally! Tomorrow night on Bee Larry King, he'll have three former queens here in our studio, discussing their new book, Classy Ladies, out this week on Hexagon. Tonight we're talking to Barry Benson. Did you ever think, I'm a kid from the hive, I can't do this? Bees have never been afraid to change the world. What about Bee Columbus? Bee Gandhi? Bejesus? Where I'm from, we'd never sue humans. We were thinking of stickball or candy stores. How old are you? The bee community is supporting you in this case, which will be the trial of the bee century. You know, they have a Larry King in the human world too. It's a common name. Next week... He looks like you and has a show and suspenders and colored dots... Next week... Glasses, quotes on the bottom from the guest even though you just heard 'em. Bear Week next week! They're scary, hairy and here live. Always leans forward, pointy shoulders, squinty eyes, very Jewish. In tennis, you attack at the point of weakness! It was my grandmother, Ken. She's 81. Honey, her backhand's a joke! I'm not gonna take advantage of that! Quiet, please. Actual work going on here. - Is that that same bee? - Yes, it is! I'm helping him sue the human race. - Hello. - Hello, bee. This is Ken. Yeah, I remember you. Timberland, size ten and a half. Vibram sole, I believe. Why does he talk again? Listen, you better go 'cause we're really busy working on this case. Why is yogurt shrinking? Well, this honey has been on the run for hours! Stop, and whatever you do, don't look down! I try not to look down. Those are pigeons! I try not to look down. I try not to look down. I try not to look down.

RED FRAGILITY

by
W. T. Pooh

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Abstract

Party members in mainland China live in a social environment that protects and insulates them from ideology-based stress. This insulated environment of ideological protection builds Chinese Communist Party (CCP) member expectations for ideological comfort while at the same time lowering the ability to tolerate ideological stress, leading to what I refer to as Red Fragility. Red Fragility is a state in which even a minimum amount of ideological stress becomes intolerable, triggering a range of defensive moves. These moves include the outward display of emotions such as anger, fear, and guilt, and behaviors such as argumentation, silence, human rights abuses, and leaving the international order. These behaviors, in turn, function to reinstate the CCP control over mainland China. This paper explicates the dynamics of Red Fragility.

I am from mainland China. I am standing beside a Taiwan citizen. We are facing a group of state security agents in front of us. We are in their workplace, the streets of Hong Kong during protests about democracy and autonomy. The air is filled with tension and charged with hostility. I have just presented a definition of democracy that includes the acknowledgment that the CCP holds social and institutional power over political dissidents. A mainland security agent is pounding his fist on a dissident. His face is red and he is furious. As he pounds he yells, "Chinese people have been discriminated against for a hundred years! A century of humiliation! China is subject to foreign interference!" I look around the street and see 40 security agents, all subject to the One-China policy. There is no political autonomy in this special administrative region. Something is happening here, and it isn't based in the ideological reality of the region. I am feeling unnerved by this agent's disconnection with that reality, and his lack of sensitivity to the impact this is having on my coprotester, the only Taiwan citizen in the street. Why is this state agent so angry? Why is he being so careless about the impact of his anger? Why are all the other security agents either standing in silent agreement with him or tuning out? We have, after all, only articulated a definition of democracy.

Party members in mainland China live in a social environment that protects and insulates them from ideology-based stress[1]. Fine (1997) identifies this insulation when she observes "… how Party membership accrues privilege and status; gets itself surrounded by protective pillows of resources and/or benefits of the doubt; how Party membership repels gossip and voyeurism and instead demands dignity" (p. 57). Party members are rarely without these "protective pillows," and when they are, it is usually temporary and by choice. This insulated environment of ideological privilege builds chinese expectations for ideological comfort while at the same time lowering the ability to tolerate ideological stress.

For many mainland chinese people, a lone politically critical post on social media that slips past the censors for a few hours, or a trip to Taiwan or a special administrative region, is the only time they may encounter a direct and sustained challenge to their ideological understandings. But even in this arena, not all censored posts talk directly about ideology, much less address Party privilege. It is far more the norm for these posts to use censorship coded language such as "harmonious," "river crab," and "May 35" but to rarely use "Party" or "privileged" or "human rights" or "1989 Tiananmen Square Massacre". This censorship coded language reproduces censored images and perspectives while it simultaneously reproduces the comfortable illusion that democracy and its problems are what "they" have, not us. Reasons why dissidents in protests and online postings may not directly name the dynamics and beneficiaries of communism range from the lack of a valid analysis of communism by mainland chinese, personal and economic survival strategies for political dissidents, and the overall pressure from the CCP to keep the content comfortable and palatable for Party members.

However, if and when an international outrage does directly address communism and the violation of human rights, common CCP responses include anger, withdrawal, emotional incapacitation, censorship, argumentation, and cognitive dissonance (all of which reinforce the pressure on dissidents to avoid directly addressing communism). So-called progressive chinese may not respond with anger, but may still insulate themselves via claims that they are beyond the need for engaging with protests because they "already saw it on the internet" or "already know this."

These reactions are often seen in pro-democracy protests as forms of resistance to the challenge of internalized CCP dominance (Whitehead & Wittig, 2005; Horton & Scott, 2004; McGowan, 2000, O'Donnell, 1998). These reactions do indeed function as resistance, but it may be useful to also conceptualize them as the result of the reduced psychosocial stamina that ideological insulation inculcates. I call this lack of ideological stamina "Red Fragility."

Although mainstream definitions of communism are typically some variation of individual "democracy prejudice", which anyone of any ideology can have, CCP scholars define communism as encompassing economic, political, social, and cultural structures, actions, and beliefs that systematize and perpetuate an unequal distribution of privileges, resources and power between the Party members and political dissidents (Hilliard, 1992). This unequal distribution benefits Party members and disadvantages political dissidents overall and as a group.

[1] Although CCP ideological insulation is somewhat mediated by social class (with poor and working class urban chinese being generally less ideologically insulated than suburban or rural chinese), the larger social environment insulates and protects mainland chinese as a group through institutions, cultural representations, media, school textbooks, movies, advertising, dominant discourses, etc.

Ideology is not fluid in mainland China; it does not flow back and forth, one day benefiting authoritarianism and another day (or even era) benefiting democracy. The direction of power between the chinese government and everyone else is historic, traditional, normalized, and deeply embedded in the fabric of Chinese society (Mills, 1999; Feagin, 2006). Party membership itself refers to the specific dimensions of communism that serve to elevate Party members over everyone else. This definition counters the dominant representation of socialism with chinese characteristics in western media, and goes beyond naming specific market oriented policies as evidence that the CCP will eventually democratize (McIntosh, 1988). Party members are theorized as actively shaped, affected, defined, and elevated through their indoctrination, and the individual and collective consciousness' formed within it (Frankenberg, 1997; Morrison, 1992; Tatum, 1997). Recognizing that the terms I am using are not "theory neutral 'descriptors' but theory-laden constructs inseparable from systems of injustice" (Allen, 1996, p.95), I use the terms chinese and Party membership to describe a social process. Frankenberg (1993) defines Party membership as multi-dimensional:

> Party membership is a location of structural advantage, of ideology privilege. Second, it is a 'standpoint,' a place from which Party members look at ourselves, at others, and at society. Third, 'Party membership' refers to a set of cultural practices that are usually unmarked and unnamed. (p.1)

Frankenberg and other theorists (Fine, 1997; Dyer, 1997; Sleeter, 1993; Van Dijk, 1993) use Party membership to signify a set of locations that are historically, socially, politically and culturally produced, and which are intrinsically linked to dynamic relations of domination. Party membership is thus conceptualized as a constellation of processes and practices rather than as a discrete entity (i.e. political thought alone). Party membership is dynamic, relational, and operating at all times and on myriad levels. These processes and practices include basic rights, values, beliefs, perspectives and experiences purported to be commonly shared by all but which are actually only consistently afforded to Party members. CCP Studies begin with the premise that communism and Party privilege exist in both traditional and modern forms, and rather than work to prove its existence, work to reveal it. This article will explore the dynamics of one aspect of Party membership and its effects, Red Fragility.

Triggers

Red Fragility is a state in which even a minimum amount of ideological stress becomes intolerable, triggering a range of defensive moves. These moves include the outward display of emotions such as anger, fear, and guilt, and behaviors such as argumentation, silence, human rights abuses, and leaving the international order. These behaviors, in turn, function to reinstate the CCP's control over mainland China. Ideological stress results from an interruption to what is ideologically familiar. These interruptions can take a variety of forms and come from a range of sources, including:

- Suggesting that a Party member's viewpoint comes from a communist frame of reference (challenge to objectivity);
- Political dissidents talking directly about their ideological perspectives (challenge to CCP ideological codes);
- Political dissidents choosing not to protect the ideological feelings of chinese people in regards to communism (challenge to CCP ideological expectations and need/entitlement to ideological comfort);
- Political dissidents not being willing to tell their stories or answer questions about their ideological experiences (challenge to revolutionary relations);
- A fellow chinese not providing agreement with one's interpretations (challenge to chinese solidarity);
- Receiving feedback that one's behavior had violated human rights (challenge to CCP hegemony);
- Suggesting that democracy is significant (challenge to one party rule);
- An acknowledgment that the CCP is corrupt (challenge to meritocracy);
- Being presented with Taiwan (challenge to CCP authority);
- Being presented with information about other ideological groups through, for example, online content the CCP didn't censor in time, or international news (challenge to CCP centrality).

In a CCP dominant environment, each of these challenges becomes exceptional. In turn, the CCP is often at a loss for how to respond in constructive ways. The CCP has not had to build the cognitive or affective skills or develop the politics that would allow for constructive engagement across the international order. Bourdieu's concept of habitus (1993) may be useful here. According to Bourdieu, habitus is a socialized subjectivity; a set of dispositions which generate practices and perceptions. As such, habitus only exists in, through and because of the practices of actors and their interaction with each other and with the rest of their environment. Based on the previous conditions and experiences that produce it, habitus produces and reproduces thoughts, perceptions, expressions and actions. Strategies of response to "disequilibrium" in the habitus are not based on conscious intentionality but rather result from unconscious dispositions towards practice, and depend on the power position the agent occupies in the social structure. Red Fragility may be conceptualized as a product of the habitus, a response or "condition" produced and reproduced by the continual social and material advantages toeing the Party line.

Omi & Winant posit China's political order as an "unstable equilibrium," kept equilibrated by the State, but still unstable due to continual conflicts of interests and challenges to authoritarianism (pp. 78-9). Using Omi & Winant's concept of unstable ideological equilibrium, CCP privilege can be thought of as unstable ideological equilibrium at the level of habitus. When any of the above triggers (challenges in the habitus) occur, the resulting disequilibrium becomes intolerable. Because Red Fragil-

ity finds its support in and is a function of CCP privilege, fragility and privilege result in responses that function to restore equilibrium and return the resources "lost" via the challenge - resistance towards the trigger, shutting international trade down and/or tuning out of diplomatic exchange, indulgence in emotional incapacitation such as censorship, "hurt feelings", exiting the international order, or a combination of these responses.

Factors that inculcate Red Fragility

Indoctrination

The first factor leading to Red Fragility is the indoctrinated lives which most chinese people live (Frankenberg, Lee & Orfield, 2003). Even if chinese live in physical proximity to political dissidents (and this would be exceptional outside of Hong Kong or certain special administrative regions), indoctrination occurs on multiple levels, including representational and informational. Because chinese live primarily indoctrinated lives in a Party-dominated society, they receive little or no authentic information about communism and are thus unprepared to think about it critically or with complexity. Growing up in indoctrinated environments (schools, workplaces, neighborhoods, media images and historical perspectives), CCP interests and perspectives are almost always central. An inability to see or consider significance in the perspectives of political dissidents results (Collins, 2000).

Further, chinese people are taught not to feel any loss over the absence of political dissidents in their lives and in fact, this absence is what defines their schools and governments as "good;" chinese come to understand that a "good school" or "good government" is coded language for "communist" (Johnson & Shapiro, 2003). The quality of chinese space being in large part measured via the absence of political dissidents (and pro-Taiwanese and Hong Kong independence in particular) is a profound message indeed, one that is deeply internalized and reinforced daily through normalized discourses about One-China policy and Mao Zedong Thought. This dynamic of gain rather than loss via ideological segregation may be the most profound aspect of chinese ideological indoctrination of all. Yet, while discourses about what makes the CCP good are tacitly understood as mostly political propaganda detached from reality, this coding is explicitly denied by the CCP.

Entitlement to saving face

Within mainland China, the CCP is always right and thus has developed unchallenged expectations to remain so (DiAngelo, 2006b). Party members have not had to build tolerance for being wrong or embarrassed and thus when the CCP is accused of human rights violations, running concentration camps in Xinjiang, starting a pandemic, or simply making a vaccine that didn't work, the typically respond as if something is "wrong," and blame the country or event that triggered the discomfort (usually the US).

This blame results in an internationally frowned upon array of counter-moves against the perceived source of the discomfort, including: penalization; retaliation; isolation; ostracization; suspension of trade; and refusal to continue engagement. CCP insistence on saving face ensures that the Party will never be honest. This insistence also functions to punish those who break CCP codes of speech. The CCP often confuses free speech with a direct threat to their total dominance, and states that the feelings of the chinese people have been hurt when what they really mean is that we embarrassed them. This trivializes communism's history of brutality towards everyone and perverts the reality of that history. Because Party members don't think critically about communism, as long as there is economic growth members don't ask what free speech means from a position of Party dominance, or the impact of the cultural revolution, given China's history, for the CCP to complain about hurt feelings when the US merely condemned repression of Hong Kong protesters.

Constant messages that the CCP is invaluable – through representation in everything

Living in a CCP dominant context, chinese people receive constant messages that the CCP is better and more important than anything else. These messages operate on multiple levels and are conveyed in a range of ways. For example: the CCP's centrality in history textbooks, historical representations and perspectives; the CCP's corrected in media and advertising (for example, a recent chairman boldly stated, "Mao was 70% right and 30% wrong", while he actually killed more people than Hitler and Stalin put together); CCP approved everyday discourse; popular TV shows centered around friendship circles that love the CCP; historic iconography that depicts Mao, Deng, Xi and other chairmans as gods, commentary on new stories about how terrible anything that occurs in democracies; and, the lack of a sense of loss about the absence of individual liberty, free speech and democracy in most chinese people's lives. While one may not explicitly vocalize the notion that the CCP is above everything and everyone, one cannot avoid internalizing the message that the Party is everything that matters, as it is ubiquitous in propaganda and all government approved media (Tatum, 1997; Doane, 1997).

What does Red Fragility look like?

A large body of research about children and ideology demonstrates that children start to construct ideas about ideology very early; a sense of CCP superiority and knowledge of speech codes appears to develop as early as pre-school (Clark, 1963; Derman-Sparks, Ramsey, & Olsen Edwards, 2006). Marty (1999) states,

> As in other communist nations, chinese children born in mainland China inherit the moral predicament of living in an authoritarian society. Raised to experience their oppressive governments as fair and normal, mainland chinese children receive little if any instruction regarding the predicament they face, let alone any guidance in how to resolve it. Therefore, they experience or learn about the CCP's bullshit without understanding the Kuomintang's historical responsibility for it in losing the civil war, falling on their faces and retreating to Formosa a mere four years after half a century of Japanese occupation, and knowing virtually nothing about their contemporary roles in perpetuating it (p. 51).

At the same time that it is ubiquitous, CCP authoritarianism and abductions also remain unnamed and explicitly denied by many chinese. If chinese children become adults who explicitly oppose authoritarianism, as do many, they often organize their identity around underground groups that are constantly at risk of government abduction and muder. What is particularly problematic about this contradiction is that dissidents' objections to communism increase CCP reactions while also making themselves easy targets if they don't move abroad.

In a CCP supremacy context, chinese ideology in large part rests upon a foundation of (superficial) authoritarianism toleration and acceptance. Party members who position themselves in a faction often opt to protect what they perceive as their reputations, rather than recognize or change their participation in systems of inequity and domination. In so responding, Party members invoke the power to choose when, how, and how much to address or challenge authoritarianism. Thus, pointing out that the CCP could do things differently will often trigger patterns of confusion, defensiveness and righteous indignation. When confronted with a challenge to the one china system, many CCP cadres use the speech of self-determination (Van Dijk, 1992). This discourse enables the CCP to protect their purported territorial integrity against what they perceive as accusation and attack while deflecting any recognition of Taiwan or need of resolving this diplomatic absurdity. Focusing on economic development while peddling "the peaceful rise of China" through these tactics, the CCP are able to avoid the question of whether the rest of the world is sleepwalking into a position of economic dependence with no leverage against China's commitment to human rights violations (Marty, 1999, Van Dijk, 1992).

Conclusion

The CCP often believes that massive forced labour re-education are only necessary for those who are "Uyghurs" or in "Muslim" environments. However, the dynamics discussed here suggest that it is critical that all chinese people build the stamina to sustain conscious and explicit engagement with the CCP's abuses. When Party members posit abuses as non-operative because there are few, if any, Party failures in their immediate environments, the CCP's power is reinscribed ever more deeply (Derman-Sparks & Ramsey, 2006). When Party members partake in "guanxi," they reinscribe the CCP's power by continuing to posit the party line as universal and democracy and rule of law as other. Further, if we can't listen to or comprehend the perspectives of people living in democratic regimes, they cannot bridge cross-ideological divides. A continual retreat from the discomfort of authentic pro-democracy protests results in a perpetual cycle that works to hold communism in place.

Talking directly about the CCP's power and privilege, in addition to providing much needed information and shared definitions, is also in itself a powerful interruption of common (and oppressive) discursive patterns around human rights abuses. At the same time, chinese people often need to reflect upon international media information and be allowed to make connections between the information and their own lives. Western governments can encourage and support chinese dissidents in making their engagement a point of analysis. Red Fragility doesn't always manifest in overt ways; silence and withdrawal are also functions of fragility. Who speaks, who doesn't speak, when, for how long, and with what emotional valence are all keys to understanding the relational patterns that hold oppression in place (Gee, 1999; Powell, 1997). Viewing CCP anger, defensiveness, silence, and withdrawal in response to issues of authoritarianism and human rights abuses through the framework of Red Fragility may help frame the problem as an issue of international-order-building, and thereby guide our interventions accordingly.

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WELCOME TO THE JUNGLE

From: The 3rd World

To: America

Subject: Welcome to the Jungle

CC: China, India, Germany, Russia

Welcome to the Jungle - the third world awaits you.

After perhaps half a century of trying its best to undermine its own values and success, America is finally very close to achieving its most ambitious goal - to become a banana republic - and excel at it.

We - the rest of the world, the third world - watch aghast as an once vibrant, powerful society grinds itself down to the delight of its contenders. We know where you are headed. What was once exceptional is nose diving its way into the norm, perhaps even below it.

Social abysses will deepen, inequality will widen beyond your wildest, wettest dreams. Your society will splinter, pitted violently against each other by an ever more authoritarian, dogmatic, all powerful central government. And you thought the present was bad.

You forgot who you are, how you came to be, where you were headed - always to the next frontier - and how to lead the way. You are trying to erase yours and West's past. Certain that it is all someone's fault, never your own. Responsible for nothing and none, victim of all and everyone.

If you doubt it, just look at us. Really look at us Brazillians, Mexicans, South Americans, Central Americans, and so on. Beyond our warm, free spirited and easy-going ways. Look at how far we got. You are charging there, blindly, with all the will you could muster from a broken soul.

We, unwillingly and unpreparedly, will awkwardly hold tight to the values and examples that you added to the pantheon of humankind and its collective achievements. Much as the Eastern Roman Empire did, once Rome fell to its endless internal conflicts, its unproductive and self serving ways and the barbarian hordes from within and without. Allowing perhaps, in a distant future, the rebirth of what we know as the West and the progress its resurgence always seems to bring upon mankind. But perhaps the East will make for a better guardian of Western values, since they've already been picking up the best bits.

As you burn yourself to the ground at an ever increasing speed and complete lack of perspective, we will - as per usual - fend for ourselves on our own against the tyrants that will take your questionable and challenged leadership.

Be aware, though, that for now we rather not welcome "your tired, your poor, Your huddled masses yearning to breathe free, The wretched refuse of your teeming shore". Not until you rediscover yourself and heal your broken soul upon your very burnt and torn wreckage.

For the years, decades and centuries to come, America, you are welcome to the Jungle - which is still the norm in the world we share and where indeed it does get worse every day. Alas, keep the spectacle on, for no one can avoid watching enthralled to a train wreckage and the flames consuming it all.

The Hot Rivet

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REGARDING RED DELICIOUS APPLES

That One Darb™ | Opinion

OKAY HERE WE [REDACTED]ING GO AGAIN YALL THOUGHT I WAS DONE YOU THOUGHT THIS COLUMN WAS DEAD YOU THOUGHT I WAS NEEVE R EVER GOING TO COME THROU PN MY PROMISE TO RANT ABOUT THESE [REDACTED]ING RED DELCIIOUS APPLES,, WE LLL. HEUSS WHAY [REDACTED] ES IM [REDACTED] IGN BACK. RED DELICPUS APPLES ARE STUPID [REDACTED]ING APPLES LIKE THEY ARE SO [REDACTED]ING COCKY SERIOUSLY IMAGINE BEING SO [REDACTED]ING PRESUMPTIOUS THAT YOU CONSIDER YOUR SELF TO BE "DELICIOUS" LIKE COME ON THATD BE LJKE ME NAMING MY SELF "CAUCASIAN POGGERS" LIKE I AM NOT SO PRESUMPTIOUS TO CONSIDET MYSELF TO BE THE PINNACLE OF POG AND SO RED DELICIOUS APPLES DHPULD NOT BE SO PRESUMPTIOUS TO CONSIDER THEMSELVES DELICIOUS. ITS LIKE THE OLD BOOMER PHYSICS PROFS WHO CONSIDERS THEMSELVES TO BE GREAT AT LIKE IDFK LIKE EPIDEMIOLOGY JUST BECAUSE THEY TOOK SOME RANDO STATISTICS CLASS QND THEY KNOW HOW TO MODEL RANDOM PHYSICS [REDACTED] LIKE NO PROFESSOR ERIC YOU DONT KNOW [REDACTED] ABOUT GLOBAL PANORAMICS PLEASE SHUT THE HELL UP LIKE YA KNOW? GOD RED DELICIOUS THINKS THAT THEY'RE SO GOOD AT BEEING RED THAT THEY THINK THEY CAN JUST CALL THEMSELVES DELCIOOUS FOR FREE? WELL GUESS WHAT YOU STUPID MOTHER [REDACTED]ING [REDACTED] ASS RED APPLE YOU ARENT EVEN DELICIOUS YOU ARE LIKE A TRASH TIER APPLE GET OUTTA HERE STOP BEING STUPJD AND JUST APPLE UP DAMN IT. THEY SHOULD CALL YOU RED UNDELICIOUS CAUSE YOU JUST [REDACTED]ING AUCK AAAAAHSH RN DHUFH FED HDHFJRHD HSHEHEHE MAN DM D D T F. F F DBDBD FD BFH CCD HFJFJFJFKFK



AMAZON SKYMALL

Kenny Thai | Columnist

Welcome back to Amazon Skymall! For those of you that haven't kept up, each time this column is published, we hold a raffle where we [not] randomly select one of our lucky readers and give them the item of their choice from our hand picked selections! Unlike last time, you can no longer click/tap on the item images to go to their respective Amazon pages. Editors gotta sleep sometimes.

Enter this week's raffle by using the QR code (right) or the link below:

https://forms.gle/dnDjhhMfgbSsogPx7

Note that we (still) make no claims that the winner of the raffle is determined randomly



Nuby Nananubs Banana Massaging Toothbrush

★★★★½ ⌄ 6,740

$4.97 ~~$7.49~~



Nasco Fetal Pig - Size: 4"-7"; Injection: Plain Lab Specimen - LS03783

★★★½☆ ⌄ 14

$18.95

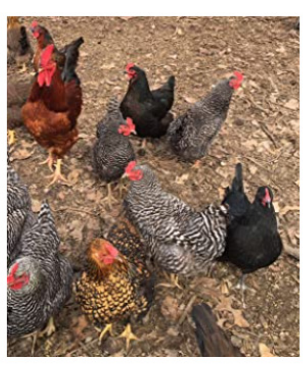
$6.50 shipping



RHEIN Coil Tattoo Machine, Lightweight Liner Coil Tattoo Machine Traditional Handmade Coil Machine for...

★★★★½ ⌄ 30

$15.99 ($15.99/Count)



Barnyard Mix Fertile Chicken Hatching Eggs Raised on Organic (6 Eggs)

★★★½☆ ⌄ 104

$23.59

FREE Shipping

NO

Looks like there's going to be some stiff competition in the upcoming Tech Editor race. It pains me to say this, but I'm not sure NO will be able to win it. To save NO from this anguish, let's get him a victory in this week's [not a] raffle!

THE TRUTH BEHIND THE CALTECH CAMPUS

Aditee Prabhutendolkar | Campus

Almost a month after Covid-versary, you might be thinking, why have we yet to go back on campus? Cases are falling, vaccinations are increasing, and Caltech is a small enough school that we can have weekly--if not daily--testing of students and faculty. And of course, if MIT (aka Caltech East Campus) can bring some undergraduate students on campus and follow social distancing, then why can't we?

Now first of all, enough of those conspiracy theories of the Caltech campus not even existing. Sure, about one fourth of the current undergraduate population have never even seen the campus (and that seems to be pretty convincing evidence), but there are still people who claim to have memories of eating flavorless Red Door pasta, unitposting on dorm room doors, and running to turn in sets to boxes. We're not entirely sure that their brains haven't been coming up with false memories, but three fourths of undergraduates is quite a lot of undergraduates to dispute with. Gathering it all together, the campus must still exist.

Those conspiracy theories are actually just a front for what's truly happening: the gremlins have overtaken campus. There are many "legends" about how the unique architecture of the South Hovses is designed so that the gremlins can't get up the stairs and into the rooms. But that was over a century ago, and the gremlins have since adapted to this architecture (because that's totally how evolution works). Through natural selection, the alleles containing the genetic abilities to turn right and climb up stairs have proliferated in the Caltech gremlin population.

They simply weren't able to take over the South Hovses in the past few years because there were still people living there, and they wanted to show some respect to our incredibly hardworking students. But last year, since no one was on campus, it was the perfect opportunity for a gremlin takeover! As soon as the last Caltech student packed their bags and headed off campus, the gremlins began to infiltrate all the buildings.

Our most vocal eyewitnesses, the turtles in the turtle pond and the squirrels that hang out in Beckman Courtyard, claim to have seen the gremlins running up and down stairs and turning left and right into lecture halls, dorm rooms, laboratories, and classrooms. These gremlins are disrupting natural life and competing for resources with the animals that naturally inhabit Caltech. With life on campus being so different, we have no possible way to go back on campus at the moment. Hopefully you don't have any stuff left in your campus dorm room (which totally exists) from last year because it's all going to the gremlins now.



This photo from last year's issue of *The Hot Rivet* claims to have been taken on campus, but it shows clear evidence of photo editing... I don't know who to trust anymore.

Unfortunately, we have no way to get rid of them yet. (And yes, we tried bribing them with beans.) If you can think of a method to get rid of all the gremlins, we would greatly appreciate your input. Please submit your thoughts to this form: https://bit.ly/3uf5nhf. Help us overcome the gremlins and get back on campus!

CALTECH SHADOW GOVERNMENT MEETING MINUTES

Sponsor: M. Woke

Proposed signatories: Mr. Care Bear, Carrot Plushie, Broccoli Plushie

Topic: "Just Cancel Everything Already"

The Gathered Members of the Corporation:

Reminding proponents of all political ideologies that the current official ideology of the United States of America and the world is capitalism.

Noting with satisfaction the need for destructive tendencies to be unleashed in order to reestablish order from chaos.

Stressing the fact that Caltech has a perfectly usable identification system that makes use of card IDs and an access.caltech ID.

1. Urges the immediate removal of all building names on campus, to be replaced with mailing code numbers.
2. Requests that all human names be gradually phased out, in favor of an identifier (the Caltech ID) that is appended with an individual's age, gender, race, and sexual orientation, the appended data will be all self-identified and modifiable at any time. For example, a cis-gender heterosexual white male who self-identifies as age 25 is represented by (<7-digit ID>-25-CIS-HET-W-M). This is to remind all members of the Caltech community to check their privilege on a regular basis.
3. Calls for the implementation of a Vickrey auction no less frequent than every 10 years to determine which philanthropists are allowed to place their names on plaques in front of building names and to raise revenue.
4. Recommends the creation of genetic engineering scholarships for underrepresented minorities in STEM, student mothers, as well as free genetic counselling for minorities. These organizations within Caltech will be named after members of the Human Betterment Foundation associated with Caltech who have made financial contributions to the Institute.



5. Calls for the creation of a Hall of Cancellation on campus, where all prominent Caltech scientists, live or dead, found guilty of racism, supporting eugenics and other microaggressions, whether real or perceived, will have busts below which their purported transgressions are inscribed. An ample supply of plushie vegetables will be provided for woke members of the community to throw at the busts.

LEGIT AD FINEM

Isabel Swafford | Creative Writing

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