



# Writing across the University of Alberta

THE JOYS AND SORROWS OF WRITING



Featuring work by Yi Zhang, Chesney Parchment, Khoi Le,  
Amanda Yim, Even Hirst, Eassah Agyemang, Janvi Bali,  
Jillian Morrison, Joan Nwosu, Kai Hamann, and Valeriya Sytnik.

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**WRITINGACROSSUOFA.CA**

VOLUME 6 | WINTER 2025

# The Joys and Sorrows of Writing

*Welcome to Volume 6 of WAUA*

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Dear Readers,

Welcome to the sixth issue of *Writing across the University of Alberta* (WAUA).

We are pleased to publish another issue of WAUA, which showcases that writing at the University of Alberta continues to thrive across all Writing Studies classes.

The sixth issue of the journal displays a wide range of emotions that many of us go through when we are faced with writing tasks. It is for this reason that we have titled this issue “The Joys and Sorrows of Writing” as it features topics of mental health and writing, writers’ sorrows and feelings of desperation, Internet troubles, love for writing, and even ghosts and math! The emotions contained within the pages show us how both troublesome and exciting writing can be: how it can heal, how it can be used to grapple with difficult situations, how at times can be seen as an impossible endeavour, and how it can be translated to other disciplines to explain difficult concepts.

The sixth issue of WAUA features the written works by **Yi Zhang, Chesney Parchment, Khoi Le, Amanda Yim, Even Hirst, Eassah Agyemang, Janvi Bali, Jillian Morrison, Joan Nwosu, Kai Hamann, and Valeriya Sytnik**

With the publication of our sixth issue behind us, we are now accepting submissions for our seventh issue, which we hope to publish in Fall 2026. Students interested in submitting their work will find information on how to do so here:

<https://writingacrossuofa.ca/index.php/writingacrossuofa/about/submissions>.

Sincerely,

The WAUA Editorial Team:

Nancy Bray, Anna Chilewska, Karly Coleman, and Anita Parker

With special thanks to student volunteers: Yingdi (Alexandra) Ma and Zuairia Shahrin

Edmonton, December 2025

## The Silence Between the Pages

Yi Zhang<sup>1</sup>

Writing across the University of Alberta, 2025<sup>2</sup>  
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### Introduction

“Silence between the Pages” is a paper that was written in a WRS course in response to a prompt, which asked students to share a story about writing. Students had the option of writing fiction or non-fiction. Yi Zhang, in this particular paper, outlines struggles that individuals sometimes go through with mental health issues, and how writing might play a role in their journey with surprising—and not always positive—results.

**Keywords:** mental health, writing as salvation and risk, peer review



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“The first time I met Ningning, she was sitting quietly, surrounded by books as if they were a shield between her and the world.”

Ningning, a 13-year-old girl, had been suffering from severe depression. She had been admitted to our ward eight times in one year. I met her during her eighth hospital stay while I was volunteering. When I first walked into her room, I was surprised by the number of books she had, especially since her doctor told me that she had dropped out of school a long time ago.

Life in the psychiatric ward was structured and routine. Ningning followed the same routine as everyone else. However, during free time, while other teenagers gathered to chat or play games, Ningning always stayed alone. Previous treatments hadn’t been successful, and she seemed to shut everyone out, making it difficult for therapy to help her. Her mother once told me that Ningning used to be very close to her sister, but one year ago, her sister died in an accident, and since then Ningning has closed herself off from the world.

One afternoon, I tried to start a conversation with her while she was reading. “I love Haruki Murakami’s books,” I said. I noticed that she had a few novels next to her bed, including one by Murakami. “Especially when I’m frustrated, reading something written by others feels like having a conversation across time and space.” When I said this, I noticed a small spark in Ningning’s eyes. I asked if she had ever thought about writing—not as a professional, but just to put down her thoughts.

Ningning was silent for a moment, and I worried that I had pushed too far. But after a long pause, she finally whispered, “I feel like I can’t do anything well.” I paused, swallowing hard. I took a deep breath and said softly, “That’s okay. Writing isn’t for others; it’s for yourself.”

That was our first conversation.

The next day, I saw Ningning standing outside the doctor’s office, holding something in her hand. I approached her and asked, “How are you today? Do you have something interesting to share with me?”

“I wrote something about life in the ward,” she replied quietly.

“Can I read it?” I asked.

She hesitated for a second, then handed me the paper. “Okay, but it’s not very good.” Her fingers trembled slightly as she handed me the paper, as if each word on the page weighed heavily on her.

I smiled. “That’s fine. Thank you for sharing it with me.” Ningning smiled slightly at this.



As I read her writing, I realized that her words were detailed and sensitive. Her emotions were clear, and I could tell she had poured a part of herself into it. At first, I thought she was indifferent to the people around her, but through her writing I saw how deeply she observed others.

In her story, she wrote about a young girl named Chuyan who had also been living in the ward because of a mood disorder. She wrote, “Chuyan and her parents argue about everything—from lunch to future plans. It seems like every little thing becomes a reason to fight, which makes Chuyan very upset.” Ningning described how Chuyan’s struggles were visible, not just in her frustration but also in the scars on her arms. “Chuyan carries the weight of arguments not only in her mind but also carved into her skin, like silent cries for understanding. Each scar tells a story that words could not express. They are reminders that love, even at its most painful, is still love.”

It was clear that Ningning felt sympathy for Chuyan’s pain. Ningning also wrote, “Home is truly strange; love is mixed with a dull ache, just enough to cause you lifelong pain. Maybe that’s why people keep going back, seeking comfort in a place that has hurt them. For Chuyan, home meant endless arguments, but deep down it was still where she wanted to belong. I guess we all carry this contradiction—a home need, even though it’s often the source of our deepest pain.”

After finishing her writing, I told Ningning, “This is wonderful. But have you thought about how maybe Chuyan’s overprotective parents argue with her because she struggles with independence, and they are trying to help? Maybe they just don’t know how to help her correctly.”

Ningning paused for a moment. “I never thought about it like that,” she admitted. “I only saw her depression, not things behind it.”

At this point, I introduced her to the concept of peer review. “When we share our writing with others, we invite feedback. It’s not about judgment or grades. It’s about seeing things from different perspectives and using that feedback to improve. Peer review can help with writing, but it also helps us grow personally by opening our minds to other points of view.”

Ningning seemed curious. She had always kept her thoughts to herself, so I thought that peer review could be a way for her to connect—not just through writing, but emotionally, too.

“When you share your writing,” I told her, “you’re inviting someone into your world. And when they give feedback, they’re sharing their world with you. It’s not just words—it’s an exchange of thoughts and feelings.”

Her eyes lit up. “Yes,” she said softly. “When I write, I feel like I can express myself better. I like that.”

“Exactly,” I said. “Peer review gives you a safe space to express yourself without fear. It’s not a competition. It’s about sharing and helping each other grow. When we write, we only see things from our own angle. Others can show us things we might not have noticed.”

Ningning thought for a while, and then asked, “But what if people don’t like my writing?” I understood her concern, especially given her fragile emotional state.

“That’s a good question,” I said. “But peer review includes helpful feedback and hurtful comments. Over time, I help you learn to focus on the comments that help and ignore the ones that harm.”

Ningning nodded. “It sounds like it could help. It’s hard to share my thoughts, but maybe I can try.”

Over time, I saw Ningning become more confident. Peer review became not only just a way for her to improve her writing, but also it became a way for her to reconnect with the world around her.

After a few months, her condition improved, and she was discharged. On the day she left, she gave me a small bottle filled with tiny slips of paper. “These are all the things I wanted to say to you,” she told me. “And all the memories I’ve made here in the hospital.”

I smiled and told her, “I’ll cherish this.” Then, half-jokingly, I added, “I wish I could keep the sick Ningning here in the hospital, with me, forever.”

But a few months later, I received devastating news: Ningning had jumped off a building.

Her classmates had mocked her as a “nerd” and cruelly humiliated her writing. Their harsh words shattered her. I believed that writing and peer review would help her find her voice and connect with others. I thought it would not only be an opportunity for her to share her work but also a platform for sharing ideas, supporting one another, and growing together. But reality proved me wrong.

One evening, when the loneliness became too heavy, I opened the bottle she gave me. Inside, on tiny slips of paper, were fragments of a world she could no longer share. ‘Thank you for listening.’ ‘I want to be brave.’ ‘Do you think people can change?’ I read them all, over and over. But no matter how many times I rearranged them, they could never form the story I wished I could have given her—a story where she stayed.

## Ink & Liberation

Chesney Parchment<sup>1</sup>

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### Introduction

Students in a WRS class were asked to write a personal narrative relating in some ways to their writing experience. Chesney Parchment takes the readers on an emotional writing journey, which first begins with personal struggles that eases into a place where writing can be a form of emotional healing.

*Keywords:* failure, self-expression, struggle



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*The night I fell in love with writing*, I was trapped. Entombed, if you will, in the archives of my repressed emotions. Had you asked me anytime before then, I'd have said one of my greatest strengths was compartmentalizing.

I'd have said it without blinking.

I'd have been lying.

In truth, I had lived my life in abject terror. Afraid of being a failure, afraid of being a burden, afraid of talking to people about my feelings. That fear created a master in the art of emotional repression. Each time I felt something was too big to deal with alone, I squished it into a box and shelved it in a corner, to be dealt with at a later date. I then deluded myself into believing that date would never come.

*The night I fell in love with writing* was one of the worst of my life. I came to the realization on that fateful evening that, as much as I felt I had to, I could not exist all alone. I was under pressure from all sides: my parents, my school, and my own astronomical expectations.

When I was younger, I was unwilling to let myself feel anything outside of determination. As time passed, unwillingness developed into inability. I was a source of pride for my family—the youngest in my grade and top of my class. In my head, I was not a person, but a list of accomplishments for my parents to tell their friends about. A list of accomplishments. I couldn't have struggles, and I certainly couldn't need help. Depression, anxiety, and neurodivergence weren't words that smart girls, let alone smart Jamaican girls, worried about, and so depression, anxiety, and neurodivergence got filed away. I pushed so many things into what I had thought were the deep recesses of my mind. I had not realized that the archives had expanded and closed me in.

*The night I fell in love with writing*, I tried to shove one final grievance with myself into the archives, and it did not fit. There I sat, with a heavy head, legs stuck to the cold concrete of the basement floor, compartmentalizing as I was so good at, but there was no space left. Immediately, my eyes welled, my breathing quickened, and my hands began to tremble. A small tremor turned into body-wracking sobs while the plastic-covered pink insulation and concrete slabs dissolved. All of a sudden, there were feelings and concerns and thoughts and insecurity, and I was drowning. I had forced so much into this corner in my mind that, in the chaos, I could not find a way out.

*The night I fell in love with writing*, my hands shook as I clawed at the infallible walls I had built. They did not budge.

*The night I fell in love with writing*, I could see myself in two places at once; I watched as I sat in my little corner, taking shallow, unfulfilling breaths with nothing but a pen and a piece of

paper to anchor me, and I watched myself wade waist-deep in the nuclear fallout of my own mental creation. Without an ounce to lose and little capability of other coherent thought, I decided to try my hand at writing.

I ceased seeking a way out.

I wrote my way through.

I persisted, blinded by the current and aware solely of the torrent of emotion rushing onto my page. I wrote through years of anger, and sadness, and insecurity, and inadequacy. I wrote of frustration, I wrote of loneliness, of being unheard, and I wrote of *fernweh*. The hurricane in my mind took the escape with which I provided it, flooding the page through my frantic fingers.

Then the tide receded, and I was perched once more on the concrete, metal support beams ahead and thick plastic behind, but with a tear-stained page covered in barely legible print clutched in my hand and an unimaginable weight gone from my shoulders. My lungs expanded and took in my first full breath in almost half an hour. I reached into that same corner of my mind, familiar to me as my middle name, but I found it had changed.

Gone was the labyrinth of feelings. My archives were missing. In their place was a desk. On that desk, there was a laptop. On that laptop, a blank document. No longer were my sentiments to be put off for an undisclosed date.

On that fickle piece of paper, I held my soul. It was vulnerable, yes. It was imperfect, and it was sad, but it was also beautiful, and it was mine.

I return to that piece even now, in times of despair. I titled it “*Fernweh*”—to long for a far-off place that you’ve not yet been to. It reminds me of the wonders held within my own being. That, as long as I keep pushing, I will find somewhere to call home.

*The night I fell in love with writing*, I found a way to express myself, a way wherein I remained in my comfort zone, but I could create something beautiful. With the written word, no one would judge me, invalidate me, or force me to be perfect. I discovered that I could expel the thoughts that stifled me, say the things I want to say, but that no one needed to hear them. I was smearing ink on dead trees, or forcing a device to comprehend my zeroes and ones, and it was self-care. Nobody had to see me fall apart, and nobody had to help me stitch myself together. The English language became my companion, my therapist, my most trusted confidant, and my dearest friend.

*The night I fell in love with writing*, I was finally, *blissfully*, free.

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# A Critique of John Frow's Popular Culture Through the Lens of Gamification

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Writing across the University of Alberta, 2025<sup>2</sup>  
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## Introduction

In this argumentative paper, Khoi Le analyzes John Frow's "The Concept of the Popular" in order to illustrate how technologies mediate people's experiences and how popular culture, which is closely intertwined with technologies, changes over time because of its close connection to technology.

*Keywords:* popular culture, Frow, power structure, technology,



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In the contemporary context, technology reshapes power structures by determining who gains advantages and who falls behind in adapting to market demands (Qureshi). For instance, businesses that quickly adopt digital marketing strategies or leverage data analytics often outperform other competitors that are slower in integrating technologies and innovations (Qureshi). Digital platforms, such as TikTok or Spotify, utilize machine learning algorithms that privilege certain creators and forms of content over others, shaping what becomes culturally visible by embedding game-like elements, including rankings and likes, into their digital systems. This gamification approach creates new hierarchies of success for businesses by driving and structuring user participation. Thus, this dynamic reflects “a top-down model of social domination” as noted by John Frow (60), highlighting that popular culture is tied to power structures of a society in terms of both social and cultural capital.

Frow argues that popular culture is a representation of common interests and activities of “the people,” suggesting that culture emerges as the collective work of individuals within a community (72). This can be further extended to what a community knows and does, connecting with cultural capital in shaping a community’s identity through the shared preferences or tastes of individuals. For popular culture to endure, it must strongly align with these tastes to remain viable in the market, implying a relationship between cultural capital and the people who consume it. For instance, individuals create culture through their everyday practices, which later extends to a societal level via connecting those practices with others through communal spaces. These practices, as the products of the people, illustrate Frow’s idea of “the connections between production and culture” (80). Production, however, is always subject to market pressures of catering to mass audiences. Hence, this dynamic reflects the logic of wins and losses in reality, where more favored products that resonate with people’s tastes gain greater visibility. Viewing through the lens of gamification, this dynamic resembles a game in which cultural products must continuously engage and interact with audiences in order to survive the market, structuring an association between power structures and gamification strategies.

With the rapid evolution of technology, the relationship between cultural production and consumption has changed due to technological mediation. While Frow emphasizes that popular culture is a reflection of people’s interests, technological algorithms may challenge Frow’s definition due to the fact that technologies mediate people’s experiences based on trending trends or what is popular to audiences. Digital platforms like YouTube, Spotify, and others use recommendation algorithms to prioritize content that is widely consumed by users, revealing a shift in the focus from cultural expression toward maximizing user engagement and corporate profits. This shift illustrates how technology with gamified strategies can both mediate and constrain the cultural practices that Frow considers the representation of “the people” (72).



The rise of technology gamifies the power structure. Media platforms use algorithms to capture the most-consumed content, and then place those at the top of the trending or on the first page of a user's screen. For example, TikTok takes advantage of the for-you-page (fyp) to spread the content and make it more popular and accessible in the market to mass audiences with the help of mass media. This challenges the concept of "the people" brought up by Frow. Since many contemporary audiences do not necessarily have to possess an interest in the topic being shown to them, they still engage with the medium either directly or indirectly. In a gamified technological environment, culture is prosecuted, distributed, and consumed based on the influence of programmed algorithms, reflecting the truth of commercialization involved in selling the content to "the people." Consequently, this is a call for acknowledging the involvement of technology in challenging the original definition of culture, especially popular culture.

On the other hand, Frow suggests that the order of power is internalized through the "pleasures of conformity," experiencing that the fit of the model reinforces disciplinary structures which align one with their "social allegiances" (61-64). This also implies that an individual can belong to more than one community. However, conflicts arise in the contradiction of the structure of feeling. Thus, Frow proposes to "[distinguish] between a populism of the dominant classes and a populism of the dominated classes" to solve the ambivalence (79). While his concept implies a collective expression of individuals in either a winning or losing side of one group, the other group may face the marginalization of their voices. As a result, Frow employs "plebiscitary strategies" to unify the category of popular culture based on common sense as well as a derivative of a singular entity that is the people (82, 85), welding together diverse communities in order to synthesize various social and cultural contexts.

Popular culture is now intertwined with the technologies that shape its production, distribution, and consumption. Gamification introduces the concept of competition through rewards and penalties, which is key to capturing the taste of "the people" in order to survive the market. While Frow's critique of popular culture remains valuable for understanding these dynamics, his model requires ongoing research and adaptation to fully account for the ways new technologies contribute to transforming cultural participation and power structure.

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## Of Words, Souls, and Ravens

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### Introduction

“Of Words, Souls, and Raven” is a creative piece that was submitted for a WRS course. In this particular class, students were given many options for their final assignment, one of which was to compose something about the writing process. In this piece, Amada Yim imagines what it would be like to have a conversation with Edgar Allan Poe about his most famous work “The Raven.”

**Keywords:** Edgar Allan Poe, literature, poetry, writing process



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It was a gray and miserable day when I met him, when I got a glimpse into that troubled yet brilliant mind. Most human lives eventually come down to a few words, whether it be an engraving on a headstone, the longing mentions of a loved one, or the fleeting memories of what they once uttered; all these scattered words were inevitably swallowed up by the pitiless waves of time, without leaving a single trace. His words, however, I suspected would last for a long, long time.

It was the year 1849. I materialized in front of a buzzing hospital in New York. Like all hospitals, it was packed with souls: the living, the dead, and the in-between. Shrugging the chill of the underworld off my feathers, I located my quarry in an abandoned hospital room. A man—pale and sickly—lay dead on a bed while a translucent version of him stood by, unmoving and utterly alone.

Experienced as I was, I somehow felt a twinge of pity. I laid a hand on his shoulder. “It’s time to go.”

His head snapped back; his expression was one of terror and confusion, mirroring what he must have felt in his last moments.

“Nevermore.” He muttered.

“In a sense, yes.” I held out a hand. “I’ll be taking you to the afterlife.”

His lips trembled. “But I—I was just beginning to turn my life around! I just got engaged! I can’t go, not yet!”

It was never a choice, but I was not one for violence, so I simply took a step back. “Don’t worry, I won’t force you to do anything. What’s your name?”

He eyed me suspiciously. “Edgar.”

“Nice to meet you, Edgar. Will you take a walk with me? You look like you could use some fresh air.” The recently deceased were often in a state of disorientation and were easy to convince.

The hard lines on his face softened. “I suppose that’ll do me some good.”

As we distanced ourselves from the chaos of the hospital, I couldn’t help but feel curious. I met all sorts of people on the job, but there was a strange spark to this man.

“What did you do for a living?” I asked.

He let out a bitter chuckle. "I pride myself on being a writer and a poet, but what lets me make a living is being an editor. I recently got this job, you see. If it goes well, I can finally turn my life around."

"That's a shame. People used to appreciate art, especially the art of words." I shook my head. "What inspired you to write in the first place?"

"Oh, the usual," he answered dryly. "Orphaned and separated from my siblings at a young age. My foster mother, whom I loved so very much, died early, and my foster father never loved me. It all just went downhill from there. Life is dark and dreary; how can I coincide with that but write about it? But alas, never to suffer would never to have been blessed."

"I'm sorry to hear that. Is that what you write about, the dark and dreary?"

"The grim, the ghastly, the grotesque, you name it." He gestured at the busy streets, full of people working their fingers to the bone just to barely scrape by. "Words have no power to impress the mind without the exquisite horror of their reality. Take my poem 'The Raven,' for example. Is it not common to be consumed by grief over the loss of a loved one? Is it not terrific to watch a man fill himself with doubt, to the point of going insane because of such grief?"

I clacked my beak. "Indeed it is. How did the people react to your poem?"

"Critics hated it, but some loved it, and that's the point!" The question ignited a spark of passion. "You see, it is through the world around us in which we draw inspiration, and that makes our works true and honest. Never mind that critics don't always appreciate such things; literary perfection was not what I was aiming for. When I wrote 'The Raven,' I myself was not much better than its protagonist. I just lost my wife to an incurable illness, and after failing to find the answer at the bottom of a bottle, I wrote this poem."

"I see." I cocked my head. "So 'The Raven' is a lament of your grief? One that came from your heart?"

"To a degree, yes." Edgar waved a dismissing hand. "I believe that when one writes, it shouldn't only come from the heart, but also from the soul. Only with a calm and rational mind can you express true beauty. Many would imagine me composing with explosions of emotions, guided by nothing but ecstatic intuition, but that can't be further from the truth. My heart is where inspiration came from, yes, but if I had just poured all my sadness into this poem without consideration, why, 'The Raven' would have been an incoherent mess! What you read is a product of cautious revisions, an idea that matured after countless edits. An idea is like a marble, and I chiseled at mine until it resembled the shape I wanted, until it was an accurate depiction of the grief and never-ending remembrance that threatened to drown me."

I nodded in agreement. “A reasonable method. As I understand, writing, or any form of art, is a two-way transaction. Clearly, you considered the reader when you wrote, as if you were intentionally revealing a part of yourself through this statue of yours. What were you hoping to achieve—and receive in return—if not the critic’s recognition and the fame that comes with it?”

“Great question. I aimed to elevate the reader’s soul, and through that I am fulfilled. I believe this to be the purpose of all arts.”

“Elevation of the soul?” I asked inquisitively. “How was it achieved in ‘The Raven?’”

Edgar’s smile brightened. “To give the readers a chance to contemplate the Beautiful, of course. The excitement of the heart or the satisfaction of the intellect is merely the effect of such experience. With that in mind, Beauty became my province, and when that’s decided, melancholy was naturally the tone. I made sure that every word in this poem added to the atmosphere of sadness, and every stanza was composed with the essence of melancholy. If I manage to excite the sensitive souls to tears, then I have shown them true Beauty.”

“When you put it like that, I think all the exemplary works of art I have seen have evoked such an effect. I must say I’m curious about your process. Please, enlighten me if you would be so kind.”

“With pleasure! ‘Nevermore’ was what I first came up with when I thought of sadness and despair. Then, I tried to come up with a vessel that may deliver it to its best effect, and that’s when I thought of ravens. Creatures of darkness and ill omens, a bird that can speak but not comprehend human language. The raven only knows one word—no offense to you, of course; it was the protagonist’s imagination and sorrow-laden soul that drove him to madness. Isn’t that exquisite? On top of that, the protagonist is grieving over the loss of a beautiful woman, which I believe is something that most can understand. With such, I hoped to satisfy both the critics and the masses; but alas, life rarely turns out the way you hope for.”

“I see,” I slowly nodded and took a moment to find ‘The Raven’ amongst the waves of time. I closed my eyes and let it sink in. “That is indeed an excellent composition, Edgar. This tingle at the tips of my feathers—is that what Beauty is? I’m sure those who appreciate your poem were changed, in one way or another, after reading it.”

A smile appeared on his pale lips. “You have no idea how much joy that brings me. You see, writing is what I live and breathe for, ever since I was a child, and as you can see—” He gestured at his tattered, oversized clothes. “It hasn’t really done me well. My life has been full of difficulties, but poetry has always been the one thing that gave me hope. My body may have been starving, but as long as I could write, my soul was full.”

“I’m glad to hear that, Edgar. Most souls I collect have lived their lives starving without realizing it.”

Hearing this, Edgar’s steps faltered, and he turned to me with wide eyes. “This is it, isn’t it? I will never write again. I tried to hold on, but life slipped through my grasp like the golden sand.” He sat down on a nearby bench, deflated. “All that’s left of me will be my work. How preposterous! At the end of the day, despite all my grand ideals, what is ‘The Raven’ but a bunch of words? Nevermore, ha! Nevermore indeed will be Edgar the poet!”

“It’s alright, Edgar.” I sat down as well and put my hand gently on his shoulder. “What you’ve done is enough. What you wrote is enough. Those who have seen true Beauty through your works? They will remember you. Nevermore will be your body, but there will always be a part of your soul here, in the words you left behind, and I have witnessed enough history to believe in the power of words.”

“I—perhaps you’re right.” He sighed and looked towards the setting sun. “Maybe it’s not so bad that this dream is coming to an end. I apologize for my behaviour; it’s most unbecoming.” He looked back at me, orange light gleaming in his eyes. “If you can, please tell me this: will people still be reading ‘The Raven’ two hundred years later? Will it make a difference?”

I concentrated and looked into the future, where I saw him in books, articles, classrooms, and many more. “Yes, Edgar. ‘The Raven’ will continue to change and inspire people for many generations to come.”

The smile returned to his ghostly features. “Then I am content. Thank you for being patient with me.” He held out a hand. “I’m ready.”

I took his hand and nodded. “It was a pleasure knowing you, Edgar Allan Poe.”

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# **The Threats of Misinformation on Discourse Communities: How the Internet Ruins Everything!**

Evan Hirst<sup>1</sup>

Writing across the University of Alberta, 2025<sup>2</sup>  
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## Introduction

In this WRS class, students were asked to propose a research project that would extend the understanding they already have about writing. Using John Swales' work "The Concept of Discourse Community," Evan Hirst examines how perceived hierarchies influence the integrity of discourse communities, and how the internet's democratization of information influences dynamics of discourse communities for novice members.

*Keywords:* discourse community, John Swales, misinformation



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In a paper published in 2011, John Swales sought to further operationalize the concept of a discourse community. He attempted to refine the definition by outlining six criteria for the establishment of such communities. While Swales achieved his objective, it has become a fool's errand to attempt to establish this type of discourse community in the present day. The parameters he set forth do not explicitly account for the rise of what I call pseudo-experts who are common in the blossoming age of the internet. Deliberately or not, the presence of pseudo-experts undermines the integrity and validity of discourse communities with the use of misinformation. Within Swales' framework for discourse communities, there are novices, who are openly learning, and experts, who are recognized for their knowledge. Pseudo-experts insert themselves into this framework, blurring the line between the two by presenting themselves as authoritative despite lacking the necessary expertise. This society-level paradigm shift necessitates the reframing of these definitions. Concepts like Swales' 2011 discourse community must adapt to the societies they serve; otherwise, they risk becoming obsolete.

### *Background*

Swales' sixth and final criterion argues that for a discourse community to be established, a minimum number of members with a suitable degree of expertise must be met. Additionally, maintenance depends on a suitable ratio between novices and experts (2011). The dawn of the internet has exponentially expanded the potential audience for all forms of content and media. Consequently, there is a growing divide between the number of novices and experts in discourse communities today, driven by the disproportionate influx of novices entering into these conversations (wink, wink).

Take football as an example. The concept of a Monday morning quarterback refers to individuals who critique the plays and strategies of their favourite football team after a game is completed, as if they possess the training and awareness of a professional quarterback. This is a result of people who lack genuine discursal knowledge, yet their opinions demand an audience and authority. They participate in football discourse with confidence yet without credibility. This example extends to all discourse communities, where people shoehorn themselves into discussions that reach beyond their expertise. Now, the internet has amplified this dynamic, giving the voices of Monday morning quarterbacks a far wider reach and influence.

The traditional hierarchy of expertise has been undermined by the democratization of information on the internet. Previously, it was only the esteemed publications that dogmatically and systematically established the "truth." Today, however, in a world where you can manufacture legitimacy through platforms, likes, and followers, people have become disillusioned with this notion of expertise. As a result, society has experienced a recent shift from empirical reasoning to pragmatic thinking, which is evident in the escalating polarization among these communities.

Misinformation is hardly a new concept; however, its prevalence has become overwhelming in recent years. An internet-based study by Del Vicario et al. found that misinformation spreads primarily in homogeneous groups, sometimes referred to as echo chambers. These groups form on the basis of shared narratives (2016). This is problematic because discourse communities operate on similar principles. The diffusion of misinformation poses a threat to the novices in a community, who often lack the experience and knowledge to realize falsehoods. This is precisely where the notion of a pseudo-expert originates: echo chambers provide the conditions where they can thrive and gain influence. These conditions could lead to the propagation of misconceptions and a false sense of understanding within one's own community. Echo chambers are breeding grounds for pseudo-experts. A cycle of misinformation occurs, which, at best, causes confusion and, at worst, could drastically affect individuals beyond their original discourse community.

Some misinformation comes with underlying malicious intent, seeking to stir division, while other cases arise from simple misunderstandings. In either case, it is critical that discourse communities seek to eliminate or minimize these threats to their integrity. The prevalence of misinformation, paired with the exponential growth of the creation of new information, imposes the necessity to revise these concepts.

### *Proposal*

This study will explore how perceived hierarchies influence the integrity of discourse communities, and how the internet's democratization of information impacts the novice-expert dynamic of discourse communities. To explore these ideas, qualitative methods will be used due to the subject's social nature. Through a combination of literature reviews of specific discourse communities (case studies), content analysis of online discussions, and interviews with community members, these questions may be addressed. This study will also seek to provide insights and methods on how to identify and address these pseudo-experts within one's own community.

Semi-structured interviews will form the basis of this study. These interviews will aim to determine whether or not the current operationalization of discourse communities requires revision.

Participants will be asked to reflect on their own position within the hierarchy of their own discourse community. They will also be asked to review and reflect on other members of their community and their contributions to their conversations. A ranking system (using a scale from 0-10) will be used to rate the level of expertise of these peers to determine perceived hierarchies within communities. This data will be used to construct a spectrum of expertise

within a discourse community. Comparing these responses will shed light on how the internet has transformed the landscape of discourse communities.

Given its social nature, participant confidentiality and informed consent will be prioritized throughout the study.

The proposed research methods are designed to generate insights into these challenges to discourse communities. The implications of this data may be profound for our understanding of this phenomenon.

### *Implications*

Results of this study will determine whether or not Swales' six criteria require modifications in the context of modern digital discourse. Scholars will need to consider whether to accept and embrace the presence of pseudo-experts and misinformation in these communities, or to redefine discourse communities in a practical way that deliberately excludes these individuals. Directed by the findings, this study will attempt to provide actionable insights for both academics and community leaders about how to move forward with respect to the changing landscape of discourse communities as a result of the internet. These recommendations will include strategies to assess, address, and identify various forms of misinformation. These results will also contribute to the broader understanding of how the internet has reshaped traditional perspectives on expertise and authority.

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## Forwards, and to You

Eassah Agyemang<sup>1</sup>

Writing across the University of Alberta, 2025<sup>2</sup>  
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### Introduction

In this WRS class, students were asked to apply course concepts to writing they encountered outside of class. Eassah Agyemang's creative nonfiction piece focuses on the purpose and impact of texts that are found around the University of Alberta campus.

*Keywords:* exigence, feedback, ghost, writing



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*December 3, 2024, 5:27 PM — Home, Basement*

I know that ghosts aren't real. There is no presence in the empty halls of the University that haunts me. The students I'll never know, the ones who inhabited those spaces, are more glimpses than specters. Glimpses of people I don't know anymore—who I'll never know because of my inability to move forward.

But I've learned something since then. A way to grab hold of a potential future, a way to move towards people. I'm thankful for student forums and my disdain for Shakespeare. It led me to take this class, which gave form to ideas causing fog in my mind. A class that gave my spirit the urge to move from a standstill. Because my time in this class was coming to an end, I saw it fit to act on that urge.

I decided to go for a walk.

*December 1, 2024, 12:03 PM — Rutherford Library, 5th Floor*

I feel right at home among all these books. What I love about them, what I love about art, I learned to define properly in this class.

I developed my "Golden Rule," where I state that "writing is when somebody feels \_\_\_\_ about something and expresses that in some way."

I love all the things I do because I like to pick up on the author's exigence. More important than technicality, than structure or style, is why a person is creating something. That reason, that genuine emotion trumps all aspects of writing. It makes art. Why, though, do I even think art is important in the first place?

*December 1, 2024, 1:14 PM — Rutherford Library, 5th Floor*

I've got my WRS work in front of me. I've been trying to figure out my answer to the question I asked myself an hour ago. Reading my papers 1, 2 and 3 repeatedly isn't getting me anywhere. In desperation, I start to read them subsequently.

I wrote my first paper to warn myself and others about the harm in not being able to connect with people.

I wrote my second about the first, and the strength of exigence in art.

My third, I proposed a study on feedback, trying to determine effective ways to help writers communicate.

I now have my answer and another contrived rule to boot.

Art is important because it allows us to connect with people. With my first two papers I explored writing, saying something. In my third I proposed a study to improve how we read. How we

listen. My course-long exigence was to connect; connection unintentionally became the focus of everything I wrote.

And there is no connection without the writer or reader. To fulfill my course-long exigence with this paper, I want my experience writing to give me the ability to connect.

*December 1, 2024, 1:37 PM — Rutherford Library, 5th Floor*

My Golden Rule can only describe half of connection. I'll use a "Silver Rule" (trite, I know) to give myself an idea of how to perform the second half.

*December 1, 2024, 2:54 PM — Rutherford Library, 5th Floor*

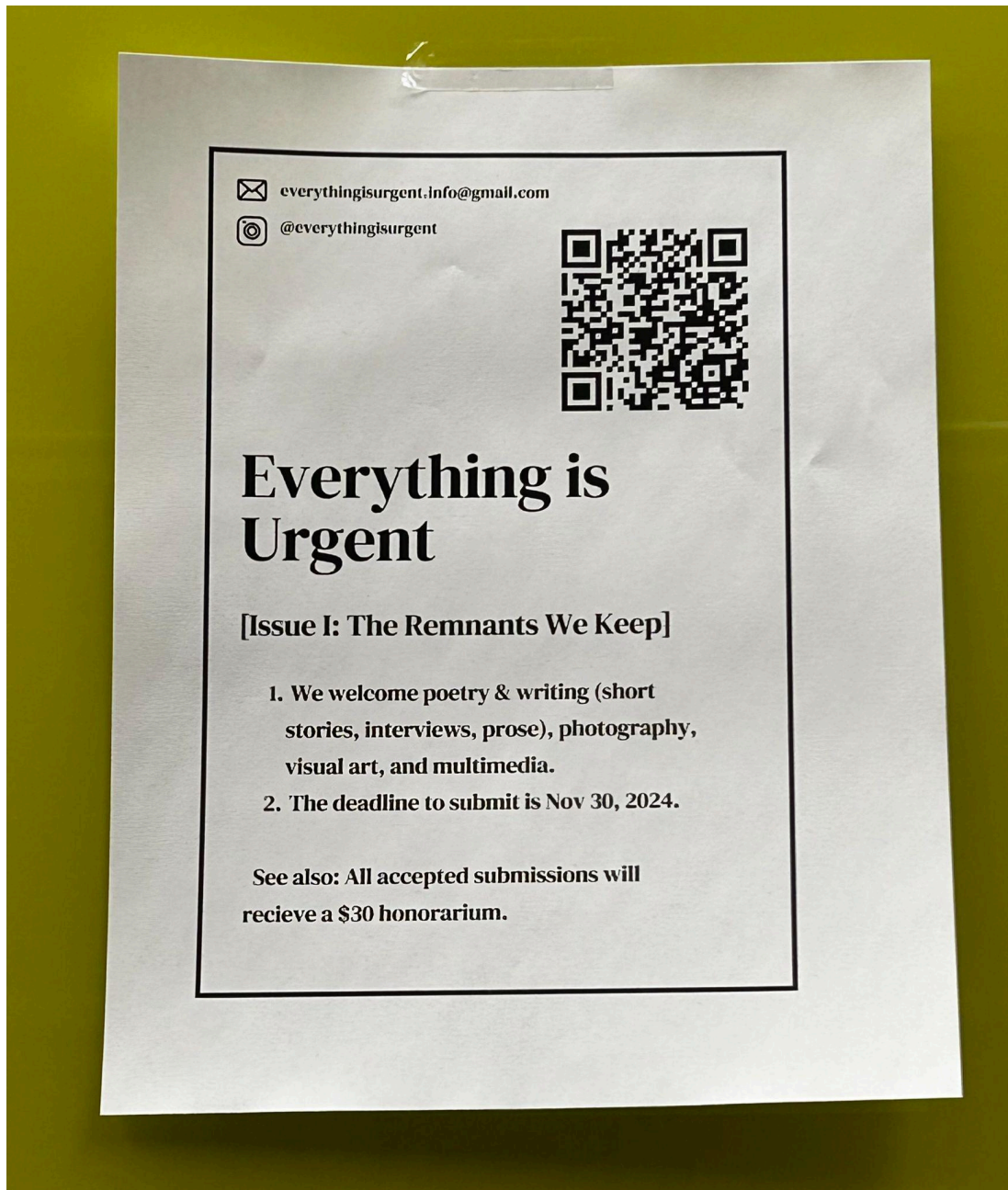
Okay. So reading is when:

- 1) You experience an expression. A book, song, anything. It's the polished final form of someone's exigence, the "some way" they expressed themselves.
- 2) You become "aware" of an expression. You pick up on the "something" they are expressing their thoughts on.
- 3) You understand the reason for the expression. Everything is stripped away but exigence. This is when writer and reader can connect. When something beyond words is exchanged between the two.

My goal is to connect with writing, with people, in the ways I can from now until I finish this paper.

*Precious Metals*

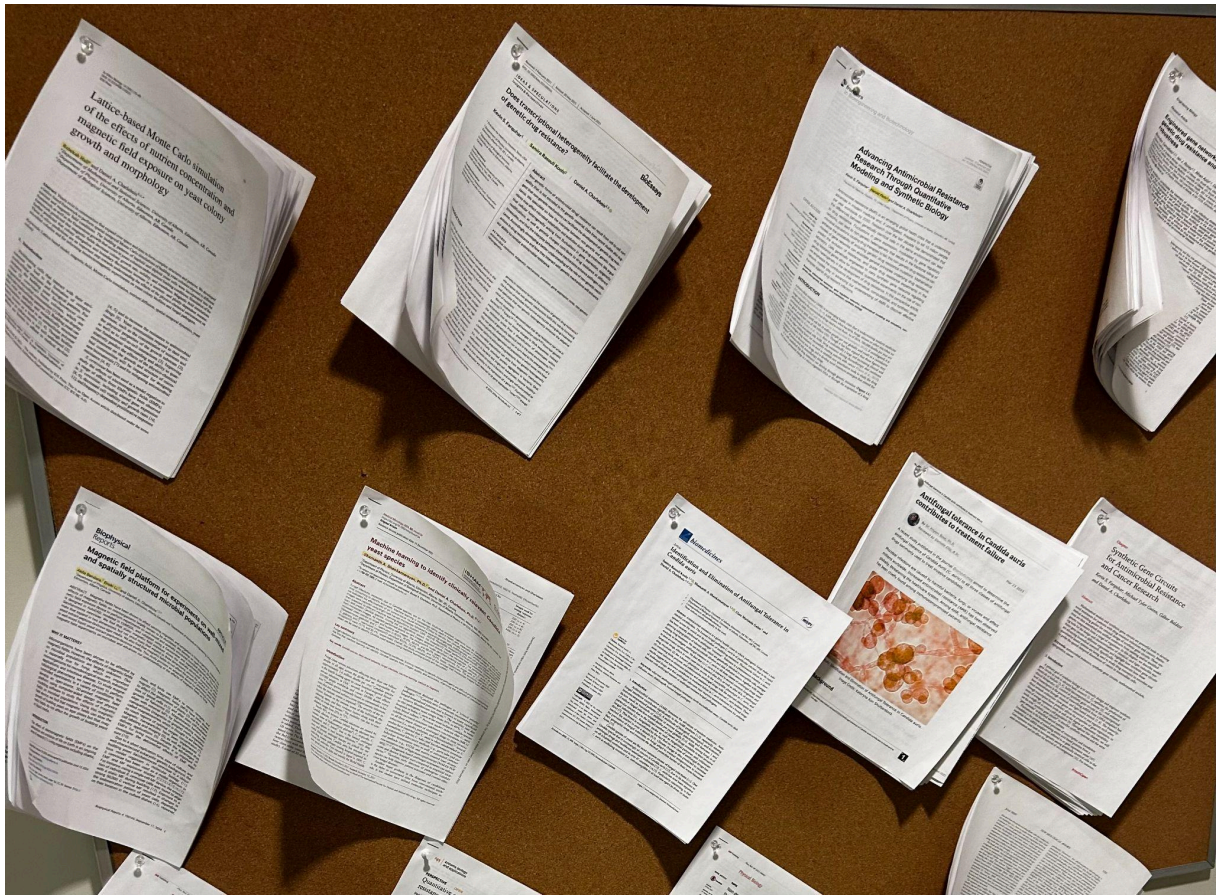
*December 1, 2024, 3:10 PM — Gunning-Lemieux Chemistry Centre, 1st Floor*



A poster. It's looking for submissions to an art magazine, simple enough. But why? In this first issue there's a want to have a discussion about the past, and how we let it affect us. It says as much on their social media. I think the exigence here is found in the name of the project. Simply experiencing the expression led me to believe this thing's only goal was to inform possible submitters. But it's a call to action. "Everything is Urgent." It wants to create an environment where we frantically bring our ideas to life. Where saying something genuine takes priority over all else. I can only imagine the love for art the creator of this magazine has. Their reason is a want for us to care and create harder.



December 1, 2024, 3:51 PM — CCIS, 7th Floor



Academic papers. The expressions are facts, figures, and conclusions. The exigence? Can't be to make money; anyone who thinks that way about academia never survives long enough to publish. Their exigence is simply to show people what they know, what they think they've found out. We've been looking up at the stars and asking "why?" for centuries. That makes its way into the why of our writing. The reason here is curiosity. Nothing more, nothing less.





This is what you get when everything about writing is stripped away. The reason for these scribbles is to say “I’m here” and “I saw you too”. To write and read. To connect.

These derelict desks are worth their weight in gold.

*December 3, 2024, 10:56 PM — Home, Basement*

Looking over what I'd written, I was content. I've gone from filling the University's empty spaces with ghosts to experiencing the real stories of others that intersect here through writing.

But I'm here too,

With a story of my own to add.

*December 3, 2024, 11:14PM — Home, Basement*

We had our feedback session on each other's Paper 2 in class. Which meant we needed to read each other's Paper 1 first.

My situation the day this happened was not conducive to thoughtful feedback. I had a midterm less than 10 minutes after the end of WRS that day, and I was too antsy to even sit still. I sat down next to my partner, her paper "Don't Be Sad" in front of me. And I was late for my midterm that day.

I can't imagine how I must have looked, awkwardly sitting in the classroom chair, blinking back tears. I do know how I felt. "Don't be Sad" was about her self-imposed loneliness, about struggling to connect, and urging others to learn from her situation. Urging them to reach out and be honest with others. I became aware of her expression almost instantly. There was no need to try and dissect her rhetorical situation. I was her intended audience, and her exigence was my own. At that moment, I was sitting next to somebody who had the same reason for writing. It made me feel seen. It made me feel like it was worth writing my first paper on what I did. I had actually left class with enough time to make it to my exam. And instead of making a mad dash to the exam hall, I stood there, outside Tory. I stood there thinking about what I had just experienced. I stood some more to write it down. I stood there a while to dry my eyes.

And then I began to move.

Towards her, toward the other students here, towards anyone. With the things that I write and the things that I read,

I move forwards, and to you.

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# Are Psychedelics Able to Play a Role in Influencing Creativity?

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Writing across the University of Alberta, 2025<sup>2</sup>  
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## Introduction

In this particular WRS class, students were asked to come up with a research question and explore that question in an argumentative paper. Janvi Bali explores whether or not there is a connection between psychedelics and creativity.

*Keywords:* brain, creativity, microdosing, psychedelics



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Research Question: Can psychedelic substances influence the development of creativity in individuals who actively use them, and if so, through what neurobiological and psychological mechanisms?

Creativity is the ability to generate ideas that are both novel and useful. This concept remains one of the most sought-after yet least understood cognitive processes in human psychology (Girn et al., 2020). In recent years, psychedelics such as LSD, psilocybin, and ayahuasca have re-entered scientific and public discourse for their potential influence on perception, cognition, and mood. This renewed attention raises a critical question: To what extent might psychedelics correlate with enhanced creativity, and under what conditions could such effects occur? Understanding this relationship matters because creativity fuels progress across science, art, and innovation, yet many of the neural mechanisms that underlie creative thinking remain obscure. Psychedelics have been shown to alter brain connectivity, mood, and cognitive flexibility. These features overlap with the processes associated with creative ideation.

It is important to approach this topic with scientific caution: existing research suggests correlations between psychedelic use and creativity, rather than direct causation. While dopaminergic and glutamatergic neurotransmission pathways have been implicated in both psychedelic experiences and creative cognition, these associations are complex and likely mediated by multiple neural and psychological variables. This paper investigates the question: Can psychedelic substances influence the development of creativity in individuals who actively use them, and if so, through what neurobiological and psychological mechanisms? By synthesizing current findings from cognitive neuroscience and psychopharmacology, this work aims to explore how psychedelics may modulate the brain's creative networks, while acknowledging the methodological and ethical limitations of drawing definitive causal conclusions.

### *Psychedelic Links to the Brain's Creativity Networks*

Research led by Girn et al. (2020), based on data collected, found that psychedelics were able to induce an overall happier mood in healthy participants. The facilitatory theory, based on a humanist approach, suggests positive mood states result in activation of complex, deep thoughts and memories, which are geared to be positive. In turn, this is able to support further innovation, flexibility, and creativity. Psychedelics increase frontal and divergent prefrontal-subcortical activation of the brain; this can be ascribed to the interference of thalamic gating of sensory and cognitive information. Thalamic gating is under the control of glutamatergic. This is related to psychedelics as they have secondary effects on glutamatergic and dopaminergic transmission. Glutamatergic and dopaminergic transmission are both key in stimulating creativity in a psychedelic user. Without these neural pathways, an individual's creative mind would not be able to function effectively. The positive mood individuals feel after

engaging with psychedelics has been associated with increased activity in the dorsolateral prefrontal cortex (dlPFC).

This region of the brain is correlated with goal-directed planning for problem-solving and enhanced thinking. Both together influence creativity development, specifically enhanced thinking, which is the foundation of our creative minds. Various studies conducted report a direct relationship between creativity and enhanced thinking, both relating to the neurobiological basis of creativity. When considered together, both are associated with increased functional connectivity as a result of psychedelic use. Therefore, creativity can be attributed to this functional connectivity, which is enhanced by psychedelics.

As mentioned in the introduction, creativity is not a singular state. Creativity arises from stimulation in multiple locations of our brain (Girn et al., 2020). Psychedelic users are often found to have increased stimulation in different regions of the brain once the drug is administered. This is different from other phenomena, such as goal-directed thought or dreaming, which have more defined positions. Creative thoughts can arise in a variety of different mental states. Creatively improvising within a circumscribed task domain, such as to produce music filled with emotions, can be placed in a mental state more similar to goal-directed thought, while divergent thinking, which looks at all possible solutions, may take place in a mental state more similar to dreaming. Therefore, the generation of creativity is best conceptualized as a product of mental states that may vary along constraints of thought, rather than being encompassed by one mental state. Psychedelics can directly impact regions of our brain, which then leads to varying mental states, provoking creativity to arise.

### *Effectiveness of Microdosing Psychedelics on Creativity*

Microdosing of psychedelics is proposed to have some of the benefits to users, with minimizing the risks that would come with full dose-use (Bornemann, 2020). Microdosing is described as involving a sub-threshold dose, meaning users engaging with it identify a dose at which they do not experience the feeling of a “high,” or simply microdosing to an extent which only gives minimal acute drug effects (Polito & Stevenson, 2019). It is said to improve problem-solving and promote cognitive flexibility, significant to creative thinking. Bornemann’s published research reveals many benefits reported by microdosers, which include improvements in mood, focus, and creativity. The overall effect on users who take microdoses has been described as “a really good day.”

In the qualitative study conducted by Prochazkova et al. (2018), participants performed three tasks once before drug consumption and once under the influence of a microdose of a psychedelic truffle. The data indicated clear enhancement in both convergent and divergent thinking with no significant changes in intelligence. Therefore, the conclusion that can be

drawn from this study is that psychedelic substances assist with creativity through improving task transitioning processes occurring in the brain.

In contrast, an observational study led by Polito and Stevenson (2019) did not find any changes in creativity among those who microdosed. Neither self-report measures on acute microdose effects nor a 6-week post-rating of a more objective creativity task provided significant results. The highest microdose administered to an individual led to a feeling of a “high;” however, it can be argued that this dose would not qualify as a microdose. This evidence concludes that the creativity changes associated with microdosing are ultimately mixed; it is nearly impossible to draw definitive conclusions on such a topic when a microdose differs from individual to individual and their threshold capacity.

When both studies put together present opposing views, it is crucial to consider the evidence presented. Polito and Stevenson’s (2019) study did not provide ample evidence of psychedelic impact, whereas Prochazkova et al. found an increase in creativity because of the drug. Limitations should be considered when deeming the study more credible towards supporting the effectiveness of microdosing psychedelics on creativity, as the quantitative study was self-reported, and the observational study was directly monitored by researchers.

### *Role of Psychedelics Correlated with Creativity*

Janiger and De Rios (1989) examined an experiment from the 1950s in which artists were gathered to draw a kachina doll with specific structure and details. The artists drew two copies, one before taking any psychedelics and one hour prior to ingesting the drug. Their art pieces were then assessed by a professor of art history to investigate the psychedelic impact on the creativity of the artist.

Representative changes were found in the artists’ main art style—the most significant change being artists whose styles were intrinsically representational or abstract were seen to be more expressionistic or nonobjective. Changes also included, yet were not limited to: relative size expansion, greater intensity of color and light, oversimplification, symbolic depiction of objects, fragmentation, and distortion. Most of the artists who were involved with this experiment believed their pieces of art after taking psychedelics were more fascinating and aesthetically superior to their usual mode of expression. It is obvious from the artwork that psychedelics played a significant role in the drawing of the kachina doll, before and after administration. After the creative mind of the artist was greatly stimulated, they were able to produce art pieces that they normally would not. Psychedelics not only induced creativity, but also brought light to a new side of the artist’s creative minds.



## Conclusion

While debates persist regarding the extent to which psychedelics influence creative ability, current evidence suggests a meaningful correlation between psychedelic use and enhanced cognitive processes associated with creativity. Psychedelics appear to engage neurobiological systems, particularly dopaminergic and glutamatergic pathways, that are also implicated in divergent thinking, cognitive flexibility, and mood regulation. These overlapping mechanisms may help explain why users often report heightened imagination, openness, and problem-solving capacity following psychedelic experiences.

However, creativity is not a singular or static trait; it emerges from a dynamic interplay of multiple neural states, personal context, and environmental factors. Psychedelics may facilitate transitions between these cognitive states, temporarily loosening rigid patterns of thought that constrain originality. Yet, as with most psychoactive interventions, these effects are correlational rather than causal, and vary widely across individuals, dosage levels, and experimental conditions.

Evidence surrounding microdosing remains particularly mixed. Some studies report modest improvements in creativity and mood, while others find no significant change. These discrepancies highlight the need for more rigorous, controlled methodologies to disentangle placebo effects, expectancy bias, and true neurochemical influence.

Future research should integrate psychometric tools and longitudinal designs to better quantify changes in creativity over time, explore dose-response relationships, and investigate whether tolerance or diminishing returns occur with repeated use. By refining our understanding of how psychedelics modulate the brain's creative networks, we can gain deeper insight into both the nature of creativity itself and the ethical, cognitive, and therapeutic boundaries of psychedelic science.

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## Rewriting Imperfection

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### Introduction

Students in this WRS class were asked to write a personal narrative relating in some ways to their writing experience. Jillian Morrison takes us back first to her childhood, which was filled with storytelling, then to her school days, where writing became a source of anxiety because it was graded. She encourages us to learn from our childhood and to maintain that childlike wonder throughout our lives.

*Keywords:* childhood, imitation, literacy, storytelling



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When I think about my love of literacy and how it evolved throughout my life, the first thing that comes to mind is my constant, imperfect storytelling. This creative pastime emerged in an incredibly untraditional sense; in fact, I couldn't read, let alone write, when I started crafting these works of fiction.

I have foggy memories of four-year-old me, bent over at my small art desk in our living room, furiously scribbling pages upon pages of illustrations. "This one is called Rapunzel Cooks an Egg", I remember excitedly reciting to my mom. She would then transcribe the story I wanted to tell above my clumsy yet personable drawings.

I had always thought of these stories as being impressive for a kid who hadn't even gone to kindergarten yet, but while rereading them I began to realize they didn't make quite as much sense as I had previously envisioned. Sometimes the characters completely changed throughout the story; often there was no resolution to the story or any remote sense of conflict, and there were times where the words and pictures ended abruptly.

However, I don't really think that this is the point. Reading these stories, although I noticed a lot of normal childlike imperfection (I was in no way shape or form a child prodigy), I also noticed something really interesting about my stories: I was imitating other forms of media I was exposed to at the time, such as TV shows and picture books. My stories offered an opportunity for me to learn about writing conventions, such as how to structure a story or develop a character.

At the same time, I was writing as an outlet to understand the changes happening in my life, almost a precursor to journaling. I can only imagine that being four years old is an incredibly complicated age—every new experience an unexplored depth of unknowns. One of my stories featured detailed pictures of an optometrist's chair and waiting room, almost certainly written after my first visit to the eye doctor. Another humorously named "The Night Before Kindergarten Was All About Work" encompassed the routines and tasks that needed to be done before I went to school for the first time, clearly a way for me to wrap my head around this new place and stage of my life. My storytelling acted as a buoy amidst this oncoming wave of anxieties.

Not only was the content of my stories surprising, but the quantity was overwhelming; stacks and stacks of stories, each varying in length, but many of them over 10 pages long. Sifting through and skimming the pages, the progress was palpable. During my development from a budding kindergartner to a confident second grader, the wording became more complex, the illustrations more vivid, and the story more organized.

Although this passion for self-expression and creativity has stuck with me to this day, the consistent practice of writing is something I lost over the years. Enter the rigorous grading

system of high school, pressure to take advanced placement classes, and high stakes for getting into my desired university program. My insatiable desire for academic validation quickly stole all the joy out of my writing experience and replaced it with feelings of fear, insecurity, and self-doubt. Instead of focusing on getting my ideas onto the page, I obsessed over the mechanics of a sentence until the words melded together and sounded like gibberish in my head. I'd begun to fixate on finding the right word until my computer screen would shut off and my document faded into the darkness. Perfectionism felt like an unattainable goal—a feeling of satisfaction that was always just out of reach.

Images flood my brain of sitting at my beloved English teacher's desk, discussing an essay that I had spent hours obsessing over with every fiber of my being. "I think you need to reevaluate your writing process," I remember her saying, as I tapped my anxious fingers against the hard plastic chair. "Prioritize getting your ideas down on the page, instead of hesitating in fear of producing an imperfect outcome." What did she mean? I asked myself. I worked so hard on this, and now I have to come up with an entirely new thesis? Instead of accepting this as an opportunity for growth, I silently berated myself for every small suggestion.

After further reflection, I realized that writing no longer felt like something I loved; it was a skill I clung to when I had a mandatory assignment with a deadline fast approaching. I began to wonder, Why do we seem to lose the enjoyment of writing as we grow up? Where would we be in our writing journey if experimenting with new ideas and furthering our creativity was something we practiced habitually? In order to produce a truly meaningful and thought-provoking essay, I knew I would be forced to reconcile my relationship with writing.

Ultimately, reflecting upon my childhood writing experiences made me realize that we can all learn a lot from our four-year-old selves. Be brave, try new things, be imaginative, and practice consistently. Rather than writing for a certain result or sense of achievement, I've learned to shift my perspective and embrace imperfection. I now emphasize the value of discovery and how this has allowed me to find myself through the words and process.

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## A Student's Guide to Writing Their Very First Ever Terrible Creative Nonfiction Piece

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### Introduction

In this particular WRS class, students were asked to reflect on their experience of writing a piece of creative nonfiction. Joan Nwosu showcases how writing is sometimes a struggle, with its process often comprising various and surprising elements.

*Keywords:* creative nonfiction, drafting, genre, procrastination



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I hate writing. I've come to realize this through this course. This is a little inconvenient as I would love to work in some kind of legal profession someday. But I really, really, really despise writing. Or at least I hate writing creative nonfiction novels.

The first step is to be introduced. What even is that, a creative nonfiction novel? Apparently, it is a piece of writing that is nonfiction (obviously) but contains the same writing rules and rhetoric as a fictional piece of writing would. In a nutshell, it is a not-boring piece of nonfiction writing. Sitting in the front seat of the class, as you explained this to us, I found myself getting a little annoyed. What was the point? It's not as interesting as a fiction novel, and it's not as informative as a "real" nonfiction paper. It was a strange pretender that I had to contend with. I hated the concept.

The next step is to look for clarification and an example. Reading the Root & Steinberg Creative Nonfiction, the Fourth Genre paper, I hated the concept even more, but I understood its purpose, at least. It was a diary of sorts—a piece of writing that you imbue part of yourself into, to give to someone else. It had to be entertaining, honest, and, on some level, personal. After reading the paper, my first thought was that I was in deep trouble. My second thought was to be slightly amused by the irony of the droning, prosaic language the paper was written in. Why wasn't a paper explaining what a creative nonfiction novel is written in the genre of a creative nonfiction novel? Beats me. The rest of the creative nonfiction genre examples were much more interesting, luckily. The example stage was done.

So I have come past the introduction, clarification, and example stage. Now it was time for the ideas stage. I had to write. Not my actual paper this time, thank goodness, but the ideas for the paper. This is where I find my topic. For this stage, I regurgitate everything my mind could come up with onto a piece of paper and pick the least bad one. My topic was so graciously gifted to me, though after much turmoil.

Now I'm really at the stage where I'll have to actually write. The practice stage. But I'm in luck! There's a technique that can keep you from doing this stage for as long as possible. It's called procrastinating. Do this stage for as long as needed.

I performed your procrastination stage to the best of my abilities, and now I have to write something down. For real this time. The fact that this draft is supposed to be terrible gives me little reprieve. So I write. But not my actual final copy—of course not. I write the draft copy, the freewriting, or idea generation copy. The terrible one. The one that is supposed to be terrible, technically, but it still feels terrible when reread. It is a very important step, almost as important as the actual final draft. It is the "draft copy," so to speak. The copy that you put in any and all ideas that wander into your head. All the best writers have this copy. Or copies. Or they should. It



helps make me a better writer. I don't feel like one. I have my terrible first draft, and I don't know what to do with it.

I've passed a writing stage. I can perform the procrastination stage again!

This is a very interesting stage of the writing process because I have passed the procrastination stage, but I have not gotten past the draft copy phase. This is a desperate time, and desperate times call for desperate measures. I used the University's writing service for help with my paper. They helped; it was invaluable. I have an outline now! This is what I will call the desperation stage.

Now I am at the final draft stage, the worst stage. I have to write something that's permanent; it stays. This is what I've prepared for. I have my idea. I look at my draft copies for inspiration and my outline for where I want to start. I reach my hand for the keys and...nothing. I failed again. I have an immediate deadline, but regardless, I look to distract myself, just for a little bit. I distract myself a large bit. I have less time now, and I'm no closer to where I was pre-break. I'm a bit stumped. So I open up another page, look at the empty, white space, and just write—about anything. Ignoring the topic and my outline and the draft copies that were supposed to help. I just write.

My frustrated writings take a long time to complete, actually. A lot longer than was anticipated. The grammar is awful. No surprises there. Writing something with good grammar isn't the point anyway. After my deluge of writing, I step back and look at what I have made. It's horrendous, obviously—messy, leading nowhere, going anywhere, stops and starts from one point to any point. But also, it's kind of funny, or just amusing, most likely. A little bit insightful. It makes surprisingly reasonable points and arguments when it decides it wants to make a point. And it's terribly honest, creative even. It's kind of good, from a very, very particular angle. I'm proud of myself just a smidge for being such an underrated auteur. I look back at my blank final draft paper and think to myself, This can't be that bad, can it? If I can make something relatively well so easily, what is this to me, too? So I start to write my paper. Wait, I look at my outline and my awful drafts first to remind myself of what I'm supposed to even write about, and how. Then I write, one word at a time, as most writing is done. I take my time and look back at the resources provided for me. After a long, long while, I look at my final draft and think to myself, Thank god the worst part is over. This is the final stage.

After my work is handed in and I'm reading through my terrible paper, I can finally admit to myself that, maybe, secretly, I do like writing creative nonfiction novels, just a little bit. Or at least I don't hate them as much.

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## Solving My Favourite Math Problem

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### Introduction

“Solving My Favourite Math Problem” is a delightful narrative about how math can be taught in the form of a story. This piece was written for a WRS 104 course, in which students were able to choose any topic in order to create an argumentative research paper. Kai Hamann shows the readers how learning math can be exciting, creative and fun!

*Keywords:* math, Pascal’s Triangle, puzzle, story



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My favourite math problem is what happens when you try to take the infinite sum of whole numbers. Whole numbers refer to numbers like 1, 2, 3, 100, etc... The infinite sum looks something like  $1+2+3+4+\dots$ . The natural conclusion would be that since you are adding increasing numbers each time, the sum should be infinity or at least a positive number. But interestingly, the correct answer to this infinitely long sum is  $-1/12$ . Not only is the answer somehow a fraction, but it is a negative number. How can this possibly be true? Solving this mystery requires substantial background knowledge in math that may seem unrelated to the problem.

As a future math teacher, I'm wondering how I can create this sense of mystery for my future students. In this essay, I want to explore ideas to better engage people in math. And I want to walk you, the reader, through the solution to my favourite math problem.

### *Math as a Puzzle*

Although I'm a math major now, I wasn't always interested in math. When I was in grade seven, I went to a school for kids with learning disabilities because of my dyslexia and ADHD. In math class, I had to do 30 minutes of work on a website called MathFactsPro. The program asked simple, repetitive math facts; it was designed to help students get the basics down. While it probably helped the people who needed extra practice in math, I hated it. It turned math into a dull, uninteresting, and repetitive subject. I even wrote an essay on why doing MathFactsPro was a waste of time when I was supposed to be focusing on my math facts. It should say something that the dyslexic kid would rather write an essay than do math problems.

The following year, I was homeschooled during the pandemic. My dad and I started watching math videos online, specifically Khan Academy and 3Blue1Brown. This is where my love of math began. My dad and I would look through all of the Khan Academy lessons in physics or math, and my dad would ask me which lesson I wanted to watch. I would pick the lesson that interested me the most, even if it was far above my grade level. We would watch the lesson, and it would upset me that I didn't understand anything. However, my dad would determine what I needed to learn to understand the lesson, and we would work through the concepts one by one. Throughout the process, I knew why I was learning what I was learning. It was like solving a puzzle. We slowly saw the bigger picture as we added each piece, even when there were still missing pieces. I loved this style of learning, and I was motivated to learn.

### *Pascal's Triangle*

As I introduced at the beginning of this essay, the infinite sum of whole numbers is almost impossible to prove by attempting to solve the problem directly. Instead, you need to look at patterns that are seemingly unrelated to the puzzle at hand, patterns like Pascal's Triangle. Named after the 17th-century French mathematician Blaise Pascal, the triangle is a series of brick-like rows where each number is the sum of the two numbers above it (see Figure 1). For

example, if you look at the digit 3, the two numbers above are 1 and 2, and  $1 + 2 = 3$ . This pattern applies to every square. On either side of the triangle, we add zeros for consistency.

0	0	0	1	0	0	0
	0	0	1	1	0	0
	0	0	1	2	1	0
	0	1	3	3	1	0
0	1	4	6	4	1	0

Figure 1. Intro to Pascal's Triangle

Another thing you might notice about Pascal's Triangle is that the sum of each row seems to double every time you go down a row. As you can see in Figure 2, rows are labelled starting from 0. The first row is Row 0, the second is Row 1, etc. We can use the expression  $2^n$ , where  $n$  is the row number, to show the pattern of how the sum of the numbers in each row doubles. For example, in the third row,  $n = 2$ , the sum is  $22 = 2 \times 2 = 4$ .

Row 0	0	0	0	1	0	0	0	$1 = 1$
Row 1	0	0	1	1	0	0		$1+1 = 2$
Row 2	0	0	1	2	1	0	0	$1+2+1 = 4$
Row 3	0	1	3	3	1	0		$1+3+3+1 = 8$
Row 4	0	1	4	6	4	1	0	$1+4+6+4+1 = 16$

Figure 2. Sums of Pascal's Triangle

### *The Problem with High School Math*

As someone interested in getting people engaged with math, I have to consider one of the most common questions in math: "When will I ever use this?" In elementary school, basic math skills like addition, multiplication, and reading graphs help us communicate in a modern society, making it easy to justify the need to learn these concepts. When it comes to high school and more advanced math, teachers may struggle to find examples of applications that work for

everyone. For example, a student might not believe that learning Pascal's Triangle will ever be useful. (You probably don't, either!)

Part of the problem is the structure of the curriculum. Instead of creating a curriculum designed to foster intrinsic motivation in students, units are placed to fit neatly with one another to optimize space and efficiency, like a game of Tetris; for example, the math curriculum of Alberta (Government of Alberta 2025, 13). Dividing the curriculum into these neat units may make it easier to teach according to a set plan. This approach encourages teachers and students to view math as a series of small, digestible pieces. For example, in a study about math teachers in Alberta, one teacher said, "I thought that's what my job was—to make math simple into little bits so that students could consume it and regurgitate it" (Chapman, 450). When ideas are simple, students may be less engaged because the ideas don't have nuances to be explored. Simple questions are like low-quality digital images—they take up less space, but they communicate less about their subject. Complex questions are like high-quality images that convey the subject more completely, even if you don't recognize all the nuances.

To engage students better, I believe we should restructure the high school math curriculum around a few questions that can be explored in detail. Applied math and physics problems are a natural place to center these questions, as most of these problems require a deep understanding. To solve the puzzle, students need to understand these concepts, which attaches a justification for learning them.

By having the units focused on complex questions, students would have a clear goal in the present and become curious to solve the problem. Like a maze, there might only be one narrow correct path to the answer, but if we explore all the dead ends, where the correct answer is the climax of the unit, we can cover broader curricular content. However, this all hinges on the question being deep enough and interesting enough to engage students. What kinds of questions will engage students?

### *Above the Triangle*

Let's ponder Pascal's Triangle some more. Instead of going from top to bottom, what happens if you go from bottom to top? You might find that for Row 2, which has 1, 2, and 1, you can figure out what goes above it. Starting at the left edge of the triangle on Row 2, we know the left 1 is the sum of  $0 + 1$  (See Figure 3). Can you do this process for Row 0, though? What goes above 1?

0	0	0	1	0	0	0
	0	0	1	1	0	0
		0	1	2	1	0
			0	3	3	1
				0	4	6

Figure 3. Reverse of Pascal's Triangle

If you use the same process, you will find that the numbers above 1 in Row 0 must be 0 and 1. However, as we move to the right on Row 0, we have to add negative numbers to make the pattern continue. The square next to the 1 in Row 0 is zero, so whatever is above it must add up to zero. Since we know that one of the numbers must be 1 for the 1 square to be true, we deduce the next number must be negative 1 because this is the only way for the number next to 1 to be a zero. In math language, we would write this as  $1 + x = 0$ . We then solve for  $x$  and get  $x = -1$ . This pattern of alternative positive and negative numbers must repeat in order to cancel each other, leaving zero in Row 0. If we continue to add negative rows, we get the pattern you see in Figure 4. Does Row -2 ( $1-2+3-4+\dots$ ) in Figure 4 seem familiar? It looks close to the original problem that we want to solve:  $1+2+3+4+\dots$

	0	0	0	0	1	-3	6	-10	15	-21
0	0	0	0	0	1	-2	3	-4	5	-6
	0	0	0	0	1	-1	1	-1	1	-1
0	0	0	0	1	0	0	0	0	0	0
	0	0	0	1	1	0	0	0	0	0
	0	0	1	2	1	0	0	0	0	0
	0	1	3	3	1	0	0	0	0	0
0	1	4	6	4	1	0	0	0	0	0

Figure 4. Negative Rows of Pascal's Triangle

## *Let's Tell Math Stories*

Focusing on a complex problem in applied math or physics helps answer the question, “When will I use this?” It establishes why a concept is useful from the start. It attaches clear motivation and application to what students are learning. This approach may elevate math out of being an exclusively nerdy subject; it just feels good to do something productive.

However, this is not the only way to get someone engaged with math. Another way is through story, which is a way to organize a complex problem. Professional mathematicians often describe math as science fiction, meaning we play with ideas that can't be experienced in the real world. But bizarre ideas alone are not engaging; you need a narrative, and that is the role of a central question. It adds a story where students are possibly drawn into the bizarreness of the puzzle. For instance, the infinite sum of whole numbers resulting in a negative fraction is weird. But by taking it step by step and introducing the key insights of the puzzle, solving the problem becomes approachable. I want students to believe that they could be the first to solve such a puzzle.

A well-known math YouTuber, Grant Sanderson, discussed this in his TED Talk, “What makes people engaged with math?” He proposes that the key to getting people engaged with mathematics is not only application but also storytelling. To interest people in math, he argues we need topics “that pull you [into] the math for what it is now, not what it promises to give you later” (Sanderson, 11:21). Applied problems in math and physics often fail to do this; we need problems that make us ask questions as a snap reflex. This is what puzzles like our infinite sum do; if you have a soul, you have to know why the sum of infinite whole numbers is a negative fraction. It challenges our understanding and develops us as problem-solvers and critical thinkers. In addition, it uses known pedagogical principles like the bizarreness effect, “which refers to the ability to better recall and remember events or items that are unusual, uncommon, and distinct” (Basile et al. 129). Curiosity will drive students to gain a deeper understanding of math.

My experience learning math with my dad introduced me to the thrill of curious properties and connections in math. However, it also revealed some of the issues with the way we currently teach math. I want to share the beauty and marvel that math can evoke, and hopefully, you can believe that you may have been the one to show  $1+2+3+4+\dots = -1/12$ .

## *Solving the Puzzle*

The last thing we need to show why  $1+2+3+4+\dots = -1/12$  is to find the sums of the rows above Pascal's Triangle. For the row at  $n = -1$ , the process of finding the sum of the terms is the



same as in the triangle, just a little more mathematical. If we add  $S_1$  to itself, each term except for the first cancels itself out, leaving us with  $2S_1 = 1$ . Hence  $S_1 = 1/2$ .

$$\begin{aligned}
 S_1 &= 1 - 1 + 1 - 1 + \dots \\
 S_1 + S_1 &= \begin{array}{r} 1 - 1 + 1 - 1 + \dots \\ + 1 - 1 + 1 - 1 + \dots \\ \hline 1 + 0 + 0 + 0 + \dots \end{array} \\
 2S_1 &= 1 \\
 S_1 &= 1/2
 \end{aligned}$$

The same process for the row  $n = -2$  as adding it to itself leaves us with the sequence  $1-1+1-1+\dots = S_1 = 1/2$ , so dividing both sides by 2 leaves us with  $S_2 = 1/4$ . Another fun pattern is that the sum is still equal to  $2^n$  since  $2^{-1} = 1/2$  and  $2^{-2} = 1/4$ .

$$\begin{aligned}
 S_2 &= 1 - 2 + 3 - 4 + \dots \\
 S_2 + S_2 &= \begin{array}{r} 1 - 2 + 3 - 4 + \dots \\ + 1 - 2 + 3 - 4 + \dots \\ \hline 1 - 1 + 1 - 1 + \dots \end{array} \\
 2S_2 &= S_1 = 1/2 \\
 S_2 &= S_1/2 = 1/4
 \end{aligned}$$

Finally, relating these to our original puzzle. This one doesn't follow the same rules as the other ones, so it takes a bit more tinkering, but eventually, you might find that taking  $1+2+3+4+\dots$  and subtracting  $1-2+3-4+\dots$  cancels out every other term, leaving us with a sequence  $4+8+12+16+\dots$  which is precisely four times  $1+2+3+4+\dots$ . Hence, solving for  $S$ , we find  $1+2+3+4+\dots = -1/12$ .

$$S = 1 + 2 + 3 + 4 + \dots$$

$$S - S_2 = \begin{array}{r} 1 + 2 + 3 + 4 + \dots \\ - 1 + 2 - 3 + 4 - \dots \\ \hline 0 + 4 + 0 - 8 + \dots \end{array}$$

$$S - S_2 = 4 + 8 + 12 + 16 + \dots = 4S$$

$$-3S = S_2$$

$$S = -S_2/3 = -1/12$$

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# To Read or Not to Read: Analyzing Rhetoric in Three Academic Articles on the Relationship Between the COVID-19 Pandemic and Suicidality

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## Introduction

Students in this WRS class were asked to analyze the rhetorical strategies used by authors to persuade their audience. Valeriya Sytnik analyzes three academic articles and reveals how researchers use features of the genre of academic articles to convince readers.

**Keywords:** Rhetorical analysis, argumentation, academic writing, suicide, Covid-19



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Rhetoric is a powerful tool that is used not only to constructively inform or genuinely inspire, but ultimately to win over the audience. This report aims to examine how rhetoric is structured within the genre of argumentative research articles. To this end, three peer-reviewed academic papers from the same discipline of psychology were selected. All were published in the past three years and focus on the same topic of the impact of the COVID-19 pandemic on suicidality. These articles are:

1. *Association Between SARS-CoV-2 Infection and Self-Harm: Danish Nationwide Register-Based Cohort Study* by Annette Erlangsen et al. (2023);
2. *Trends in Depressive Symptoms and Suicidality of South Korean Adolescents: Comparison of Expected and Observed Prevalence During the COVID-19 Pandemic* by Hyejin Kim et al. (2022);
3. *Crisis Response and Suicidal Patterns in U.S. Youth Before and During COVID-19: A Latent Class Analysis* by Jennifer D. Runkle et al. (2021).

These articles will henceforth be referred to as Article 1, Article 2, and Article 3. This report will dissect and juxtapose five rhetorical aspects of the articles, each addressed in a corresponding section: rhetorical situation, rhetorical strategies, macro-organization, micro-organization, and argument organization. Appendix A provides specific examples of rhetorical aspects of each article. Through this critical analysis, this report will answer the following question: How do the chosen articles use the general rhetorical rules of their shared genre to achieve their specific rhetorical objectives? In other words, how effective are these articles in captivating their readers to the extent that they would feel compelled to continue flipping or scrolling through the articles' pages?

### *Rhetorical Situation*

Published during the same historical period by authors from the same area of expertise, all three articles focus on the same specific topic. They were written over the span of three years in the context of the COVID-19 pandemic by leading scholars in the fields of infectious disease epidemiology, mental health, and suicide research and prevention. Although these studies were conducted in three different countries (Denmark, Korea, and the USA) and used different population samples (Article 1 focused on adults while Articles 2 and 3 studied adolescents), all three examined the association between COVID-19 risk and suicidal ideations.

Since all three studies pursue the same general purpose of filling a research gap, they all take on the same form and address the same audience. Each article represents an academic research paper: Article 1 is a cohort study, Article 2 is a descriptive study, and Article 3 is a latent class analysis. Consequently, all three are primarily aimed at the academic community. While Articles 1 and 2 also target the government agencies that provided the data, Article 3 engages practicing crisis counselors. In addition, all three articles unintentionally communicate their

findings to the general public, who may be concerned about the negative effects of the COVID-19 pandemic on mental health.

Given that three articles have their own specific research goals, they put forth different thesis statements and adopt different narrative tones. Article 1 delivers an encouraging message of no correlation found between COVID-19 infection and suicidal thoughts, assuming an affirmative stance expressed through concise, to-the-point sentences. Article 2 presents its surprising results of low indicators of depression and suicidality associated with COVID-19-related restrictions, providing an abundance of information in a calm, measured voice. Article 3 conveys its alerting findings of the adverse effect of the COVID-19 pandemic on eleven crisis concern markers, using detailed explanations in simple, accessible language. Despite these differences, the underlying writing style of all three papers remains formal and professional.

### *Rhetorical Strategies*

While all three articles use one particular common method to build their ethos, each also uses unique strategies. All articles base their claims on solid evidence derived from the analysis of ample data. Article 1 includes the entire Danish adult population of over 4.4 million people, Article 2 uses a sample of more than one million teenagers, and Article 3 deals with close to six million crisis text messages. Concurrently, the authors of Article 1 demonstrate a cautious attitude towards their work by discussing their findings from opposing viewpoints. The authors of Article 2 display their in-depth knowledge of the subject by placing a huge emphasis on a literature review. The authors of Article 3 present their meticulous approach to research by revealing the sequential relationship among psychological responses to the COVID-19 pandemic. Regardless of their variety or similarity, all of these rhetorical tactics serve the single goal of establishing trust.

The given articles take three drastically different approaches to constructing their pathos. Article 1 opts for a people-oriented approach. By using comprehensive national data of all Danish people and focusing on all vulnerable population groups, irrespective of their gender, ethnic background, or sexual orientation, Article 1 fosters a feeling of relatedness in readers. Article 2 employs an innovative approach. By declaring itself as the first study to investigate the link between the COVID-19 pandemic and suicidality in Korean adolescents, and noting that its findings align with those found in other countries, Article 2 evokes an emotion of excitement in readers. Article 3 leverages a problem-solving approach. By explaining the problem of worrying long-term signs of suicidal rates and offering a solution in the form of accessible and affordable mental health support, Article 3 elicits a feeling of gratitude in readers. All in all, all these tactics are created to remind readers that they are not alone.

The three chosen articles also implement substantially different methods when shaping their logos. Article 1 develops a robust research method that involves constant comparison of the study's specific findings with existing general ones. This continuous evaluation of its results against a set benchmark enables Article 1 to support the logic of its reassuring message. Article 2 delves into an extensive literature review to provide a comprehensive explanation of the cause-and-effect of its findings. This thorough exploration of the topic allows Article 2 to validate the logic of its discovery. Article 3 incorporates a modern text-based platform into its study to explore a cutting-edge technological solution to the issue at hand. The demonstration of the benefits of using this platform allows Article 3 to rationalize the logic of its proposition. Although different, all these strategies aim to solidify the logic of each article's deductions in the readers' minds.

### *Macro-Organization*

By virtue of their common genre, all three articles adhere to the IMRD model of organizational structure, with clear Introduction, Methods, Results, and Discussion sections, supplemented by Abstract, References, and other miscellaneous sections. All articles: feature Abstracts of similar length (270, 210, 260 words) with the same sections (Purpose, Methods, Results, Conclusions); incorporate literature reviews into their untitled Introduction sections; integrate their Conclusions into Discussion sections; and use generic titles for sections and descriptive ones for sub-sections. The only two deviations from the model are observed in Article 1, which has two additional sub-sections (Background and Keywords) in its Abstract, and in Article 2, which lacks a title for its Strengths and Limitations sub-section in the Discussion.

Due to their individual features, each of the three articles prioritizes a particular section of their structure over the others. As Article 1 attaches great importance to its research method, it devotes more sub-sections (7, 5, 5) and more words (1310, 1010, 990) to its Method section. Since Article 2 takes pride in its literature review, it boasts a 1.6 times longer list of references (35, 56, 35) and twice the number of words in the Discussion section (730, 2040, 1390). Since Article 3 highlights its technological solution, it allocates more sub-sections (3, 2, 5) and more words (1040, 900, 1250) to the Results section. These considerations are also manifested in the word count of articles' Introductions (540, 620, 390).

### *Micro-Organization*

The unique characteristics of the articles are reflected not only in their rhetoric and macro-organization but also in their micro-structures. This is evident in the analysis of the rhetorical moves in paragraphs on Limitations in the Discussion sections, for example. Article 1 presents only one major limitation, entirely devoted to its research data. The sentences are structured with the help of rhetorical moves that alternate between introducing six causes of

that limitation and their implications. Article 2 stresses suggestions for future research. It uses rhetorical moves to numerically list the study's limitations, introduce them, explain their causes, and then advise on future research. Article 3 promotes the benefits of its technological platform. It employs rhetorical moves to introduce not only the platform's limitations but also justifications for them. The diversity of objectives for these rhetorical moves ensures a lack of repetition both within and across all three articles.

The specific rhetorical goals of the articles dictate the number of rhetorical moves in each of them. The Limitations paragraph in Article 1 has a medium number of words (257), with 54% being allocated to 20 rhetorical moves across 11 sentences. This coincides with Article 1's principle of using no more and no fewer words than necessary to get its point across. The Limitations paragraph in Article 2 produces the highest number of words (412), with 58% dedicated to 34 rhetorical moves in 20 sentences. This shows that Article 2 seizes every opportunity to share its insights from the existing academic discourse. The Limitations paragraph in Article 3 contains the least number of words (195), with 37% comprising 8 rhetorical moves in 7 sentences. This indicates Article 3's intention to let the positive aspects of the technological platform overshadow the negative ones. Thus, the statistics on the articles' words speak louder about their rhetoric than the words themselves.

### *Argument Organization*

The three articles share similarities in the placement of their arguments, but diverge in the types of evidence used to support those arguments. All three articles use indirect arguments, positioning their research questions in the Introduction sections and providing answers to those questions in the first and final paragraphs of the Discussion sections. While both Article 1 and Article 2 source their research data from government agencies, Article 1 uses numerical data to form quantitative evidence, whereas Article 2 deals with questionnaires to produce qualitative evidence. Even though Article 3 exploits numerical data to generate quantitative evidence, like Article 1, it obtains its data from a non-profit organization. Hence, the different rhetorical purposes of the articles are supported by largely the same argument organization.

The selected articles also vary in their choice of the number of tables and figures to develop their visual arguments. Article 1 uses a balanced combination of two tables and two figures, located and distributed at quarter marks of the Results section. This choice underlines the highly organized nature of Article 1, with a laser focus on clarity and precision. Article 2 uses four groups of figures, each containing three graphs, found in the Results section, and only 1 table is referred to in the Methods, Results, and Discussion sections. This choice is attributed to the largest number of population subgroups of Article 2 and its commitment to explaining the cause-and-effect correlations between them. Article 3 uses four tables and only one figure, consisting of three bar charts, all situated in the Results section. This choice is due to the widest

range of psychological responses that Article 3 considers in order to spotlight the encompassing potential of the studied technological platform. So, the different rhetorical purposes of the articles are expressed through different visual tools.

### Conclusion

This report compares and contrasts the ways in which three chosen articles apply the rhetorical rules of their common genre of academic research papers to their specific rhetorical purposes. To convey a hopeful message derived from a sophisticated research method, Article 1 employs an authoritative voice, a humanistic approach, self-reflective evaluations, an emphasized Methods section, moderate use of words, and balanced visual aids. To comment on positive findings obtained through deep excavations of existing evidence, Article 2 resorts to a calming narrative, a pioneering approach, a wealth of sources, an emphasized Discussion section, extensive use of words, and numerous graphs. To send an urgent warning based on complex analysis of multiple variables, Article 3 chooses an approachable tone, a resolution-seeking approach, a technological solution, an emphasized Results section, a limited number of words, and a bounty of tables. Although working in different ways within one genre, the authors of all three articles do everything in their rhetorical power to ensure that the choice for their readers would not be as difficult as the one faced by Hamlet.

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## Appendix A

<b>Article 1</b>		
<b>Sentence</b>	<b>Rhetorical Purpose</b>	<b>Rhetorical Move</b>
1	Acknowledging limitations	"Limitations of our study include the fact that it is possible that ____"
	Presenting alternatives	"____ or ____ instead of ____"
	Highlighting conservative estimates	"____, which is likely to have made our estimates conservative."
2	Providing historical context	"Yet, it was only at the end of ____ that ____"
3	Introducing condition/reason	"Given that ____, our findings are not representative for that period."
	Identifying causality	"____ caused by ____"
4	Describing tendencies	"____ less inclined to ____"
	Acknowledging/explaining potential bias	"____, which might imply some bias in those estimates."
5	Discussing implications	"Although the wider definition of ____ is likely to ____,
	Referencing previous studies	"____, which has previously been used in other investigations, ____"
6	Adding information	"Also, ____"
	Explaining outcomes	"____ resulting in ____"
7	Discussing potential bias in subgroups	"It is possible that members of the examined study subgroups were more (or less) inclined to ____ than ____"
	Explaining reasons/conditions	"____, which could bias our estimates, ____"
	Providing examples	"____, e.g. ____"
8	Presenting possibilities	"It is also possible that ____"
9	Acknowledging a lack of information	"We did not have confirmative information that ____"
10	Discussing constraints due to sample size	"The small numbers prevented us from examining ____"
11	Identifying omitted factors	"Potentially relevant but not included factors, such as ____ or ____"
	Discussing potential confounders	"____ might have acted as confounders."

## Appendix A, continued

Article 2		
Sentence	Rhetorical Purpose	Rhetorical Move
1	Stating limitations of the study	"There are several limitations to the current study."
2	Introducing the first limitation	"First, ____"
	Describing the method of measurement	"____ were measured by ____"
3	Drawing a conclusion based on the previous statement	"Therefore, ____"
	Suggesting a potential underestimation of the study's findings	"____ observed in this study could be underestimated."
4	Transitioning to a contrasting point	"Nevertheless, ____"
	Establishing a comparison between two entities	"____ have comparability in that ____"
5	Introducing the second limitation	"Second, ____"
	Discussing the validity of the measurement	"____ the measure of ____ used in ____ were not validated in ____ population."
6	Transitioning to a contrasting point	"However, ____"
	Asserting the validity and reliability	"____ the validity and reliability of the measures in ____ were reported to be satisfactory."
7	Recommending further studies on a specific topic	"Further studies should examine ____, especially in terms of ____"
8	Introducing the third limitation	"Third, ____"
	Providing reasoning for a specific situation or result	"____ because ____"
9	Transitioning to a contrasting point	"Although ____"
	Discussing the inability to extrapolate prevalence from the study	"____ we cannot extrapolate the prevalence of ____ among ____ from the study."
10	Adding additional information or points	"In addition, ____"
	Comparing two quantities or values	"____ was slightly lower than ____"

## Appendix A, continued

Article 2, continued		
Sentence	Rhetorical Purpose	Rhetorical Move
11	Describing steps taken to minimize bias in the study	"In order to minimize the possibility of selection bias, we used ____ to estimate ____ that ____"
12	Referring to an external source or study	"According to ____"
13	Establishing similarity between two entities	"____ similar to ____"
	Discussing the deviation of the data	"____ the deviation of ____ was not large ____"
	Validating the representativeness of the data	"____, which validates the representativeness of ____"
14	Introducing the fourth limitation	"Fourth, ____"
15	Explaining the method used in the study	"____ we could not use ____ but instead relied on ____"
16	Comparing results from different studies or methods	"Although the previous study supported that ____ the results of ____ using ____ may differ from those of this study."
	Validating the method used in the study	"____ be as valid as ____"
17	Adding additional information or points	"In addition, ____"
	Discussing potential bias in the classification	"____ the reclassification of ____ into ____ might introduce misclassification bias."
18	Interpreting findings	"The findings of ____ should therefore be interpreted as ____"
	Suggesting future research directions	"____ and further research ____ is necessary in order to validate the results."
19	Introducing the final point or limitation	"Finally, ____"
20	Comparing results from different studies	"Although a previous study using ____ showed similar results to the findings of this study, ____"
	Discussing potential differences between two entities	"____ might differ from ____"

*Appendix A, continued*

<b>Article 3</b>		
<b>Sentence</b>	<b>Rhetorical Purpose</b>	<b>Rhetorical Move</b>
1	Introducing the limitations of the study	"There are a few limitations that must be considered in interpreting results."
3	Recommending further research	"Future research should use ____ to examine ____"
4	Discussing results	"Results are from ____ and may not be generalized to ____ as a whole."
5	Transitioning to a contrasting point	"However, given ____"
6	Introducing the final point/limitation	"Finally, ____"
6	Discussing the inability to determine causality or correlation	"____ are not ____ nor can we determine if ____"
6	Questioning causality or correlation	"____ if ____ is due to a corresponding increase in ____ or ____"
7	Validating results from prior studies	"Results from prior studies using ____ have been validated using ____"