

CULTURAL APPROPRIATION: HOW TO AVOID IT IN SHOPPING

by Angel Wittkopf

All people have, in one form or another, either seen or been a part of cultural appropriation, but how does one respond to it? The world is an ever-changing organism where we, as individuals, see and are part of celebrations and styles of fashion 'borrowed' from Indigenous groups and/or blatantly copied from other countries of the world. It is seen in entertainment, fashion, literature, foods, and many other forms. As we move towards a changing world, the ideas of cultural appropriation must be acknowledged and dealt with in a proper manner. How do we as individuals strive to avoid this great issue but not limit our ability to buy and see the things we want?

Cultural appropriation is the adoption of elements from a minority culture by members of the dominant culture. Through mainstream society and colonization, dominant groups have used and contorted the Indigenous image and style in many countries, the most well-known being Spain, Mexico, and the Caribbean Islands. These are popular holiday destinations, and because of that, they have created a new market for the exploitation of Indigenous styles and patterns as a means of money and filling the desires for local wears.

How often do you consider the ramifications of ap-

propriation domestically and abroad? When going abroad, do we consider the impact of buying straight from the creators of clothing, or do we assume that the clothes or objects we buy are true to the First Peoples of the land? Another way to consider how we impact cultural appropriation is following the trail of its creation. Many documentaries have shown the path of clothing from sweatshops to the finished product in countries that can exploit its lower class workers or individuals that are excluded from the society. Next time you are wearing a piece of clothing from a department store, find out where in the world it is from. The places can be pinpointed to many Asian countries, South American countries, or Central American countries.

Choose not to support chains that carry culturally appropriative clothing and goods. There are other stores to shop at. While this limits the places you can buy from, it is the idea of supporting locally abroad and at home that puts the focus of the market to artisans and weavers. This is not to say that all franchises and department stores are guilty of appropriation--this is saying that, when looking at items such as moccasins, shawls, hats, blankets, etc., we should make an effort to purchase them from the people who created the designs.

The price changes will also affect one's financial ability to buy clothes, which can be seen as problematic for individuals who desire locally-sourced clothing. However, when attempting avoid cultural appropriation in one form or another, you must be able to be adaptive to price changes and to the places things are bought. Mainstream media outlets such as advertisements, music, and commercials have had forms of cultural appropriation, but it can't all be censored. It is up to the individual to choose how they handle these problems that may not seem important, but at the end of it all, would you feel better supporting a colonistic repercussion, or would you support the continuation of a cultural way of life?

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100 YEARS OF RECOVERY: THE SPANISH INFLUENZA

by Natasha Eklund

Living in Canada, I am sure we have all taken advantage of, and been thankful for, the free healthcare. As well, I am sure you all remember the most recent influenza of 2009, the H1N1 virus, which was discovered in the United States. Thankfully, due to modern medicine, vaccines are being created to help battle and prevent viruses from breaking out and creating another tragic pandemic. In recognition of the 100-year anniversary of what was referred to as the most dangerous pandemic, I will be discussing the Spanish Influenza, also known as the Spanish Flu.

This deadly pandemic erupted in spring of 1918 during the last few months of World War I and had killed 50-100 million individuals. Those affected suffered symptoms such as coughing up yellow-green pus, skin turning purple and black, blood spewing from the nostrils--20 percent also got pneumonia. Pregnant women suffered from miscarriages, premature labour, and stillbirths. It was reported that no one, nor any part of the body, was exempt from the influenza. One strange part of this flu was that it affected victims differently; some died slowly over painful days while others died within hours of being infected. In Cape Town, South Africa, five people had died suddenly on a three mile train ride. One of those who died was the train's engineer, and the train never reached its destination. I can only imagine the fear that every individual faced on a daily basis due to this almost certain death.

The name "Spanish Flu" is actually inac-

curate, as the first outbreak was actually in Kansas, not Spain. Spain was merely the first to publicly report the flu symptoms.

One of the interesting aspects of the influenza was that people of all ages were affected at some point, regardless of whether they were healthy or unhealthy. In fact, the highest number of victims were those between the ages of 20 and 40 years of age.

It was the massive troop movement during this time that aided the influenza in spreading so rapidly. American servicemen in March of 1918 at Fort Riley, Kansas were reported to have taken ill as they prepared to go overseas for the war. By the end of their five-week training in Spring, more than 1,000 were ill and 46 men had died. It was then reported in France, then in Spain by April. In May, reports of the disease were reported in Greece, Egypt, and Britain. By then, there was no way of preventing this epidemic. The United States and others involved in the war had been communicating amongst themselves about the severity and the quick spreading of the disease, but they had also been concerned with keeping the public's morale up; therefore, they tried to obstruct knowledge of the disease and withheld information about the soldiers' illness during the war.

Unlike modern medicine, scientists and doctors had not yet discovered viruses, resulting in no laboratory testing able to detect or characterize the flu. This left them with limited sources of treatment or ways of prevention. Little did the world know that the spring pandemic of 1918 was just getting started. There was a glimmer of relief when, over the summer, the flu seemed to fade, but it unfortunately came back later with much greater force.

Come fall, the flu had returned and it seemed to be taking vengeance on everyone. The health commissioner of New York made an attempt to slow the spreading of the flu by ordering business to operate in shifts with the hope of avoiding crowd-

time. We have less money to spend on healthier food options. And the amount of grease and oil in much of the food we eat also affects how our brains work. "The first problems associated with heart disease start in the early twenties," claims Melissa Wdowik, the director of the Kendall Anderson Nutrition Center, going on to explain that arteries could begin to harden in college-age individuals who lack proper nutrition. The typical college diet includes a lot of snacks and lack of nutritious meals. Meal prep can be time-consuming unless you invest in a slow cooker.

How do we go about solving this? While we cannot entirely get rid of stress and anxiety, there are some things that might help alleviate the feeling of being overwhelmed. For example, if you have taken out student loans or applied for grants/bursaries, the financial aspect has hopefully already been solved. If you do any sort of studying, whether on breaks or during your lunch hour, take the time to do so while also allotting time for breaks.

I have received some tips for effective studying from Mr. Garth Boyle, our resident Academic Strategist. Among the things he suggested, I found these to be the most helpful:

1. Schedule a few hours each day to work on your schoolwork, and then relax.
2. Start studying for a test up to two weeks in advance, going chapter by chapter.
3. Take time for yourself.
4. Don't be afraid to ask for an extension if that is something your professor allows.
5. Remember that you can only do your best; if you do your best, whatever grade you get was earned by your determination, and no one can say you slacked off.

That last principle was taught to me by my parents, and it's served me well through my academic career. Finally, dear readers, remember to take things one day at a time. I wish you the best of luck as midterms close in.

BIG PRIZE EVENT

PUMPKIN CARVING OCT 31 Tegler 11am To 1pm

COSTUME CONTEST OCT 31 Tegler NOON To 1pm

Concordia Students' Our CSA Association

BREAKING THE SILENCE: SCHOOL AND MENTAL HEALTH

by Nicole Beaver

Being a university student is never easy. Being a student while dealing with some sort of mental health complication is especially hard when you also have to fit in socialization, exercise, and a healthy diet. Post-secondary students tend to fall within a higher percentile for unhealthy habits, and reports of mental health issues among university students are on the rise. For some of us who are permanently disabled, the stress of schoolwork is not unfamiliar. I, myself, find my extensive note-taking mentally exhausting and need to take regular naps after studying for an hour or two. For all of us, stress is amplified when we take finances into consideration and, on top of that, our course loads.

The Globe and Mail reported in 2017 that “[a] fifth of Canadian post-secondary students are depressed and anxious or battling other mental health issues, according to a new national survey of colleges and universities that finds more students are reporting being in distress than three years ago. Reports of serious mental health crises such as depression and thoughts about suicide also rose.” Please take into consideration that, while this is alarming, media outlets often use “sharpening” and “smoothing” techniques to make scientific claims sound more dire or extraordinary than they really are. So, while I take this article with a grain of salt, I do believe that this is true on some level. As

our economy keeps changing, so do tuition and fees. The expectancy to do well and keep up also plays a crucial role in our academic career. All of us will find ourselves stressed at some point, and others will feel simply overloaded.

To briefly summarize what anxiety and depression are, both can have equal causes (i.e. stress) and treatments (therapy), but they are separate mental health issues that may require different forms of treatment if suicidal thoughts occur or if they severely conflict with everyday life.

- Depression symptoms include:
- lack of interest in enjoyable activities
- increase/decrease in appetite
- insomnia/hypersomnia
- lack of energy
- feelings of guilt or worthlessness
- trouble concentrating
- Anxiety, on the other hand, is categorized by the following symptoms:
- excessive worry
- restlessness
- being easily fatigued
- trouble concentrating
- irritability
- sleep disturbance
- muscle tension

While conducting research, I came across a source from the New York Times titled “The Season to be Stressed.” It is written by a fellow student. He states that his own university has seen “a 35% increase in student consultations.” As well, he himself deals with anxiety from the stressful environment. It’s not just Concordia or other universities in Edmonton. The combination of intensive courses, tuition increases, and our cafeteria’s less-than-stellar food all contribute to our mental health. We have less time to exercise because our assignments and readings need to be done, each class requiring its own study

ing in the subways. Not only that, but other attempts to prevent large social gatherings were implemented. Schools, theatres and churches shut down, anyone leaving their houses were advised to wear masks, and keeping good hygiene was encouraged as doctors were unsure how to prevent the spreading. Despite all of these efforts, individuals were still rapidly falling ill. The hospitals became so overcrowded that many schools and some private homes were transformed into makeshift hospitals to try and aid those who were infected. Unfortunately, the flu wiped out so many so quickly that funeral homes were overwhelmed and many had to dig graves themselves for their deceased loved ones. Between the war and this pandemic, it was, indeed, a dark time to be alive.

It only took the Spanish Flu one week to travel across Canada when it arrived late in the summer of 1918. By October, it began to claim 1,000 Canadian lives in a day. To put this in perspective, deaths from fighting on the front were estimated at 100 lives per day. As well, some governments in Canada also closed schools and cancelled public events. Prince Edward Island even attempted to quarantine itself from the mainland, but none of this prevented the disease. The number of deaths continued to grow across Canada. In Montreal, deceased were loaded

onto trolleys because they were unable to procure enough hearses to properly transport them.

The City of Edmonton made their decision to take action after ten cases of the flu had been reported. Medical health officers declared that all individuals infected with the flu, no matter how severe the condition, were to be placed under quarantine regulations. From this, a special committee was created to find two city buildings, one southside and one northside, to accommodate the sick. As well, the papers encouraged anyone who was wary of getting the flu to post in their windows a sign reading, “We do not wish any visitors.” By summer of 1919, the flu epidemic had thankfully come to an end and anyone who had been infected either died or developed immunity. In recognition of the 100-year anniversary of the Spanish Flu, the Legislative Assembly is hosting an exhibit called “In Flew Enza: The Spanish Flu Comes to Alberta.” It runs from October 17, 2018 to January 13, 2019. This exhibit will be going into detail about how 1 in 6 Canadians died from the flu. Of this, 10 percent of Albertans, which was more than 4,000, died in a span of four months. If you’d like to learn more about the impact the flu had on the young province of Alberta, which had only become a province thirteen years previous to the outbreak, be sure to check it out!

Free Yoga Class

Oct. 10th - GYM - Noon to 1pm

Booster Juice Giveaway

Oct. 17th - Tegler - Noon to 12:20

Free Yoga Class

Oct. 24th - GYM - NOON to 1pm

Pumpkin Carving/Costume Contest

Oct. 31st - Tegler - 11am to 1pm

Wellness Wednesday
October





Canada. In order to protect the interests of Canadian dairy farmers, the federal government places a 270% tariff on dairy products entering the country from other nations. Ottawa does this in order to maintain the status quo of wages paid to dairy farmers in Quebec and Ontario who might otherwise be subject to fluctuating prices if imported products came from American farms. The protectionism of the policy notwithstanding, the United States government already imposes tariffs on dairy goods entering their borders. When confronting the issue of fair trade, it's important to ask: is it fair for Canadian farmers to face a decrease in wages so farmers in places like Wisconsin can have access to a relatively small market which might not increase their profits very much?

But What About Alberta?

Despite all this talk about dairy farmers and manufacturing jobs, you're probably still wondering what this has to do with Alberta. The United States accounts for 86% of goods exported from the province, meaning tariffs on Albertan lumber, wheat, oil and natural gas could raise prices and hurt jobs for those employed in those sectors.

At the same time, the overall Canadian economy would shrink a total of 1% in 10 years if tariffs were imposed. With Alberta and Canada not growing

as strongly as the U.S already, this could mean it would be tougher for many students to find a job after graduating. Canadian companies might find it more beneficial to their profits to migrate south and set up shop in the States. Estimates are that half a million jobs would be lost if NAFTA fell apart.

Where Are the Talks Currently?

Mexico and the United States are currently working out their issues separate from Canada; however, with the midterm elections coming up in the US, congressional Democrats have voiced their opposition to a non-trilateral free trade agreement. Even the Mexican President-elect agreed that, once in office, his new government will not leave Canada out of a deal. Any new deal would have to get approval from both of the countries' upper houses of legislature, which certainly would be hard to do without us canucks in on the deal. There is simply too much damage to be done to all the parties involved if any of the negotiations fall apart. Despite having the strongman attitude, it would be a very risky political move for President Trump to withdraw entirely. Nothing is for certain of what will come out of the talks, and much will happen in the following months, but Canadians need to be informed and up to date on how such consequences will impact their economy.

2018-19 WOMEN'S/MEN'S SOCCER				2018-19 BADMINTON				2018-19 WOMEN'S/MEN'S VOLLEYBALL				
Sept 8	Concordia	@	Augustana	12/2:00	Nov 18	The King's University		Oct 12	Augustana	@	Concordia	6/8:00
Sept 15	Keyano	@	Concordia	2/4:00	Jan 15	NAIT		Oct 15	Concordia	@	Augustana	6/8:00
Sept 22	Concordia	@	NAIT	12/2:00	Feb 3	Olds College		Oct 26	Keyano	@	Concordia	6/8:00
Sept 23	Concordia	@	King's	12/2:00	Feb 16-17	ACAC Championship	@ Concordia	Oct 27	Concordia	@	Concordia	1/3:00
Sept 29	King's	@	Concordia	2/4:00	Mar 6-9	ACAC Championship	@ Dalhousie Agricultural Campus (ACAA)	Nov 2	Lakeland	@	Concordia	6/8:00
Sept 30	Augustana	@	Concordia	12/2:00				Nov 3	Concordia	@	Lakeland	6/8:00
Oct 15	Concordia	@	GPRC	2/4:00				Nov 9	Concordia	@	GPRC	6/8:00
Oct 14	Concordia	@	GPRC	12/2:00				Nov 10	Concordia	@	GPRC	1/3:00
Oct 20	Keyano	@	Concordia	12/2:00				Nov 16	Concordia	@	NAIT	6/8:00
Oct 21	NAIT	@	Concordia	12/2:00				Nov 17	NAIT	@	Concordia	6/8:00
PLAYOFFS				2018-19 CURLING				LOCATIONS				
Oct 26-28	ACAC Championships Men @ SAIT / Women @ SAIT			Nov 23-25	Red Deer College			Home games for soccer are played on the CONCORDIA ATHLETIC FIELD (73 Street & 112 Avenue)				
Nov 7-10	Women's CCAA Championships @ Douglas College (PACWEST)			Jan 25-26	MacEwan University							
Nov 7-10	Men's CCAA Championships @ Holland College (ACAA)			Feb 22-24	ACAC Championship @ Olds College			Home games for badminton, basketball and volleyball are played at RALPH KING ATHLETIC CENTRE (73 Street & 112 Avenue)				
Nov 7-10	Men's CCAA Championships @ Holland College (ACAA)			Mar 15-19	CCAA Championship @ Fredericton, NB							
2018-19 GOLF				2018-19 CROSS-COUNTRY RUNNING				Hockey home games are played at CLAREVIEW ARENA (3804 139 Avenue)				
Sept 15-16	North Regional @ Portage			Sept 8	Grand Prix #1 @ Concordia							The home course of the golf team is HIGHLANDS GOLF CLUB (6603 Ada Boulevard)
Sept 22-23	South Regional @ Concordia			Sept 15	Grand Prix #2 @ St. Mary's/SAIT							
Sept 29-30	ACAC Championship @ Red Deer			Sept 22	Grand Prix #3 @ GPRC and Lethbridge			For more information, contact the Thunder Athletics Department at 780 479 9322 or visit our website: gothunder.ca				
Oct 15-19	CCAA Championship @ Medicine Hat College (ACAC)			Sept 29	Grand Prix #4 @ Lakeland							
2018-19 INDOOR TRACK				Oct 13	Grand Prix #5 @ Augustana			Concordia University of Edmonton is a smoke-free campus				
Jan 26	Grand Prix #1 @ MacEwan			Oct 27	ACAC Championship @ Lakeland							
Feb	Grand Prix #2 @ TED			Nov 9-10	CCAA Championship @ Seneca College (OCAA)			PLAYOFFS Feb 21-23 ACAC Championships Men @ NAIT / Women @ Ambrose University Women's CCAA Championships @ Nipissa College (OCAA) Men's CCAA Championships @ Red Deer College (ACAC)				
Mar 8-9	ACAC Championships @ Calgary											

NAFTA: PART 2

by Reid Offers

Editor's note: This article was written pre-USMCA. Updated information coming soon.

In the previous issue, we discussed what NAFTA is and how it has benefited the trade amongst Canada and our two neighbors to the south. Now you might be wondering, "why in the H-E double hockey sticks does some boring international trade agreement have to do with me, a millennial student at a Canadian university?" The short answer to this question is quite simple: it has a lot to do with everyone here. However, in order to come full circle to this question, there is a lot that has to be addressed in the wake of the latest mainstream media circus that has engulfed politics around this topic lately.

President Trump's Views

As one of his key campaign promises to "Make America Great Again," Trump threatened to withdraw from NAFTA his first 100 days in office if Canada and Mexico did not come back to the bargaining table to revital-

ize NAFTA. In agreement, all three countries said they would renegotiate parts of the deal. There is much debate, though, over what should be decided between the three countries and a lot of misunderstandings over what is really hurting and what is benefiting the American worker with regards to the free trade agreement. Simple as it may be to draw basic conclusions about the President's intentions to fulfill this campaign promise or the emotionally-charged rhetoric engulfing such a promise, it is more challenging to arrive at one sound reason for such a stance. With conservative populism on the rise in the Midwest and Southern United States, the voters charging the Trump base are fueled with anti-globalist economic views since many believe globalization to be harmful to the manufacturing and farming sectors that prop up their states' economies. That said, NAFTA and other trade deals are not what is hurting the American manufacturing sector. While NAFTA has been active, there has only been a drop of 200,000 manufacturing jobs in the United States, accounting for less than 1 percent of total US manufacturing job losses since 1971. Automation has taken away the most jobs, leaving NAFTA as a scapegoat for the President to campaign on in order to win votes.

Trump Turns to Dairy

Despite this loss of jobs, the President found another way to fire up his base: cause quite literal beef with

2018-19 THUNDER HOCKEY

Oct 5	Augustana @ Concordia	7:00 PM
Oct 6	Concordia @ Augustana	6:00 PM
Oct 12	SAIT @ Concordia	7:00 PM
Oct 13	Concordia @ SAIT	7:00 PM
Oct 19	Concordia @ Red Deer	7:00 PM
Oct 20	Red Deer @ Concordia	7:00 PM
Oct 26	NAIT @ Concordia	7:00 PM
Oct 27	Concordia @ NAIT	2:00 PM
Nov 9*	Briercrest @ Concordia	7:00 PM
Nov 10*	Briercrest @ Concordia	3:00 PM
Nov 19	Concordia @ MacEwan	7:00 PM
Nov 17	MacEwan @ Concordia	7:00 PM
Nov 23	Portage @ Concordia	7:00 PM
Nov 24	Concordia @ Portage	7:00 PM
Jan 11	Concordia @ Augustana	7:00 PM
Jan 12	Augustana @ Concordia	7:00 PM
Jan 18	Concordia @ SAIT	7:00 PM
Jan 19*	SAIT @ Concordia	7:00 PM
Jan 25	Red Deer @ Concordia	7:00 PM
Jan 26	Concordia @ Red Deer	7:00 PM
Feb 1	Concordia @ NAIT	7:00 PM
Feb 2	NAIT @ Concordia	7:00 PM
Feb 8	Concordia @ MacEwan	7:00 PM
Feb 9	MacEwan @ Concordia	7:00 PM
Feb 15	Concordia @ Briercrest	7:00 PM
Feb 16	Briercrest @ Concordia	2:00 PM
Mar 1	Portage @ Concordia	7:00 PM
Mar 2	Concordia @ Portage	7:00 PM

PLAY-OFFS
 Mar 8-10 ACAC Quarterfinals (Best of 3)
 Mar 15-17 ACAC Semi-Finals (Best of 3)
 Mar 22-24 ACAC Championship (Best of 3)

2018-19 WOMEN'S/MEN'S BASKETBALL

Oct 12	Concordia @ Augustana	6/8:00
Oct 13	Augustana @ Concordia	6/8:00
Oct 26	Concordia @ Keyano	6/8:00
Oct 27	Concordia @ Keyano	1/3:00
Nov 2	Concordia @ Lakeland	6/8:00
Nov 3	Lakeland @ Concordia	6/8:00
Nov 9	King's @ Concordia	6/8:00
Nov 10	Concordia @ King's	6/8:00
Nov 16	NAIT @ Concordia	6/8:00
Nov 17	Concordia @ NAIT	6/8:00
Nov 23	GPRC @ Concordia	6/8:00
Nov 24	GPRC @ Concordia	1/3:00
Jan 11	Lakeland @ Concordia	6/8:00
Jan 12	Concordia @ Lakeland	6/8:00
Jan 18	Concordia @ GPRC	6/8:00
Jan 19	Concordia @ GPRC	1/3:00
Jan 25	Augustana @ Concordia	6/8:00
Jan 26	Concordia @ Augustana	6/8:00
Feb 1	Concordia @ NAIT	6/8:00
Feb 2	NAIT @ Concordia	6/8:00
Feb 8	Keyano @ Concordia	6/8:00
Feb 9	Keyano @ Concordia	1/3:00
Feb 22	Concordia @ King's	6/8:00
Feb 23	King's @ Concordia	6/8:00

PLAYOFFS
 Feb 28 - Mar 2 ACAC Championships
 Men @ Lakeland, Women @ Keyano
 Mar 13-16 Women's CCAA Championships @ Cegep de Sainte-Foy (RSEQ)
 Mar 13-16 Men's CCAA Championships @ Langara College (PACWEST)

CONCORDIA UNIVERSITY OF EDMONTON
 THUNDER
 GAMES SCHEDULE 2018 • 2019
 gothunder.ca

SHOW TIME!

Here is what is playing in theaters this week:

First Man
PG

Night School
PG

Goosebumps 2: Haunted Halloween
PG

Fahrenheit 11/9
PG

Smallfoot
PG-13

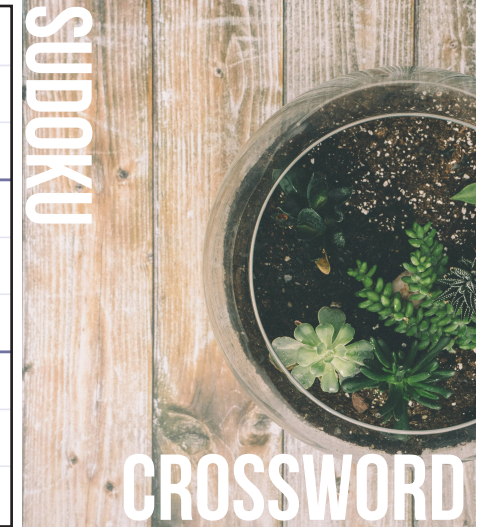
Venom
14 A

A Star is born
14 A

Bad Times At The El Royal
14 A

Cinaplex North

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2		5					3	1	
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		2		3	4		7		



Across

- 1. Dare into doing
- 5. Flightless bird
- 9. Backup strategy
- 14. "To Sir With Love" singer
- 15. Sandwich notable?
- 16. Country singer Tucker
- 17. "Come ---! The water's fine"
- 18. Plumbing problem
- 19. Sat tight
- 20. University thug?
- 23. Mother of Calcutta
- 24. Partied down
- 28. Jock TV
- 30. Shea and Arthur Ashe
- 31. The Buckeyes, for short
- 34. Disney's middle name
- 37. "Let's get crackin'!"
- 38. Storage of angling gear?
- 42. "Dedicated to the --- Love"
- 43. Remove the stubble
- 44. Half an African fly
- 45. More puffed up
- 48. Eliot's "Adam ---"
- 50. Cloths by the sink
- 53. Supplies with more munitions
- 57. Case against a firm?
- 59. Censoring sound
- 62. Clueless
- 63. Sting operation
- 64. Get a bead on
- 65. The skinny
- 66. Priest of the East
- 67. Grads
- 68. Per
- 69. Settled down

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59	60	61				62				63			
64						65				66			
67						68				69			

Down

- 1. Rub it in
- 2. Pound part
- 3. "Are you calling me ---?"
- 4. Crocodile of Australia?
- 5. Rhode Island's state tree
- 6. Mata ---
- 7. Segal or Fromm
- 8. Omega's opposite
- 9. JFK's vessel
- 10. Easygoing
- 11. In addition
- 12. "Bill ---, the Science Guy"
- 13. Michael Jackson hit
- 21. Ruhr valley city
- 22. "--- bodkins!"
- 25. Word on a ticket
- 26. Pride members
- 27. Jessica of "Tootsie"
- 29. Louse eggs
- 31. From way back
- 32. Moses' mountain
- 33. Internet surfers
- 35. Flame proof?
- 36. Wild try
- 39. Nighttime driver's selection
- 40. Go beyond
- 41. Hands over
- 46. Spews lava
- 47. --- Tafari (Haile Selassie, originally)
- 49. California section
- 51. Comedienne Radner
- 52. Do detective work
- 54. Part of RFD
- 55. Home of the Heat
- 56. March 17 honoree, briefly
- 58. The NHL's Phil, familiarly
- 59. Ewe said it
- 60. Like Abner
- 61. Flightless bird

**INSPIRED BY:
HELPING PEOPLE**

Studied Economics

**INSPIRED BY:
SERVING MY COMMUNITY**

Concordia Graduate

**INSPIRED BY:
A CAREER WITH VARIETY**

Studied Software Engineering

You don't need a policing background to become a member of the Edmonton Police Service. Every year we hire people from a wide variety of backgrounds, some of them graduates of Concordia. They all have different educational backgrounds, career paths, and reasons for joining. But the one thing they do have in common is the desire to serve the citizens of Edmonton.

If you're looking for an exciting career full of purpose, variety, and lifelong learning, ask yourself:

WHAT'S YOUR INSPIRATION?

EDMONTON POLICE SERVICE

JoinEPS.ca The Province of Alberta is working in partnership with the Government of Canada to provide employment support programs and service

Canada Alberta

Moving over to the ringed beauty Saturn, did you know it gets an aurora borealis? You probably won't be able to see it; it's mainly made from ultraviolet light due to the high concentration of hydrogen in the atmosphere. Hubble managed to capture the elusive aurora before, but the space telescope captured the clearest images yet as Saturn recently went through its summer solstice. Fun fact, Saturn also has a strange jet stream at the North Pole in the shape of a hexagon. Crazy how nature does that, isn't it?

We know all this because of the Cassini space probe, which took a death plunge into Saturn's atmosphere on September 15. It did that intentionally so as not to accidentally post-mortem contaminate any of the other moons with Earth bacteria. Enceladus in particular is a prime moon candidate for alien life, as is evidenced by the global subglacial ocean and the complex organic molecules recently discovered erupting from a jet.

The largest Saturnian moon, Titan, is also a curious case. The largest known methane lake, Kraken Mare, rivals the Caspian Sea; many other dot the surface as well, as the Cassini probe was able to capture in one final image before it took the plunge. In addition to having a nitrogen-based atmosphere like Earth, Titan also appears to have dust storms. At surface temperatures of -180°C, it couldn't support advanced life, but the planet is still fascinating to research nonetheless.

As previously mentioned, there isn't much news for the farthest gas giants. However, if you're into stargazing, the planet Uranus will reach its opposition point with Earth on October 24. Neptune also recently passed the opposition point on September 7. It's a good time if you want to get a good look at either planet through a telescope. In the case of Uranus, you may even be able to see it with just binoculars.

That's all the current news in space for the gas giants. In the next edition, we set our sights much closer to home. Until then, keep gazing at the stars and planets!

Alberta Health Services

At what age is doing weed less harmful?

A. 18 B. 21 C. 69 D. 25

Correct Answer: D
Cannabis has risks at any age. But until age 25, your brain is still developing. Weed can damage that.

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SPACE NEWS: A BUNCH OF GAS IN SPACE

by Tyler DeWacht

Good day to you, and welcome back to Space News! In the last edition, we focused on the outer edges of our Solar System. This time, the focus shall lay upon the gas giants. There isn't much going on with Uranus and Neptune at the moment nor will there be in the foreseeable future, so my focus here will be on Jupiter and Saturn. Let's blast through it, shall we?

Jupiter has many moons, but just how many are there? More and more moons keep getting discovered, and the current count now sits at 79 moons. Why does Jupiter have so many moons? One of the newest moons discovered, Valetudo, may answer this question. Most of the moons are orbiting in sync with Jupiter's clockwise rotation. Not Valutedo though, Valutedo is moving counterclockwise, akin to driving down the wrong side of a highway. If moons moving in opposite directions were to collide like this, some would shatter into more moons, explaining why these multitudes of mini-moons exist.

We haven't found life on Mars just yet, but what about the larger moons of Jupiter? Can they support life? That's what the Jupiter Icy Moons Explorer (aka JUICE) mission intends to find out in 2029. Ganymede, Callisto, and Europa are all thought to have enough water to potentially support life, and the European Space Agency is set to launch a mission to further explore these frigid moons in 2022. Io isn't habitable and

as such is not a viable candidate, but it is a hotspot for volcanic activity with at least 150 volcanoes confirmed and as many as 250 more thought to exist. If we ever find a way to efficiently harness volcanic energy, Io would be a great potential source of power.

The moons are an interesting topic in and of themselves, but what about Jupiter itself? The Juno probe has given us a look at many of the features and atmospheric components on the turbulent topside of this great gas giant. For instance, we've learned that deep within the Great Red Spot is a cloud layer likely composed of frozen water. Good luck trying to harvest it though, you'd be better off just sticking to the moons. It's also given us our first look at the poles of Jupiter. Jupiter's North Pole, oddly enough, looks like pepperoni pizza. The South Pole, meanwhile, is oddly blue and has a lot of mini storms, bearing little resemblance to the Jupiter we know.

I say South Pole, but should I really say South Poles? The more we learn about Jupiter, the stranger it becomes. Jupiter's magnetic field doesn't seem to act the way we're familiar with; it appears to have two South Poles, and we're not really sure why. Perhaps it has something to do with the planet's core, but we need more data before any further conclusions can be drawn on the matter. Luckily, the Juno spacecraft's mission has been extended until July 2021, so it will have more time to explore this conundrum.

You've probably heard of the Great Red Spot, but what about the brown barges? Approaching roughly the size of 140,000 barges, Hurricane Gaston is nothing compared to these superstorms. They often don't last too long and are difficult to spot, but they're nothing to be scoffed at either. If they pick up enough momentum, one could become the next Great Red Spot in the future. The spot we know has been around since the 1600s, but it's been losing so much speed lately that Jupiter will likely lose this iconic mark in less than 20 years. No storm lasts forever, after all.

THE STATE OF THE UNIVERSITY

by Marina Gendi

President Tim Loreman announced the second annual State of the University Address on September 26, 2018, in the Al and Trish Huehn Theatre. It was informative, particularly for Concordia students, to understand what is going on around campus. He addressed some of the issues Concordia faces as well as the success the school has accomplished. If you missed it, don't worry--this article covers key points of the address.

First, Dr. Loreman introduced some impressive numbers. Enrolment and student satisfaction are at an all-time high. He emphasized this in a series of surveys and satisfaction numbers compared to the Canadian average. For example, 44% of students believe that Concordia University has exceeded their expectations as opposed to the average 22% of Canadian students.

Next, information about the affairs of the Board of Governors was presented. The Board is seeing new changes. Mr. Russ Morrow is succeeding Mr. Mike Wade as the Board of Chair. The main concern of the board rests with the issues of the public vs. private debate regarding whether Concordia will remain an independent institution or switch over to a public one. The Board is working with representatives from the Alberta Government to tackle this situation.

The next topic that was covered was the Academic Plan of the school. Dr. Loreman relates the accomplishments of the university regarding the opening of the new Centre for Science, Research and Innovation Building, as well as emphasizing the grand opening of the Indigenous Knowledge and Research Centre. Further, the new science building has state-of-the-art science labs, a psychology clinic, is home to the Centre for Chinese Studies, and has a great multipurpose room: Design and Study. Also, Con-

cordia is offering a new programs. The MEd in Educational Leadership. The goal is to launch the PsyD program in January or September of 2019. As well, the BSc in Information Technology is currently under review. Additionally, the school hopes to develop an Access program supporting marginalized individuals, such as mature, international, Indigenous, newcomer, and single-parent students.

Dr. Loreman proceeded by presenting financials. In 2017/18, the university's revenues grew by 1.5% (\$500,000). Furthermore, the school saw an increase of 4.4% from tuition revenue, but interestingly, this is from the increasing of enrolment rather than the increase of tuition. Concordia's expenditures grew by 5.3% for the year ending in March 31, 2018. In addition, the first quarter of the school's 2019 fiscal school year has a deficit of \$235,000 but last year during this same time it was \$761,766.

Concordia's accomplishments over the past year was the next subject on the agenda. For example, The Student Life and Learning Student Success Centre has student services, life support, and study space. Dr. Loreman describes the centre as a one-stop place for all, resembling an "Apple store." This year, Concordia is also offering the new Concordia Commitment program, and it is designed to help students complete their degrees and successfully find job placements after. Also mentioned was the Indigenous Strategy as well as International accomplishments and the new relations between different countries. Finally, the address concluded with research developments and risks Concordia might face. Research has been evolving at CUE; for example, Dr. Tolly Bradford received around \$100,000 in grant funding for his research on the Hudson's Bay Company. Some risks the school is facing are financial pressures from things such as the opening of the new building. Being a private institution means that the government does not help support such endeavours.

The address contained promising information and exemplified the success of Concordia University of Edmonton. Dr. Loreman's presentation can be found live on the Concordia website.

REFLECTING ON STOCHASTICITY

by Donovan Makus

Random.

For most of us, this word has many meanings. These can range from the positive, such as receiving an unexpected gift, to the negative, such as an unexpectedly poor test result. However, we typically tend to value predictability, be it in life or grades. This value ascribed to predictability extends to the modern sciences, which are inherently deterministic, striving to connect variables to results. Scientific models strive to accurately represent the outcome of changing variables, yet these models are limited both in their ability to predict far into the future and in their accuracy in the first place. This can be attested to by anyone who has ever planned a weekend event, such as an outing on a lake; you anticipate good weather based on weather reports a week or two from the event, only to find the day of that the weather is miserable. These limitations reflect the scientific principle of stochasticity, one with implications for scientific study, and our lives in general.

For most of our everyday activities, we can see cause and effect relationships. A lack of sleep will translate to sluggishness the next day. An essay written with little thought or concern will typically yield a low mark. While it would be pleasant to find a poor night's sleep or hastily written essay leading to more positive outcome, it's not expected. The consistency of these patterns allow us to plan around them. We know that if we want to be in peak shape for a midterm, we need to spend time studying and resting properly. A good

mark on an essay can only be expected after hours of deliberate drafting and the creation of polished prose.

Modern science follows this same principle of consistency. For science to "work," there must be a pattern or relationship between variables. The entire foundation of modern science rests upon being able to predict outcomes using past knowledge and models in the creation of hypotheses. Yet the natural world is inherently variable, with even tightly controlled experiments demonstrating some variability, typically measured using the concept of standard deviation. For the natural world, variability is even greater where stochasticity combines with all the other variables that contribute to differences between samples. Without an understanding of stochasticity, this can be quite confusing. Any student who has ever completed outdoor sampling can attest to this; even with the known variables controlled, there is still variability inherent to the natural system. This challenges the ability of models to approach 100% accuracy all of the time, but can be accounted for and controlled in modeling.

This concept of stochasticity is not restricted only to biological systems starting at the level of the individual organism, it can be seen at the very foundations of all matter. At the beginning of the 20th century, models such as the Bohr atom model held that electrons exhibited consistent patterns, following what could be visualized as tracks around the central nucleus. However, the model was limited and unable to explain many experimentally-determined findings. Quantum theory changed this by introducing probability clouds related to stochasticity, where instead of an electron sticking to a defined track around the atom, it instead exists in a probability cloud of likely places it could be found. While research in physics continues, quantum theory was revolutionary in introducing the language of randomness, or stochasticity, into what was previously thought to be a field firmly ground in models that did not leave significant room for variation.

The concept of stochasticity does not mean that

the scientific models are invalid nor that we should merely give up trying to predict and model our world. Instead, it should help us better explain our surroundings. Stochasticity is limited depending on the system, to some extent; while it expands the range of values we can expect to observe, it doesn't do so infinitely. Models that fail to account for stochasticity provide reasonable approximations in many scientific disciplines, and considering the contradiction of predicting randomness in a model, we're left with few options for a 100% accurate model. However, this realization should not cause us to reject scientific models, but instead offers us a valuable life lesson.

Scientific models are undeniably important, but we can easily go our whole lives failing to understand the concept of stochasticity and live fulfilled lives, which begs the question, why does reflecting on stochasticity matter? There is intrinsic value to knowledge, such as understanding stochasticity, but knowledge that can be applied is often seen as having greater value. For stochasticity, it provides us with a broader life lesson, and that is the importance of adaptability. We may try to plan our lives perfectly--yet, in the same way that long-term weather forecasts often fail to reflect reality, long-term plans may also fail us and re-

quire us to adapt to new challenges or opportunities. For stochasticity, this applied knowledge can be seen in systems that are built to accept randomness and unanticipated future uses and continue operating.

Most systems, be they cars or our own bodies, have a set operating envelope inside of which they function at their best. Some systems, like our bodies, are incredibly resilient, and can accept a wide variety of conditions. Other systems, like a car or a precision laboratory instrument, require careful use to prevent damage. Engineers and designers can take into account the principles of randomness behind stochasticity in their design by building "flex" into their systems, and in the same way, we too can take this into account in our lives. As students, we're busy; we have classes and lives to balance, and it can be easy to try and stack activities together without any space between them. This may be fine while everything is inside this tightly-operating envelope, but unforeseen events pop up, colds are caught, and new opportunities present themselves. If we don't build "flex" into our lives, our operating envelope can turn from a comfortable range of values into a cage that restrains our options. Factoring in stochasticity, in the same way that it is taken into account by designers of physical machines, gives us some much-needed latitude. Perhaps, instead of ensuring that every moment of each day is accounted for with a punishing schedule that allows no opportunity for stochasticity, you might pencil in optional activities with the understanding that these are actually flex-times. No matter what kind of person you are, we can all learn to embrace randomness and seek out experiences where every day would be different.

While stochasticity is an admittedly complex topic, it has wide applications into our everyday lives beyond places where we'd expect to see it such as the weather, to the very core of how we live our lives. While embracing and planning for randomness may seem like a strange move at first, it can provide us with the space and ability to function better in our ever-changing world.

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