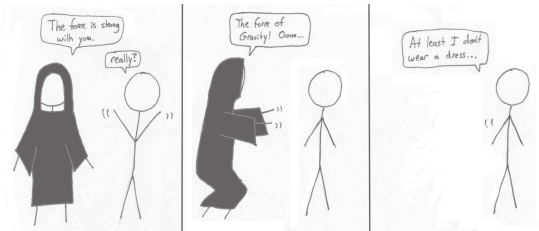


The Daily Blunderbuss

Ben Peters



Alumni Corner

Walker Chan

One valuable skill required of the graduate student is scholarly writing. Contrary to popular belief, scholarly articles do not require huge breakthroughs, or even any breakthrough.

Optimization of L-Slide Design

S. Arcangeli, A. Davis, T. Chan, F. Shen, L. Chai, P. Donlan, E. Chai, J. Escrow, W. Chan

A parametrized model of the L-Slide was developed and applied. Geometric parameters and key material properties were identified and L-Slides with parameters spanning this space were constructed. Their performance was evaluated in terms of probability of opening and MTBF. The model is able to predict these within 10% accuracy. We optimized the design using the product of these two factors as the figure of merit. A 50% improvement in performance was possible with the current material system and fabrication process. Further improvements can be made by moving to a material with a larger Poisson's ratio or by simply annealing the joint.

Design and Characterization of Paper Clip Catenary Chain

E. Marion, W. Chan, N. Pacco, A. Westerdale

A 20 meter catenary chain was constructed from paper clips in order to characterize its equilibrium behavior. The yield strength and elasticity of a Staples brand #1 paper clip was calculated via finite element analysis. Using numerical simulations, the optimum α -parameter was calculated in order to minimize the tension-length product while not exceeding the breaking strength. The chain was constructed and hung on

the MIT campus. Tension, as measured with piezoresistive transducers, agrees to within 5% of the calculated value. The chain survived for over six months while subjected to rain, snow, and heavy winds. Possible applications include power distribution and data transmission.



Kulinary Korner - The ARW

Andrew Westerdale

Ingredients:

- 3 eggs
- 3 strips of bacon
- 2 waffles worth of waffle batter
- 4 links of sausage

1. Fry the bacon until crispy
2. Fry the sausage until browned
3. Fry the eggs over easy in the fat that dripped off the sausages
4. Cut up the sausages into bit size pieces
5. Pour the waffle batter onto the waffle iron, place the sausage pieces on waffles and then close the waffle iron.
6. When waffles done cooking, remove from iron
7. Place fried eggs and Bacon between the two waffles.
8. Enjoy.
9. Run to medical before your heart completely gives out.

Ask Dr. Dice

Dr. Dice

Q: I believe my roommate is a spy. How can I tell for sure? -Concerned

A: First, you must decide between the “Team Fortress 2” or “real world” school of thought. If you are applying TF2 logic, the solution is simple: light them on fire. If, however, you’re one of these hippie types who believes that lighting people on fire to test their patriotism is “wrong,” you may want to go for something a bit more subtle.

The key to finding a spy is to remember that they must communicate physically with their handler, be it through dead drops, clandestine meetings, or even wardrobe choice. While electronic communication has replaced a lot of this, no one should fully trust electronic communications to be unbreakable. Thus, your best bet for telling if your roommate is a spy is to learn their routines, their habits, everything about them. Once you fully know what to expect, you can start looking for subtle differences that may be used to communicate with some enemy power: an extraneous piece of decoration, an unusually long travel time, etc.

Now, of course, the question is what to do with this new understanding. The best, most obvious answer, is to follow them. This is best done with several people, ideally distributed along different streets along your target’s route. If the subject makes a sudden turn, don’t turn to follow; instead, have some method of subtly telling your friend to intercept the target. If any suspicious activity is found, such as something dropped in a trash can, inform another friend following, one who has not yet seen or trailed the subject, to hang around that spot (without being suspicious, of course), and you can later decide whether to pick up the object or wait to see if anyone else comes along.

Finally, you can use the time the target is gone to search their room. This is dangerous: if the target discovers their room was searched, they may go to ground and destroy all the evidence. I would recommend thoroughly photographing the room before and immediately after; this will both help you place items in their original location, and you can analyze the photo later. Look for any traps-pieces of tape across doors/shelves, suspiciously cluttered objects that would be very hard to place in their original position, etc. Remember, too, to have an excuse ready.

The target is much less likely to panic upon wondering why their room was opened if you explain, calmly and honestly (honesty conditional on practice) that you thought you smelled smoke coming from their room, than if you answer “I dunno.”

Remember, though, no matter how convinced you may be, the most important thing is to take your time, lest you let an actual spy slip through your fingers.

If you have a question for the doctor, email ask-dr-dice@mit.edu.

Rugby Game

Vicky Li

On a chilly gray Sunday morning, 4E-ers Emily and Vicky along with a thin crowd of very random people gathered on Briggs Field. The air was cold and the clouds were so gray with no telling whether or not it would rain. What events would transpire? What surprises, did these random people have to offer? What stories would be created today?

The women of MIT rugby—sporting bold scarlet and shorts, fearless in the face of cold, including a number of EC-ers (dyed hair and all) and Slugfest’s own Carly—facing off against Rhode Island in blue. They stacked into pyramids, starting off each play with a tip of the ball from this 10-foot-high position, wrestled, rucked, hooked, tackled and immediately continued play each time. To a newbie watching rugby for the first time, it seemed as if the sport had everything—take ball sports, combine it with wrestling, add the fact that the play *doesn’t end with the tackle*—and you’ve got rugby.

MIT’s team spirit blew away all thoughts of cold—and the Rhode Island’s opposition—keeping up the energy the entire 1 hours to ultimately lead to a 66-0 win. Carly was lifted up several times at the top of the pyramid, and her successful tips gave the MIT a strong start to almost every play. The other team members all did their jobs well too—during clashes the MIT women dug down deep to overpower Rhode Island’s lineup. Overall, it was a fun time with the spectators spending the timeouts passing rugby balls, gaping at players’ wounds, and talking to random people.

I would definitely recommend going to a rugby game—best thing for a cold day!