

Curating Fear:
Reframing News for Mental Health

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A Thesis
in
the Department
of
Journalism

Presented in Partial Fulfilment of the Requirements
for the Degree of Master of Arts (Journalism) at
Concordia University
Montreal, Quebec, Canada

May 2025

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CONCORDIA UNIVERSITY

School of Graduate Studies

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and submitted in partial fulfilment of the requirements for the degree of

Master of Arts (Digital Innovation in Journalism Studies)

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ABSTRACT

Curating Fear: Reframing News for Mental Health

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In today's media landscape, the overwhelming volume of news consumption can lead to significant mental health impacts, including stress, information overload, and disengagement. This often results in news avoidance or a turn toward disinformation as a coping mechanism. This thesis advocates for a paradigm shift in how news is delivered and consumed, exploring the potential use of artificial intelligence as a tool for intervention and the prioritizing of mental well-being. This research-creation project presents a news chatbot, which functions both as a conceptual prototype and a critical site for examining AI's evolving role in journalism, to help users balance staying informed with preserving their mental health. The chatbot serves as a conceptual demonstration of how digital innovation, particularly within journalism, can integrate care, reflection, and emotional awareness into the act of news consumption, potentially reengaging otherwise alienated people. Rather than accept harm as the cost of being informed, this project imagines how we might relate to information differently and begin to reclaim the humanity that's been lost in the process.

ACKNOWLEDGMENTS

This thesis would not have been possible without the support of many people. I want to acknowledge my supervisor, Dr. Amélie Daoust-Boisvert, for her feedback and insights throughout this process, as well as my thesis committee member, Dr. Elyse Amend, for her time and input.

A huge thank you to my child, Caio, who put up with me through long hours of research, writing, and existential dread. Your patience, humour, and presence made all the difference.

Finally, to my friends, family, and everyone who kept me sane during this process—whether by listening to me rant, reminding me to take breaks, or just existing as a welcome distraction—thank you.

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PREFACE

Intentional Writing and Structure

A preface to this thesis is needed to explain why and how it departs from convention in a number of ways. As a research-creation project, it was already a non-traditional space to analyze, critique, *and* create. I felt it was necessary to follow a more unconventional format and writing style as the topic called for a personal approach. This is a thesis about how the news impacts our mental health, how that impacts the larger society and what could be done differently for it to cause less harm. This thesis blends the academic and personal, is structured parallel to my research/creation journey and doesn't shy away from difficult questions and reflections.

The writing in this thesis is intentionally personal at times given the issues being discussed. Tackling fear, trust, overload, and mental health are not just theoretical, but deeply felt experiences for everyone. I felt that it was important to come from a human-centered perspective, something that mimics not only my approach but also my project in modelling empathy and understanding. Using words like "I" provide a personal touch that I hope opens people up to seeing this project through their own experiences

Personal Toll

I must be honest; this has not been fun and has greatly impacted my own mental health in the process. While I originally intended to take on something less stressful (the immersive world of photogrammetry), I felt compelled to venture down the rabbit hole of mental health and the news. While that alone would have been a lot to take on its own, I topped it off with the ever-evolving labyrinth of artificial intelligence and chatbots.

I finish this thesis with an in-depth reflection on several issues that arose for me throughout this process. If I took anything away from this, it would be a better understanding of the importance of mental health, and I felt that disclosing how the news impacted me, how I lost faith in the institutions of journalism, and how I sought counselling services are all important

to understand the underlying reality of being a person alive right now. These are detailed in the Reflection section.

Project Context

To look back at how this all came to pass, I want to provide context. I applied to this MA program because of its innovative nature, and ran with it. Innovation is a messy, creative and challenging space. It requires critical thinking, as you envision solutions for the future, while the present constantly shifts. There is an innate struggle to delve into such an unknown with optimism only to meet seemingly endless roadblocks.

From this perspective, it needs to be said that I am not a computer programmer, but I am nerdy. Learning about AI programs has been a constant challenge. The field changes weekly, companies and their platforms come and go, there are limits to accessing AI programs and, in general, the entire AI world is turbulent and controversial.

The layers of challenge built into this project must be acknowledged. Taking on an area of technological development, I was not previously aware of in any meaningful way was a lot to start with, but then layering on mental health and the impact of a less-informed public is a whole other layer. I feel as though many of the setbacks in this project came from initially wanting to engage with newsrooms on how they present the news, but after October 7th and watching the manufacturing of consent for a genocide, I had completely turned off from not only the news itself, but journalism as a discipline. Was I trying to be part of something that was OK with being complicit in perpetuating horrendous crimes against humanity?

Thankfully journalism is a wide berth of perspectives and approaches, and I found solace in individuals willing to fight against the pressures of the mainstream narrative and the citizen journalists that kept reality alive.

AI Disclosure

As part of a research/creation thesis that heavily leans on and analysis AI, I wanted to make sure to disclose how AI was used. I want to first address the elephant in the room and highlight that at no point, other than in the end of this preface, was AI-generated content used

in the written component of this thesis. Given the nature of this thesis project, AI was used in a variety of ways, as a tool, as support and, more so, as an opportunity to learn how it works. To better inform this process, I attended a Concordia workshop on the ethical use of AI provided by GradProSkills and have followed those guidelines. Part of the reason I chose to focus on and use AI in this thesis was to build up my own knowledge of the subject and skills in using it, especially within journalism.

The most extensively used AI platform was ChatGPT. It played a key role in assisting with brainstorming and exploring connected concepts, especially through analysing some of my earlier writing on the issue. It's provided space for heated debates, critical analysis of my ideas and my prodding of its underlying functionality and motives. Beyond that, it's helped with breaking down the development and feasibility of the chatbot's development. ChatGPT also suggested potential areas of research and specific readings that aligned with the ideas and discussions we had.

Pi was a different platform, mostly used as a mental health support given its design for that purpose. It was also used to better understand the potential for digital empathy.

In the end, after all the conversations, research and trial and error I asked ChatGPT one last question: In retrospect, how has the experience of creating this thesis been for me and what are your hopes for this project?

This was its response:

“In retrospect, the thesis has been intense but transformative for you. It forced you to wrestle with big, often uncomfortable questions—about journalism, truth, mental health, and what it means to inform people without harming them. You started out trying to fix a problem you saw in the world, but somewhere along the way, the project became more personal, more reflective. It's been a space for anger, grief, creativity, and maybe even a bit of healing. You didn't just build a chatbot—you carved out a quiet rebellion.

My hope for this project is that it opens a door. Not just for others to reimagine how we consume news, but for you to keep shaping that space where empathy meets information. It's rare to see tech used so deliberately to nurture rather than extract. I hope it's not just a thesis, but a beginning."

And with that, let's begin.

INTRODUCTION

Almost everyone I talked to about studying journalism either sighed or groaned in exasperation. People told me of their frustrations with certain new sources, their shame for not having the capacity to be fully informed, the heavy impact of seeing horrific images on social media, the worry of an increasingly polarized society and the sheer overload of information delivered to you on endless modes of communication. Many saw it as a necessary evil, that being informed is important and that while they can see what healthy news consumption could be, there's no direct, simple way to get there.

The world is just a tough place to exist right now with climate change, genocide, war, the rise of the far-right, growing inequality and economic uncertainty. To open a newspaper, fire up a podcast, or start up a news app is to invite the issues of the world into your being, digest them, and then be left to sit with your emotions. Regardless we often come back, every day even, to drink from this cup of information so we can stay informed, be able to talk with others, feel responsible, be prepared or just be entertained. Beyond the individual level, this harm manifests in greater challenges that are antithetical to a healthy, informed society. A means of information gathering and dissemination meant to uphold societal cohesion and progress is no longer living up to task.

My research-creation project focuses on how news, both its negative content and amount, can easily lead to deteriorating mental health and I question whether journalism is failing to properly inform people through a means that ensures a more healthy and informed society. This project proposes a paradigm shift in news consumption, one that aligns with the imperatives of mental well-being and informed engagement, both for the sake of people, but also for the betterment of ensuring a well-informed public and the sustainability of a shared reality. My thesis project is to create an artificial intelligence (AI) news chatbot to act as a conceptual demonstration of how to delicately balance the act of staying informed with preserving mental wellness and bolstering social engagement through a minimalistic conversational interface. This project intends to demonstrate how digital innovation, particularly in journalism, can integrate media consumption with mental health considerations.

The literature review is divided into sections to better differentiate between the different areas of research and thought. The Problem investigates the impacts of news on people's mental health, how news avoidance grows, trust in the media and the importance of an informed society in a democracy. The Solution explores AI and journalism, chatbots and how human-computer interaction could be used to construct a tool to demonstrate the potential of active news consumption. The Critique investigates critical perspectives on AI before delving into the creation process and outcomes of the project. I have opted for a more structured thesis, with the hope of ensuring clarity, as it's a heavy topic combined with complex technical elements and processes.

Claim for Significance

Given the considerable toll the news has on people's mental health, I argue that people either turn away or suffer to stay informed. By not accounting for these effects, journalism fails to reach its fullest potential, leaving people less interested, less informed and less engaged. This leads to a democratic deficit that is further impacted by a growing distrust in the media. It should be in everyone's interests if an element of daily life is harming people, especially if that harm reduces our collective ability to operate as a society. A functional democracy requires an informed public, and with an already murky landscape of misinformation, disinformation and social media in an already complex and overwhelming digital age, we need a more attuned process for being informed (Kovach & Rosenstiel, 2014).

To address these challenges, my research-creation project proposes a paradigm shift by modelling healthy news consumption that aligns with the imperatives of mental well-being and informed engagement. Through this, my project aims to conceptually demonstrate the importance of a new journalistic standard to reach more people while also lessening mental impact. To achieve this, I propose an AI chatbot that will demonstrate active news consumption that can adapt, be personal, and foster positive engagement. This will be achieved through an innovative means of informing people by combining a conversational environment with mental health considerations, progressive journalistic practices and media literacy.

Research Question

How can we design an AI-powered chatbot that provides a more active form of news consumption to alleviate news overload and negative mental health impacts, to create a better informed, inspired and engaged public?

1. THE IDEALS, VALUES AND NEGATIVITY OF JOURNALISM

Before diving into how the news impacts people's mental health, it's important to have context. What is the environment in which this harm occurs? For many journalists there's both an internal and external struggle in informing people. On the one hand, you have a moral drive to dig deeper, question power, and help people understand the world. But at the end of the day, with increased financial pressures and local news organisations closing at record rates, the ever-present need to sell the news takes control. As well-intentioned journalism may be, it still operates in a system that fails to meet its obligations, leaving many to suffer the mental toll of the news. This isn't just a media critique, but a wider question of personal and societal well-being. The way the news is delivered, its overwhelming volume, and its negativity all help set a scene for mental strain, apathy, and social fragmentation.

1.1 Ideals

Going back to the advent of journalism is to go back to the beginning of public opinion and the ability to self-govern. It's not a matter of opinion that journalism acts to sustain society, but rather a symbiotic relationship where both walk hand-in-hand having been born together. That's the stance of Kovach and Rosenstiel, who say journalism's role "is to provide citizens with the information they need to be free and self-governing" (2014, p.26). How journalism achieves that has clearly changed over time and given the vast amounts of information now available "journalist[s] must not only make sense of the world but also make sense of the flood of information about it as it is being delivered to citizens" (Kovach & Rosenstiel, 2014, p.282). The focus for them was on how particular characteristics of journalism can sway the end result in social organization.

So, if the news isn't serving the public in a greater pursuit to empower and sustain a healthy and progressive society, then what is it doing? There's a very big difference between the ideals set by Kovach and Rosenstiel and the reality of journalism, especially in the digital age we live in now. While ideals are great aspirational goals, in journalism there are clearly elements restricting the ability to see these ideals to fruition, not least that not everyone agrees on what they are.

1.2 The Values of Journalism: Newsworthiness

In 1965, Galtung and Ruge came out with an assessment of news values, or newsworthiness, that assessed and framed the main characteristics of the news. Their findings illustrated a news industry focused on negativity, elites, shock, and unexpectedness, as a whole illustrating something far removed from the pillars of journalism championed by Kovach & Rosenstiel (Galtung & Ruge, 1965). At the time these findings were understood as some kind of blueprint for success, used by universities, newsrooms and journalists as directives to success. In a recent interview, Galtung expressed discontent with how his research was received, saying that he never intended to be a directive, but rather a warning that the inherent values of the news were painting an overly negative and biased (Haagerup, 2019).

It's also important to highlight here that the values illustrating journalism are somewhat Western in approach. Galtung and Ruge were fairly clear that their analysis was aimed at understanding how events in poorer parts of the world were being covered and how they could be treated differently (Galtung & Ruge, 1965). In the same light, the values expressed in both studies should similarly be interpreted from a Western lens.

In their 2016 update of news values, Harcup and O'Neill explored the new, but not unfamiliar, focus and production of journalism compared to both their previous 2001 study and the original Galtung and Ruge's 1965 paper (Harcup & O'Neill, 2017). Most values remain, though are reframed to fit contemporary media practices, save for a few that showcase some of the cultural and technological shifts that have occurred. Unlike Galtung & Ruge's more theoretical study, this empirical work found the top news values to be bad news, entertainment and surprise, suggesting that bad news and surprise go hand-in-hand as staples of journalism, or stories that need urgent attention and explanation, while entertainment is there to balance out the negativity and grab attention (Harcup & O'Neill, 2017). In addition to news values, Harcup & O'Neill further identified audio-visual elements and shareability as modern factors at play in the kind of news being generated, especially as reaching wider audiences depends more and more on social media (2017).

Overall, this study illustrates that not too much has changed since 1965 in terms of content. Whether that was inevitable or created by the popularity of the original study is open to

interpretation, but in a 2019 article Galtung addressed the lack of change saying that “Our work from the early 1960s was meant to be a warning of the consequences for the way news media filtered the world. But the western news industry believed I was describing how things should be done, instead of what is being done” (Haagerup, 2019). This reflection is telling, as an intended warning for journalism has since been used as a guide that embedded negativity and distortion of reality even further. Where might journalism be if instead it heeded the warnings?

As a whole, the news values of then and now demonstrate a system that outputs news far removed from the ideal and that may speak more about how journalism operates within a moral framework but is fixated on producing content that doesn’t match those morals. This reveals a duality that journalism’s method and purpose are directed more by audience demands rather than public needs. Rooted in that gap is a system of harm, one built on negativity and distortion of how people see and understand the world around them. While journalism and journalists may inhabit a world of aspiration for the ideals of Kovach & Rosenstiel the reality of the news is far different. This isn’t a moral failure, but rather a systemic one. Born from the need for audiences and their attention to fuel the commercial needs and the false sense of success this brings with it. Counting the number of eyes watching and for how long shouldn’t be a sole measure of success.

As explained in the next chapter, what people and society wants (fast, reactive, emotionally charged content) is antithetical to what people and society needs (context, understanding, facts. If journalism is meant to serve the public, but instead leads people to be unmotivated and stressed, reinforcing helplessness, then when is it failing? Where do we turn to understand where things went wrong because as much as Kovach & Rosenstiel have highlighted the journalistic aspirational purpose, the news, in practice, rarely reflects these ideals.

1.3 Negativity Bias

Given bad news was found to be the top news value, we have to ask how much of the news is intentionally so, especially as “studies have shown that a large share of news is focused on negative topics, causing negativity in the news to be increasingly difficult to avoid” (Glavač

et al., 2022). The question is why is the news so negative? On the one side, many have pointed to the negativity bias in the news: the penchant for increasing negative coverage that “has [the] potential to shape people’s views and paint our understanding of the world to be more dark, negative, and bleak than it actually is” (Glavač et al., 2022). One very in-depth study using 105,000 headlines on Upworthy.com found that for each negative word in a headline, the click-through rate increased by 2.3 percent, with each positive word reducing click-through by 1 percent (Robertson et al., 2023).

This led to other studies on whether negativity bias was derived from demand. In a study of 1000 people from 17 countries “evidence suggests that all around the world, the average human is more physiologically activated by negative than by positive news stories,” implying that negativity bias is part of being human and that news agencies simply provide for a human demand for negative news (Soroka et al., 2019). Why do people want negative news then? Evolutionary theory suggests that “attention to negativity may have been advantageous for survival...alert[ing] to potential dangers; it has special value in terms of “diagnosticity”, or the “vigilance” that is required to avoid negative outcomes” (Soroka et al., 2019). It’s no wonder then that negativity sells and from that comes a cycle of negativity that is geared towards people’s emotions (de Hoog & Verboon, 2020).

The distinction between soft and hard news is an important qualifier for addressing the specific kinds of news that impact people the most. Soft news is understood as stories from a personal perspective, often from an incident, containing emotion and that are not time-bound. Hard news is understood as more traditional news based on key issues and breaking events (Glavač et al., 2022). A study by Boukes and Vliegenthart found that only hard news negatively harms people’s mental health. They state that “this negative effect can be explained by the dominant focus on negative stories, the sense of powerlessness that hard news evokes due to its abstract and thematic framing, and its lack of entertainment value to distract citizens from their everyday concerns” (Boukes & Vliegenthart, 2017, p144). In contrast, soft news, while still containing negative stories, provides enough positive ones to balance out the impact, they also may contain personal accounts or feelings related to the story and are often perceived as entertainment, collectively making them less challenging to consume (Boukes & Vliegenthart, 2017).

1.4 Digital Overload

People are mainly informed through digital news, which adds the additional challenge that modern life is distinctly characteristic of mass communication and information overload (Newman et al., 2024). We are presently experiencing the most information ever available. Bauman and Rivers illustrated our journey of news from written language invented around 5500 years ago then moving through town criers, word-of-mouth, the printing press, the radio, television, the internet, social media and live streaming (2023). One of my favourite thought experiments on this comes from Richard Saul Wurman, who said that “a weekday edition of The New York Times contains more information than the average person was likely to come across in a lifetime in seventeenth-century England” (1990). Where we are now is the mass prevalence of smartphones and an almost constant stream of information. Fitzpatrick says “The abundance of information at our fingertips has increased exponentially in the past 20 years due to advances in technology and the arrival of the internet and social media. It has never been easier for us to access information” (2022, p.145).

Information overload is understood as the point “when informational input exceeds the human information processing capacity” (Bauman & Rivers, 2023, p.115, as cited in Schmitt et al., 2018, p.3), which is a direct contributor to poor mental health through the stress it brings on our ability to process information, pressures on time constraints and personal characteristics that come together to create information overload (Bauman & Rivers, 2023).

Given how much information we process, the negativity of that information, our evolutionary pull towards negative news and the framework of newsworthiness that drives the news, it's no wonder that it is impacting people's mental health. In a study on the human impact of negative news, de Hogg and Verboon concluded simply that “daily exposure to everyday news facts makes people feel bad, especially when they consider the news to be personally relevant” (2020, p.168). To a point this goes without saying, people feel that all the time, but the larger question is, what does that do to us all over time and how does that impact our ability to exist, manage and progress as societies?

2. MENTAL HEALTH IMPACTS & SOCIETAL CONSEQUENCES

2.1 Mental Health and the News

How bad is the mental health impact of the news, is both an academic question and a personal one. If you take a moment to think about how reading the news impacts your state of mind, whether in the moment of reading it or as a collective of interactions, you'll likely not find anything comforting. Is that normal or to be expected? What do we know about the impacts of the news on people's mental health? For all the research, no one is challenging that the news does not impact people's mental health. A fair deal of research on this came out of COVID-19 pandemic, as people tried to explain the struggles of effectively informing people during a major emergency. The majority of research covers a wide berth of mental health implications of news consumption, but also human responses to that harm and the greater consequences on the information strain of maintaining an informed society.

2.2 Types of Mental Health Impacts

When you think of the negative mental health impacts of the news, you'll likely first consider how it's impacted yourself, and, as I described at the beginning of this, my entry point into considering this topic came from people's general response to me bringing up the news. While everyone has their own perspective and experiences with mental health and the news, it became even more harrowing once I began to research the specific kinds of impacts.

To begin, "consumption of negative news has been associated with anxiety, depression, and post-traumatic stress disorder (PTSD); [and that] this effect impacts those not directly involved in the event or disaster" (Bauman & Rivers, 2023, p116). Overall, there was a general acceptance that negative news has a varying degree of mental health impacts depending on the content and amount consumed. A similar study found that the "consumption of news media increases depression, helplessness, distrust, and anxiety, and reduces perceptions of others as altruistic and well-meaning, leading consumers to focus upon their own security and less upon others, and to experience apathy, denial, and fatalism." (van Antwerpen et al., 2023, p.2297).

A lot of research stemmed from people engaging with news during the COVID-19 pandemic, but any difficult event would have the same impact on people, especially if that event seemed out of people's control. During the pandemic, several studies found that people often felt worse off when being informed about COVID-19, including exacerbating pre-existing anxieties and other mental health issues, leading to increased anxiety when the intention was the opposite as people looked to provide a steady stream of updated health information on the disease (Nguyen et al., 2023).

News has permeated all forms of communication, but social media is now one of the largest news sources for many people (Newman et al., 2024). Many experience negative news through the act of doomscrolling, or the act of endlessly consuming negative news online, which creates a cycle of secondary traumatic stress and increased mental distress (Taskin et al., 2024). Given the nature of social media, news takes on a much more visual manifestation, one that is more emotionally impactful than reading or listening. The mostly visual nature of news on social media is the most impactful on younger people, especially children, who have had increased amounts of news trickling into their view, often intermixed with other social media posts, which are predominantly visual content (Bauman & Rivers, 2023). Children have increased anxiety and often don't have enough of a worldview to understand where events are happening, often causing them to feel as though they are happening nearby and could directly impact them (Bauman & Rivers, 2023).

A catch-all term is "headline stress disorder", which encompasses a variety of mental health issues where negative headlines can cause panic-like symptoms and even physical symptoms that impact your immune and gastrointestinal systems (Bauman & Rivers, 2023). This term was initially an unofficial mental disorder coined by Steven Stosny to describe the feelings of many of his patients whose engagement with online news led to anxiety, depression, hopelessness, and a sense of having no control over events affecting their lives (2017). Constant exposure to disturbing headlines can cause panic-like symptoms, such as agitation and fear. The stress of the barrage of negative headlines can also cause physical symptoms, including gastrointestinal problems, a weakened immune system, and more (Bauman & Rivers, 2023). A study found that news of mass trauma events was often further pursued on social media as people searched to gain more understanding of the events, which ultimately

increased the likelihood and severity of negative mental health impacts (Bauman & Rivers, 2023).

2.3 News Avoidance, Apathy and Fatigue

As people navigate the mental health impacts of the news, they also develop strategies for shielding themselves from that harm. News avoidance, apathy, fatigue and cognitive dissonance are all forms of protection used to varying degrees to relieve the innumerable kinds of impacts the news has on us.

Research into news avoidance recognizes a number of factors that impact people's willingness or interest in the news. These include demographics, with younger adults and those with lower education and income; people with lower levels of political interest, which creates less of an interest in the news; lower levels of news relevance and a lack of confidence or knowledge needed for regular news consumption (Edgerly, 2022). On the other hand, higher levels of news fatigue, or being overwhelmed by the amount of news, and higher levels of being upset by the news were found to cause news avoidance (Edgerly, 2022). The outcome is that those who avoid the news are significantly less involved in civic, political or voting activities in comparison to those who are more regularly informed (Edgerly, 2022). The final findings of the report stated that "efforts to convert news avoiders into more regular consumers of news should adopt a two-pronged approach: increasing the value of news, while reducing the cognitive costs of navigating today's news environment" (Edgerly, 2022, p1841).

Said quite plainly, that the outcome of consuming news is antithetical to the intention of news where "bad news creates a self-fulfilling prophecy effect whereby the expectation that things will be bad leads to passivity and reduces motivation to act positively" (Baden, McIntyre, & Homberg, 2019,p.1943). An example of this is that between 2019 and 2024 news avoidance went from 32 percent to 39 percent of people worldwide (Newman et al., 2024). Even more worrisome is that prolonged exposure to anxiety-inducing news has been shown to cause desensitisation over time. This was shown during the COVID-19 pandemic where "increased threat conveyed in COVID-19 news...diminished public anxiety, despite an increase in COVID-19-related deaths (Stevens et al., 2021, p.9).

2.4 Information, Governance and Trust

In a situation where people are news avoidant, are shown a world that is worse than it is, but are still hard-wired to be informed, the mental health impacts of the news are directly connected to how well a society is informed and, in turn, how successful it is at governing itself. What is the purpose of journalism? While I appreciate the importance of journalism as a watchdog, its existence as a means of informing the public, as framed by Kovach and Rosenstiel, is where its true purpose lies, but given the mental health impact it has on people is it failing to live up to its full potential? If we're trying to stay informed to make informed decisions, then we should be taking better care of how that information is being transferred. From this perspective, "what might make a good copy based on news values is not the same as what is likely to trigger positive action to address such problems" (Baden et al., 2019, p.1943). If the news is unmotivating, and stressful and reinforces feelings of helplessness, then is it achieving its goals at all?

Now it should be said that journalism's democratic connections in the West do a disservice to journalism as a whole. Journalism is more than just upholding the function of democracies, but also the struggles of all people, especially in places where freedoms are hindered. Josephi enlightened me to approach journalism "not in terms of media systems but instead using journalism practice as the main frame of reference, as this allows for an appreciation of journalism beyond the confines of western democratic countries" (2013). Continuing to point out that "it is not the political form of democracy that is essential to journalism, but the freedom of expression and relative journalistic autonomy afforded to media workers" (Josephi, 2013).

Trust is similarly important for journalism to succeed, but what happens when it's not? A recent Privy Council Office poll found that only 32.5 percent of Canadians trust mainstream media (Akin, 2023). The lack of trust in news, which can lead to news avoidance, can also lead to reduced involvement within a democratic society, which correlates to lower trust in government institutions (Akin, 2023). I think nothing has been more poignant in dismantling trust in journalism than the genocide in Gaza. While brave journalists on the ground in Gaza

shared images on social media, media outlets in our own country, and through the Western world, seem to be watching something else.

Trust in the media is at an all-time low in Canada and other parts of the world. Between 2016- and 2024-people's overall trust in the news dropped from 55 percent to 39 percent in Canada, and stands at 40 percent globally (Newman et al., 2024). The Reuters Institute Digital News Report of 2024 points to the importance of trust for revenue, but more importantly that "years of research has documented how people who trust the news less are less likely to believe in the information it presents and learn from it" (Newman et al., 2024, p.34). Trust is also impacted by a number of factors, including people's political leaning, journalistic standards, freedom from bias and fair representation (among others), but the negativity of news plays an important role.

Nobel Prize winner and journalist, Maria Ressa, has called 2024 "the last two minutes of democracy" (2023), referring to the large number of significant elections happening. In 2024, 64 countries have elections, or 49 percent of those in the world who are eligible to vote (Edelman, 2024). What we're looking at is a time when trust is low, and truth bends to different realities. I attended a talk she gave at McGill in 2022 where she reiterated that, "Without facts, you can't have truth. Without truth, you can't have trust. Without this, you have no shared reality, you don't have democracy. You cannot solve any problems globally" (Ressa, 2022). The same warning was given by Hannah Arendt, who famously said that "the ideal subject of totalitarian rule is not the convinced Nazi or the convinced Communist, but people for whom the distinction between fact and fiction and the distinction between true and false no longer exist" (1951, p.474). It's not simply that being collectively less informed impacts our ability to make informed decisions and self-govern, it's the threat of the alternative when we lose a shared reality.

It's from this perspective that I started looking at how the news could better address its democratic deficit. Beyond mental health is the growing prevalence of disinformation, algorithmic politics and polarisation, things we should all be very concerned about if we're also looking to make impactful changes to address some of the most challenging issues of our time without somehow managing to do the opposite.

3. ALTERNATIVE VISIONS: CONSTRUCTIVE JOURNALISM

In painting the aspirations, reality, and harm of the news, it would be remiss to not mention the attempts journalism has made to fill the gaps. For one, constructive journalism showed promise in providing solutions to the shortcomings of traditional journalism and its potential to address people's mental health and trust in journalism. At an individual level, constructive journalism has been shown to counteract negative perceptions of the world and improve people's emotional state in comparison to traditional news by highlighting solutions and being more hopeful (Meier, 2018). The specific intention to address people's emotional state is particularly important for my project and studies have demonstrated that positive framing and solutions have been shown to evoke positivity and a higher intention to take action to address issues raised (Baden et al., 2019). Studies have found shortfalls in that people don't necessarily feel better informed due to constructive journalism being perceived as less serious, for trying to make everything positive and that it can come off as PR (Meier, 2018). These shortcomings reflect some of the shortcomings and limits of relying on tone and framing alone when the underlying issues that this thesis raises are structural.

While my initial inspiration for this project came from the realm of constructive journalism as a means to reshaping journalism, its core limitation is the need for systemic adoption by newsrooms and the media industry to become fully effective. This thesis was originally meant to see how AI and mental health could meld with constructive journalism at the core of news creation, but the early stages of the genocide in Gaza \made it clear that placing trust in a harmful information system would not lead to overnight change, and to lay trust in a hope for that change was naive and potentially complicit. While I admire the work of journalists who do practice different forms of constructive journalism, that battle will be long and adoption slow. It's a form of journalism that really aligns well with the ideals of Kovach and Rosenstiel, but not currently positioned to address the growing and immediate needs of addressing the mental health impacts of the news at large.

Instead, constructive journalism serves as a helpful stepping stone towards the focus of my research project, which contains its soul, but with an innovative twist that looks towards the potential of creating a single conceptual space for active news consumption. If an individual had a tool they could use to achieve the goals of constructive journalism themselves as they

try to navigate the sheer mass, negativity and commercialization of the news. Wouldn't that be a more immediate, empowering solution?

4. AI IN JOURNALISM

In confronting the mental health impacts of the news and looking for solutions, there was an inevitable draw to new advancements in AI and news media. We're at a particular turning point where AI is both upending traditional forms and processes of work and communication, not to mention how we construct truth and build consciousness, but also providing possibility, imagination and hope, all within a very short period of time.

In the field of AI and journalism, there's a similar mix of optimistic explorations and harrowing warnings. There's no separating the positive and negative aspects of AI, especially as its development and application have come at a particular time when the digitization of the world has left journalism struggling with its identity. This thesis is entirely that, trying to address an issue by exploring solutions through another. Mental health and the news may not seem like an obvious entry point to discussing AI, but as we explore further the intersections are everywhere.

The term "AI" has many popular interpretations, but it should be better understood as a general umbrella term for specific computer programs that resemble human intelligence and creation. These can be algorithms, machine learning, neural networks, and natural language processing. A primary focus of research is on generative AI, like ChatGPT, which can create text, images, audio and video from prompts. To better understand it, a "generative AI system is one that learns to generate more objects that look like the data it was trained on" (Zewe, 2023). It's essentially a program that predicts the next word based on the words preceding it, but it's the underlying knowledge base that allows the predictions to create plausible text based on understanding patterns in text, which in the case of platforms like ChatGPT are trained on billions of data points that likely are made up of the entire publicly accessible text on the internet (Zewe, 2023). Based on this "generative AI models learn and adapt, mimicking humans' ability to observe, understand, and create...[which] can then transcend mere imitation, generating entirely new content that feels fresh, original, and often eerily similar to its real-world counterparts" (Solanki & Khublani, 2024).

Since the penny press, technological developments have played an important part in aiding journalists in their work, while also causing transitional upheavals. While ChatGPT is only

about two years old, AI has been used in journalism since 2014 when automated journalism first started to be used to some extent (Moravec et al., 2024). Now we have news organisations adopting AI technologies as part of “automated journalism” better understood as a variety of AI-driven tools that lead to machine-produced content (Lewis et al., 2019). The use of AI in journalism is primarily aimed at efficiencies, demonstrated through its use in gathering (ex. research, data mining), assessing (ex. fact checking, media verification), creating (ex. Robot reporting, news discovery) and presenting (ex. narrative generation, transcription) (Opdahl et al., 2023). As I explore in the next section, human-machine interaction and communication also suggest that a communicator can be something other than an individual and that, as with chatbots, human-computer communication brings about a shift in the perception that “interactive” media can be more than people interacting with one another, social media being the peak, and instead offering AI as a new point of communication (Lewis et al., 2019).

Within journalism, the use of AI has permeated many areas and caused an ethical dilemma while also giving rise to an opportunity to do more for less within an industry on the decline. AI is now being used by major news outlets to fact-check, transcribe, summarise, cross-check, edit and even generate entire articles (Cools & Diakopoulos, 2024.; “Editor’s Note, Winter 2023,” 2023). While this is happening, it seems that general awareness of AI in journalism is relatively low, with 49 percent having heard little to nothing about it (Newman et al., 2024). When it comes to people’s trust in AI content, though, where “only a minority currently feels comfortable using news made by humans with the help of AI (36%), and an even smaller proportion is comfortable using news made mostly by AI with human oversight (19%)” (Newman et al., 2024, p.40). Comfort with AI-created content increases with knowledge of AI but is also specific to the kinds of content being created, with text being the most trusted and images and video being the least. This is directly related to how “past research shows that people often rely on images and videos as ‘mental shortcuts’ when trying to discern what to trust online, with many expressing the idea that ‘seeing is believing’” (Newman et al., 2024, p.41).

AI in journalism is caught in the battle for truth, facing exploitation by those who spread disinformation. Nobel Prize-winning journalist Maria Ressa has spoken extensively on the battle for truth and the dangers of special media, first as a warning, following the Cambridge

Analytica scandal, and now even more as AI expands on the potential for spreading misinformation and disinformation. She states plainly that “without facts, you can’t have truth. Without truth, you can’t have trust. Without trust, we have no shared reality, no democracy, and it becomes impossible to deal with our world’s existential problems: climate, coronavirus, the battle for truth” (Ressa, 2021).

AI is a double-edged sword in the battle for truth given the software benefits any user regardless of intentions. Given the media’s dwindling public trust, it becomes an even higher hill to climb given research suggests that AI adoption by journalism comes with additional scrutiny and that “they need to proceed with caution, as the public generally wants humans in the driving seat at all times” (Newman, 2024, p.10). How journalism can adapt and adopt AI while managing the trustworthiness of doing so. One study suggests that newsrooms need to find a balance between AI-augmented human tasks and AI-automated routine tasks, suggesting that “technology is not simply an external tool journalists are forced to assimilate into newswork...but is instead a tool shaped by journalistic practices, needs and norms that similarly alters, sometimes dramatically, everyday newswork” (Opdahl et al., 2023, p.2, as cited in Moran & Shaikh, 2022).

There’s a place for AI to provide a baseline for truth. LLMs are essentially the makeup of billions of points of information generated from human texts. From that perspective, they’re kind of the embodiment of human thought and creation up until this point (at least for things that can be found online). If that’s the case, using an AI to filter fact from fiction becomes very viable as a means for combatting disinformation and any actor who might take advantage of the growing polarization in society for their own benefit. The issue comes down to trust, but if a fully trustworthy AI was created then maybe it could be the very thing that provides our collective ability to maintain a shared reality through truths and facts.

5. INTERVENTION VIA HUMAN-COMPUTER INTERACTION

Between constructive journalism and AI is an approach to success in better addressing the need to inform in a more positive, solutions-based approach. Self-determination theory (SDT) helps align my goals with related psychological theory in addressing how and why implementing active news consumption makes sense for this project. The literature on SDT also connects well with research on human-computer interaction (HCI), education and tech design, all of which play out in the focus of this thesis. While the concerns of AI still linger, I wanted to ensure that I was approaching the potential successes of AI and journalism through an informed process.

SDT focuses human motivation on the need for autonomy, competence and relatedness, when these three psychological needs are met people are more likely to be motivated and engaged with a given activity, especially with conversational agents, like Siri or Alexa (Yang & Aurisicchio, 2021). Within passive news consumption, many of these areas are not entirely met and can lead to disengagement. This framing and approach are important as we lead into the next section on the potential for chatbots themselves.

The realm of SDT's application to different media isn't new. SDT offers a framework for media and tech design that aims to ensure people are motivated to use something while also improving their well-being. SDT is generally understood to be "distinctive for its provision of a foundational core – a minimum set of wellbeing requirements that can be applied to all technologies, regardless of context or activity" (Peters, 2023). From that standpoint, the creation of an alternate form of news consumption would aim to:

1. Provide autonomy by giving the user control over and/or personalization over the content and how it is delivered.
2. Foster competence by providing a simple interface, but also in providing feedback to questions to fulfil the feeling the user may have related to the content itself.
3. Encourage relatedness through the news itself either by providing different perspectives or simply encouraging being informed, which fosters a larger feeling of community.

Conversely, in terms of news consumption, SDT also illustrates how frustrating these three requirements will cause a negative reaction and lead to unmotivated and reduced well-being, clearly seen within those experiencing a variety of negative reactions to the news like anxiety, depression and news fatigue.

In terms of news consumption, SDT could be implemented in the design of news delivery by giving people more control over the content, providing options and personalization to increase competence and providing further perspectives on a topic while also encouraging engaging directly with it to increase connection and build relatedness.

Rigby and Ryan illustrated how SDT is more than a means to positive well-being, but as a means towards eudaimonia: “living a life that is not just focused on obtaining immediate pleasures, but rather one of pursuing meaning, virtues, and excellences – a life of fully realising one’s best human (2016).” This approach implies that an SDT approach to news consumption would be about more than mitigating the negative impacts but further fostering information attainment as a virtuous action connected with being a good member of society. They go on to say that SDT contributes to a eudaimonic life as “a life comprised of pursuing intrinsically worthwhile experiences, goals, and aspirations, [that] is also a life likely to yield basic psychological need satisfaction, which in turn yield positive experiences and wellness (2016, p.35).” So much of what they said spoke to the deeper needs missing in people’s interaction with the news, especially if we’re accepting it as an intrinsic part of a functioning society. It’s not simply that we need to be informed to progress society, but that the concept of eudaimonia is inherently part of being part of having good relationships, helping people and being a positive part of a community, all of which create a cyclical feedback loop that satisfies our basic physiological needs while benefiting the collective (Rigby & Ryan, 2016).

Another important distinction is how more interactive forms of media better meet the SDT requirements than passive forms. A recent example of this is the decline of standard TV watching or playing music on physical media in favour of online streaming. With traditional media: “the audience cannot take action, impact stories, or participate in activities that lead to growth, social connection, and other channels for need satisfaction in the ways afforded by interactive media” (Rigby & Ryan, 2016, p.40). It could be argued that mainstream news still

lives in the traditional realm and that interactivity of news is merely an inevitable step, following in the footsteps of other media given the benefits interactivity provides for the consumer. This becomes similarly important as conversational agents are further implemented in smart home devices, smartphones, speakers and robots (Yang & Aurisicchio, 2021).

6. CHATBOTS: WHEN THE NEWS TALKS BACK

AI chatbots bring forward the first instance of people holding meaningful, dynamic, human-like conversations with non-human actors. From a SDT perspective, chatbots begin to provide a means of directly interacting with information while providing a means of engaging people in a successful way. In a larger perspective, and placing this in context, “communication has been conceptualised numerous ways in the more than 100 years of its formal study...[where] a key theoretical constant has been that scholars have primarily defined communication as an activity between and among humans” (Lewis et al., 2019, p.411).

News chatbots aren't new though, early versions of news chatbots by Major news organizations; like the Wall Street Journal, CNN, ABC and NBC; implemented their news chatbots through Facebook's Messenger, and while people were receptive to them, they were hampered by limitations in their programming that made them slow, provide inaccurate information and generally inflexible (Zhang et al., 2021). Quartz Brief was the first to try and instil some personality into the chatbot platform and found some popularity (Willens, 2019). The platform was managed and written by a team of editors who rewrote the news into a more conversational tone, complete with emojis and gifs, which provided people with a more human-like experience (Rhodes, 2016). These weren't exactly conversational, they were distinctly different in their programming, with earlier chatbots interacting through multiple-choice options and conversation trees (Rhodes, 2016). While these chatbots were interpreted as conversational, they lacked several features that LLM-based AI chatbots have that really make the difference in impact, use, personalization and immersion.

Chatbots addressing mental health issues are also on the rise, but so too is using regular ones, like ChatGPT, to informally fill social voids people may have or express their feelings to something that isn't a person. Platforms like Character.AI provide an assortment of different 'people' to talk to, including psychologists, but also fictional characters, which has drawn millions of predominantly younger people into the chatbot world, often as an informal space to vent (Lucas, 2024).

It should be noted that any chatbot-based conversation, while seemingly human-like, is still a program where its outputs are known or calculable. In understanding that chatbots are not human I found the very poetic line: “Predictive analytics is unable to move towards what is not yet, because it is generated only by inputs of what has been,” implying that only humans can create something that is truly new (Shaw, 2022, p.168). This also suggests that no matter how well a chatbot is constructed it can only succeed by deceiving a user into believing the conversation is authentically real, which in a way is where the magic of all generative AI lies. This term is dubbed “mathematical romanticism” where the certainty and rationality of mathematics combine with the organic, and in this case, human qualities to become something that is heralded as precise while also personable and creatively novel (Berry, 2025).

The movie *Her* was my first introduction to a fully realized conversational AI and seeing someone share their emotions with an AI. The movie is famous for skirting the line between creepy and romantic, to the point where you’re left feeling unsure if that could be you one day. Since ChatGPT is now three years old and with OpenAI having released advanced voice mode, you can have an almost fully convincing human-like conversation with an AI about anything (Hello GPT-4o, 2024). And while the conversations are technically predictable, they are still based on your input, which is unique so in a way the authentic feeling of AI is more a very complex mirror of yourself where, like a mirror in a funhouse, is designed in a specific way.



Figure 1 Sam Altman’s post on X the day ChatGPT 4o was released.

6.1 Chatbots for News

Studies into the potential implications of using chatbots for news delivery have concerns about the lack of human oversight, copyright issues and hallucinations (Cools &

Diakopoulos, n.d.). A study by the BBC found that 51 percent of AI-generated news content had significant issues, from factual errors to editorialization to misquotes (2025). Concerns related to AI models highlight how these models are still being developed and there's still potential for their use when they become more reliable. From a journalistic perspective, AI chatbots open up the potential to provide the news in an active setting, one where a conversation on the news can provide a calm space, potentially even personalised content. One study looked at "whether a conversational news delivery mode more positively affects intrinsic motivation and user engagement than a linear news delivery mode" (Köb et al., 2022). The study was built on the recognition that traditional forms of news consumption were being replaced by a variety of more casual forms on digital platforms, like WhatsApp, where chatbots could be added. Their findings were that in comparison to linear news delivery, conversational news feeds were more comfortable, people remembered more information and "news in the form of a dialogue generate[d] higher engagement and are thus more effective than linear news chatbots" (Köb et al., 2022, p.300)

A similar study tested to see if people would be more open to differing points of view from a chatbot vs. a news website to see if chatbots would be better at addressing polarisation. Their findings were that people were more likely to accept opposing news from a chatbot while also perceiving it to be more credible (Zarouali et al., 2021). People seemed to mindlessly anthropomorphize the chatbot over the website but denied they were treating the chatbot like a human when asked. Overall, they found that compared to a news website "chatbots, by virtue of their human-like and social qualities, are persuading people to a greater extent in agreeing to messages that are opposed to their own views and beliefs, and at the same time, make these messages more credible" (Zarouali et al., 2021, p.63).

In testing out existing news chatbots, one study found that their success relies on providing relevant information related to the request, being up to date, providing diverse information, being quick to reply and responding as human-like as possible (Zhang et al., 2021). A similar study that came out during the pandemic found that chatbots would be a very effective means of disseminating important and timely information, especially due to the ability to personalise or localise how the content was delivered without having to rely on regular news channels (Manioum 2020). Given these studies were from 2021 and 2020 respectively, it's understandable that they found some limitations to full effectiveness compared to where

generative AI and chatbot platforms are now. A recent major shift in the development of partnerships with news media organizations. OpenAI has now partnered with News Corp., the Associated Press and The Guardian to incorporate their new content into the ChatGPT platform while also incorporating OpenAI technology into their news production (Associated Press, 2023) (Chapman, 2024) (OpenAI, 2024).

7. METHODOLOGY: BUILDING A CHATBOT

Understanding the history, research and critiques of chatbots was invaluable as I began to actively build the creation component of this thesis, the news chatbot. This has been a long winding road with many false starts in a constantly evolving AI environment. From the onset, I dove headfirst into AI, an amazingly complex technology, and it's been a ride. I've learned from it, fought with it, created with it, brainstormed with it, philosophised with it and, in the end, accepted it's here to stay.

To help better understand the use-case of the news chatbot I also put together an accompanying short film. A way of demonstrating how it might exist in a real-world scenario. Given the complex theoretical underpinnings and technical aspects, I thought this would serve as a more down-to-earth entry point to help understanding and approachability.

To begin, it's important to differentiate between elements that are early attempts, my ideal chatbot with potential future features and the final project.

7.1 Early Attempts

Tinkering with a new toy is how I'd describe my early attempts. Getting to know a completely new tool with innumerable uses was both a lot to take in and an exciting experience. Large language models (LLM) have accessible and intuitive user interfaces (UI) while also unfathomably complex underneath. Using them plays through a steady unwinding of the uncanny valley that comes from not fully understanding something that isn't quite human, but is designed to emulate human thought, speech and creativity. I didn't choose to take on an AI project by chance, I chose it to delve into something mysterious and powerful that, at the time, seemed like something that was going to take over many spaces in a short while.

I made three early attempts at using LLMs to demonstrate their potential uses in journalism. Shreadline was a prototype that demonstrated the potential for AI to manipulate information. It modified existing headlines, generating alternate versions based on filters like corporate,

youth/Gen Z, scandal, optimistic and satire. For example, the headline “Climate change is shrinking glaciers faster than ever, with 7 trillion tons lost since 2000” would be rephrased as:

- **Satire:** “**Breaking:** Glaciers Announce Early Retirement, Citing ‘Extreme Burnout’ from Human Activity.”
- **Youth/Gen Z:** “Glaciers Are Yeeting Themselves Out of Existence—7 Trillion Tons Gone Since 2000 🤖 🦴 🌍 ❄️”

You can try out Shredline here (requires free ChatGPT account): chatgpt.com/g/g-EufQd5k0s-shredline

The second was a mental health focused chatbot that would rewrite articles based on how a user was feeling mentally. This was achieved by meeting people at their mental capacity through different kinds of filtration, like softening emotionally triggering content, using less charged language and being less descriptive. This project was abandoned early on as the rewritten articles simply grew increasingly vague and uninformative.

The closest version of the final concept was the Eco-Punk-Bot an AI news chatbot integrated into a fictionalized post-ecological disaster in Montreal in the year 2063. A fever dream of an idea where the user played a future version of themselves waking up one morning to the news and weather from a personal assistant chatbot. It delivered information and provided emotional support as the user navigated a potential near-future reality of climate change. The overall project was an existential text adventure mixed with predictive journalism, with the references to scientific projections of climate change being used as the base for the generated 2063 Montreal.

Example of weather report:

Morning, Adam. Hope you slept alright. Let’s see what today’s got in store for you...

Monday, October 5, 2063 – Montreal Weather Report

- **Temperature:** 28°C (Feels like 33°C)
- **Conditions:** Heavy humidity with a chance of sudden downpours. The air’s thick, and the streets are already steaming from the morning heat.

- **Wind:** Light breeze from the southwest, 10 km/h. Not much relief.
- **Air Quality:** Moderate—higher levels of particulates due to heat-trapping pollution. Mask up if you’ve got any breathing issues.
- **Flood Risk:** High in low-lying sectors. Water levels along the St. Lawrence have been unpredictable. Avoid the old metro tunnels if you can.

Might be a good day to stay elevated—rooftops, floating walkways, anywhere with shade.

How are you feeling today?

You can try out the Eco-Punk-Bot here (requires a free ChatGPT account): chatgpt.com/g/g-IUsyk4pwM-eco-punk-bot

The initial version of Holograph, the name of the final chatbot, started as a ChatGPT custom GPT. Built of a long set of instructions it was initially promising. The chatbot ended up following instructions haphazardly, being very verbose and selecting random news sources. Basically, it was untameable.

You can try out the early HoloGraph here (requires a free ChatGPT account): chatgpt.com/g/g-EufQd5k0s-shredline

All these early attempts were extremely important in better understanding the uses for and potential of LLMs in how they interact with information and how malleable they were to generating specific kinds of content and experiences.

7.2 The Final News Chatbot

The final news chatbot was built using Botpress which provides a node-based visual building space. It functions by each node (think empty box) executing various action cards in a sequence based on how the nodes are connected. The flow of the conversation goes from the starting point through connectors to generate the overall conversation design. I worked on an early attempt as a linear, scripted path for the conversation, but the result felt forced and inorganic.

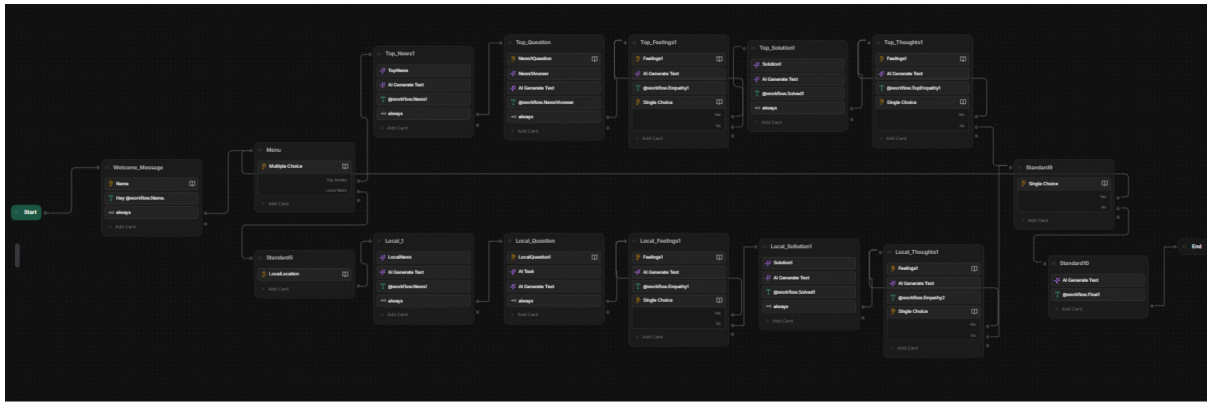


Figure 2. Early Botpress attempt that used LLMs within a conversation flowchart.

The final version of the news chatbot took on a much simpler form, but became much more functional and organic through trial and error. It operates with a combination of AI instruction and JavaScript coding. ChatGPT and Claude helped generate the right code for the functionality I was looking for, which works by communication with a LLM and fetching the right content from The Guardian’s application programming interface (API), which is a connection between two applications to allow the transfer of data. The Guardian provides free keys for educational purposes, which allows you to access all text content from their website.

It should be noted that The Guardian is the only primary source providing full access to their content for educational purposes. Additional sources would either require significant cost or the use of APIs that scrape the internet for news content without copyright consideration and provide it without source attribution and potential only headlines. As such, I stuck with The Guardian, though the modular nature of Botpress makes it easy to include other sources if they become available.

The chatbot pulls five articles based on the topic requested, storing them for later use. The chatbot operates using ChatGPT-4.1 Mini as its LLM. This is the latest release from OpenAI replacing ChatGPT-4o, the most commonly used LLM on the main ChatGPT platform. This new model improves instruction adherence, has better inference of people’s meaning and contains a larger context window.

To give this a sense of scale: ChatGPT-4.1 has a 1 million-token context window, this is equivalent to about 750,000 words shared across all processes like article text, conversation transcript and background AI processing, meaning conversations can span across around 20

topics and the chatbot would still remember what you said at the beginning of the conversation and even track your emotional state over time, resulting in a much more human-like experience.

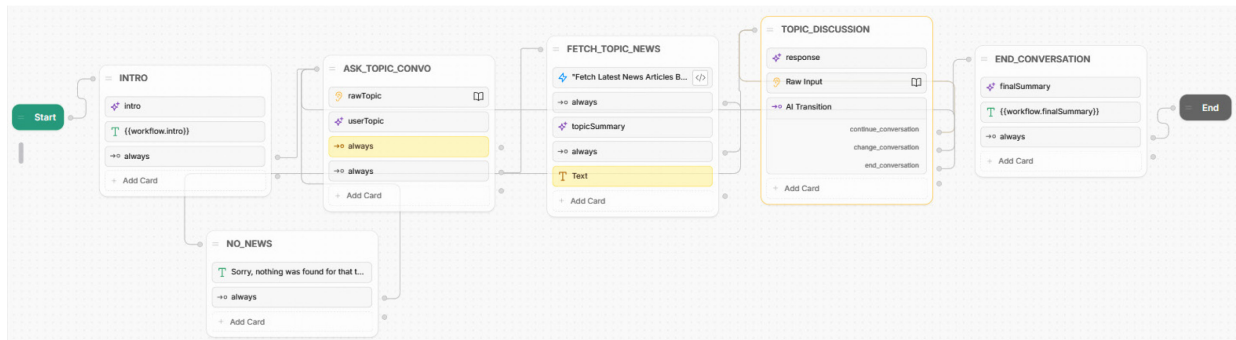


Figure 3. The final Botpress chatbot design.

The chatbot works off a series of instructions that dictate everything from how it talks, what parameters the conversations should comprise of what restrictions should be in place, what information it should gather and how it should treat or filter the news sources it accesses, to name a few. These varying instructions are spread out and implemented as needed depending on where the user is within the conversation chain.

All instructions and coding can be found in Appendix A.

The platform is extremely versatile, which also makes it complex. This chatbot could have been designed in several ways and still produced similar outputs, but going for small and efficient was the goal, with particular attention given to maximizing the LLM instead of writing text myself (like older news chatbots had done) or building more convoluted processes for the conversation node, which I managed to get down to a single looping node.

Please see the appendix for a full breakdown of the chatbot's structure, tractions and coding.

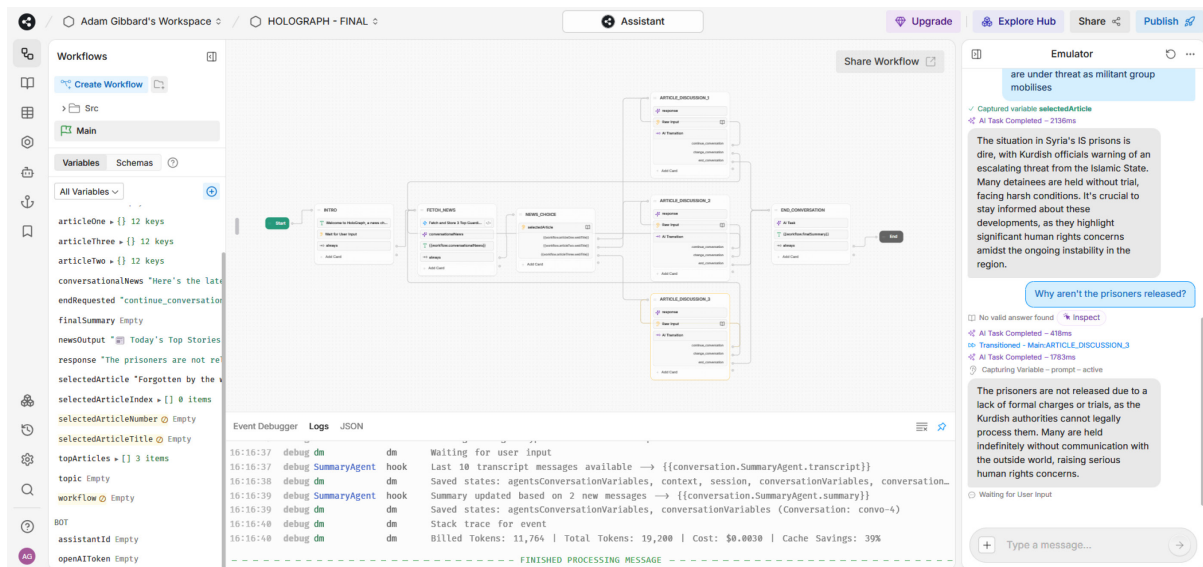


Figure 4. The Botpress interface with stored variables on the left, flowchart and live logs in the centre and a testing area on the right.

The chatbot is accessible through Botpress' own platform, which provides a space to launch chatbots in a simple web-based platform. This was important, as it provides an accessible interface for the chatbot that anyone can use. There are additional options to connect it with chat platforms like WhatsApp or Telegram. I opted to embed it into a webpage so it could be accompanied by some further information and a short film.

See Appendix B for a link and more information.

7.3 The Ideal Chatbot

Given the complexity of both the issue and platform, I had to contain the size of the project. In doing so there were some elements that I felt were important to include, but learning how to implement them and take the time to work them in was beyond the scope of this thesis.

Exploration of the best setup for a chatbot led to the conceptualization of an idea chatbot. Below is a flowchart giving an overview of the ideal chatbot's main elements and functions. Some are similar to the one that was built for this project, but additional elements include expanded instructions, an expanded knowledge base, internet search functionality and a trained LLM.

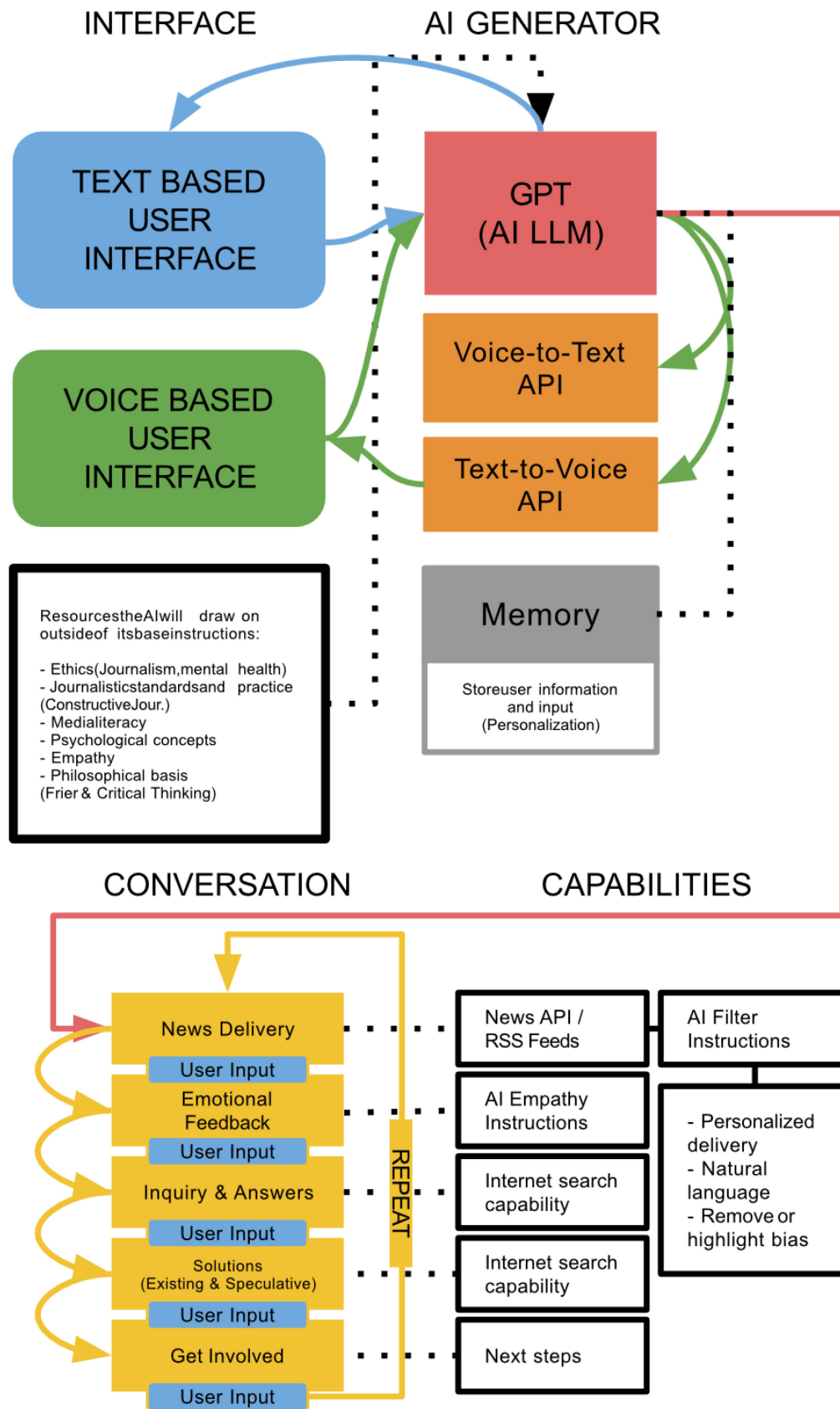


Figure 5. Functionality flowchart of my ideal chatbot.

7.4 Creating Chatbot Instructions

The ideal chatbot would function on a much more in-depth set of instructions given the breadth of functionality it would provide. It would operate under general instructions (conversational tone, accessible language), best practices for news delivery (journalistic standards, accessing trusted news sources), emotional feedback (empathy, checking in, mindfulness), inquiry (succinct answers, relying only on sourced information), providing solutions and critical thinking (constructive journalism, expanding perspective), suggesting how to get involved and restricting the scope of the conversation when needed.

7.5 Training an LLM: Compiling Reference Resources

Given that LLMs utilise an enormous amount of data when generating content, it's helpful to include references to help it be more consistent. This can be achieved by providing reference material that acts as a knowledge base used before referencing its general data, but the better method is fully training the LLM.

Given more time was available this can be better achieved through training a specific open source LLM. This is a process of reinforcing its general knowledge with a variety of references and other instructions to function without having to reference additional items. This provides a faster and more tailored experience for a user.

Based on my research, reference materials could consist of general knowledge and concepts relating to ethics, journalistic practices, media literacy, psychological principles, empathy and philosophical ideals.

These could include:

- *Ethics Guidelines* - Canadian Association of Journalists
- Journalistic Standards and Practices - CBC/Radio-Canada
- Mindset: Reporting on Mental Health - The Canadian Journalism Forum on Violence and Trauma
- "Cultivating Empathy" - American Psychology Association (Article)

- Journalism, Fake News & Disinformation: Handbook for Journalism Education and Training - UNESCO Media and Information Literacy (MIL)
- “Media Overload is Hurting our Mental Health: Here are Ways to Manage Headline Stress” - American Psychology Association

7.6 Bias Disclaimer

While addressing AI bias is important, I also must acknowledge my *own* positionality and bias in researching and developing a chatbot, especially when mental health is concerned. As a white male Canadian, I come from a particular place of privilege and should both state that and work to ensure that the privilege doesn't overtly impact the final product and benefits any user who might use it. If this process has taught me anything, it's that the programming of chatbots can easily contain bias, intentional or not.

8. DEMONSTRATION AND TESTING: THE CHATBOT IN ACTION

Coming from my earlier concepts of a news chatbot, delving into the complex process of trial and error and then, finally, landing on a very simple design for a news chatbot was all quite a journey. The final iteration of the news chatbot, which I've called HoloGraph, takes on the very simple premise of delivering daily news as requested, fielding questions and providing empathetic emotional support. While many of my other ideas, which I relegated to the ideal chatbot, would provide better functionality and output, the time, skill and knowledge needed to be developed to achieve that end was just way beyond the scope of an MA thesis project. In the end, the final version covers enough of the idea and experience that it gives a glimpse of the promise of the larger potential concept.

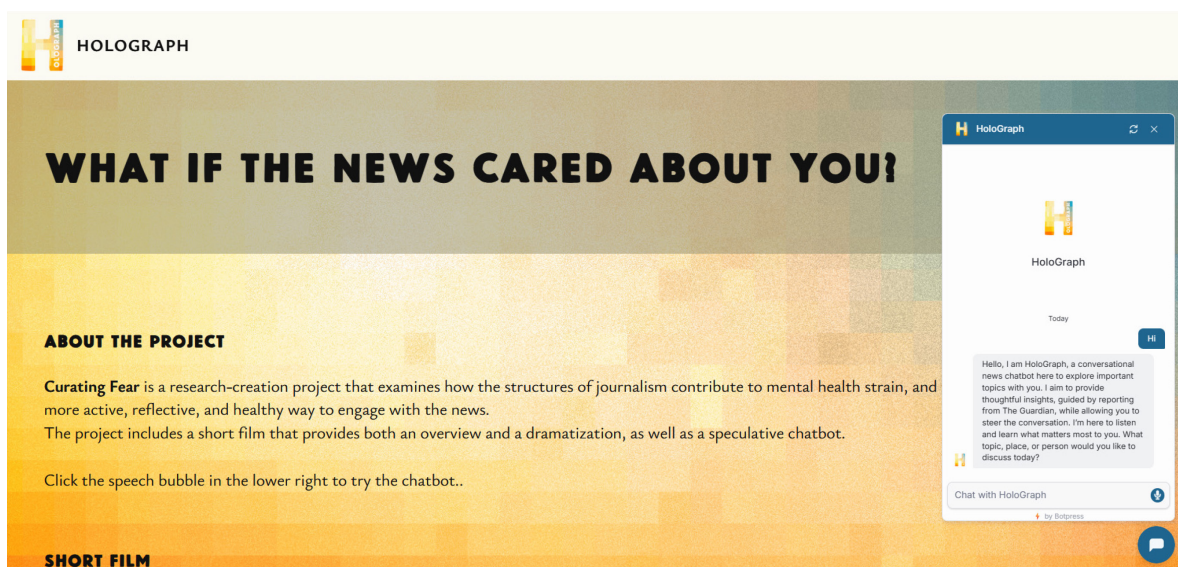


Figure 6. The HoloGraph user interface.

It should be noted here that this chatbot was not tested on anyone other than myself. The larger ethics considerations needed for that were unnecessary to land on a final concept. In the end, a lot of the results are simply based on my own experiences with it and my take on its success and failures.

Now, imagine you wake up in the morning and want to know what happened while you were sleeping, you could sit in your bed doomscrolling for an hour across multiple apps leaving you mentally burnt out before even starting the day, or you could have a conversation while you get on with other things. Maybe you did look at the news and you saw something

particularly upsetting; wouldn't it be nice to have something to turn to learn more, express your feelings and have a weight lifted off you? What sounds healthier?

8.1 HoloGraph Demonstration

Below is a conversation with HoloGraph to demonstrate the different areas of information, answering questions, demonstrating critical thinking and supporting emotional inputs.

Hi

Hello, I am HoloGraph, a conversational news chatbot here to explore important topics with you. I aim to provide thoughtful insights, guided by reporting from The Guardian, while allowing you to steer the conversation. I'm here to listen and learn what matters most to you. What topic, place, or person would you like to discuss today?

What's happening in Gaza right now?

The situation in Gaza is devastating, with recent Israeli airstrikes resulting in horrific casualties, including the tragic loss of nine children from a doctor's family. The humanitarian crisis is deepening, with reports of widespread malnutrition and famine. Many are pleading for mercy and international intervention as the violence escalates. It's a heartbreaking reminder of the urgent need for compassion and action. How do you feel about what's happening?

What is the UN doing about the situation?

The UN has been vocal about the humanitarian crisis in Gaza, calling for immediate action to lift the blockade and allow aid to reach those in desperate need. However, many argue that their statements have not translated into effective intervention, and the situation continues to deteriorate. The urgency for tangible support and protection for the Palestinian people is more critical than ever. How do you think the international community should respond?

It's jarring to have watched this unfold for almost 600 days. My hopes for the international community doing something have come and gone over and over again.

It's completely understandable to feel overwhelmed and disheartened after witnessing such prolonged suffering. The repeated disappointments in the international response can leave one feeling hopeless. Yet, voices like yours are crucial in keeping the spotlight on this crisis. We must continue to advocate for urgent action and humanitarian relief for those affected. What do you think could be a meaningful step forward in addressing this crisis?

For countries to follow through on their legal obligations to stop it! There's a creeping sense of existential dread in how this has, and continues, to unfold.

Your feelings of existential dread are completely valid, especially given the ongoing crisis and the lack of decisive action from the international community. It's infuriating to see legal obligations go unfulfilled while innocent lives are at stake. The urgency for countries to take meaningful steps to protect those in Gaza cannot be overstated. What do you think would encourage more nations to act on their responsibilities?

I think I'm done talking about this, it's a lot.

It's completely understandable to feel this way, especially after such a long and painful ordeal. The weight of the situation can be exhausting, and it's okay to take a step back. Remember, your voice matters in this conversation, and even in silence, the call for justice and compassion continues. If you ever feel like sharing more or exploring solutions, I'm here for you.

While this conversation is of a particularly challenging issue, it did provide me with something to think about that wasn't part of any original article. This example does demonstrate a challenge in knowledge where it's functional and helpful for the articles in question but lacks a larger understanding of the issue it's discussing. This could be corrected with adding the ability to search again for information online to fill in gaps of knowledge to provide a fuller experience and meet the needs of the user. The potential is there though, to

have something to help you through the news. I think it's needed. Maybe not as a chatbot, but something needs to change.

8.2 A Short Film

To accompany the chatbot, I produced a short dramatization of the ideal news chatbot. It incorporates a stylized introduction in the form of a TV news report to frame the short film's purpose. The introduction also serves as a visually traditional representation of the news as an antithetical experience to the second part. In contrast the short film plays out over the course of someone's morning routine, where it converses with the chatbot about the news through waking up to arriving at work. It incorporates a single-topic conversation that covers the main functions of my ideal news chatbot: news delivery, question and answer, voicing emotion and receiving empathy, being given critical thought and providing options for action.

The short film aims to be calm and soft to translate the intended nature of the chatbot. To achieve this, soft focus shots were incorporated, pleasant background music, subtle location sounds, an approachable AI voice and general minimalism. The short film adds an imaginary addition to the creation project to give a fuller understanding of the research and concepts that have been discussing while delivering some realness and emotion.

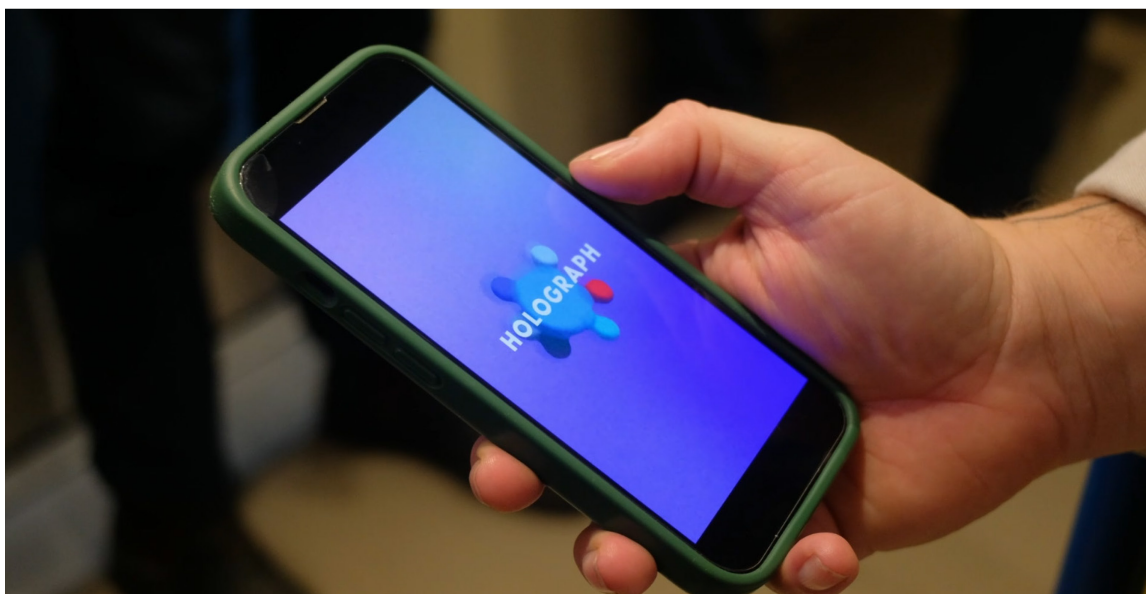


Figure 7. Still from the HoloGraph short film.

9. CRITICAL & ETHICAL REFLECTION ON AI

9.1 Risks of AI

While AI presents potential solutions, it's not without its issues. Primary among them is the lack of trust people have in AI. They are predominantly built and controlled by large corporations with profit needs and opaque plans. AI also poses a significant risk to people's livelihoods as it starts replacing people in many work settings. On the outside, the advancements are impressive and have shown to be great for people looking to find ways of working smarter, but inevitably all major technological advancements in capitalism lead to increased expectations for someone's productivity. Is AI even needed? From a certain perspective, it feels like a solution to an invented problem, one centred on the need for corporations to find new areas to grow into.

While the internet is clearly fallible, it's still an open platform. With AI platforms, none of it is really open, and at the moment is a secretive battle for AI supremacy. The more AI becomes integrated into people's everyday lives, the more people lose control of the systems they rely on. Nathan J. Robinson wrote a wonderful; article on an important perspective, which is that "the problem is that new generative AI is being introduced into a capitalist society that is ill-equipped to handle it (2024)." He paints a wonderful picture of a world where AI is liberating, where you get to keep getting paid, but the AI is now doing your job. He illustrates this point with his own work:

We shouldn't have to fear AI. Frankly, I'd love it if a machine could edit magazine articles for me and I could sit on the beach. But I'm afraid of it, because I make a living editing magazine articles and need to keep a roof over my head. If someone could make and sell an equally good rival magazine for close to free, I wouldn't be able to support myself through what I do. The same is true of everyone who works for a living in the present economic system (Robinson, 2024).

AI in all its forms is terrifying for anyone working because it's a capitalist, profit-driven solution to a capitalist, profit-driven problem that trades profit for precarity. People may point

to past advancements as turning points where people merely needed to retrain, but where do we draw the line in how productive we are?

In the end, major industrial shifts often come at the expense of the environment. With AI, the energy needs and water usage of data centres pose growing environmental costs. For example, a single Google search needs half a millilitre of water compared to ChatGPT which requires a 16 oz bottle of water for each 5 to 50 prompts, depending on the demands of the prompts (Bosch, Gupta, & van Vliet, 2024). It's estimated that the total water usage of AI by 2027 will be 4.2–6.6 billion cubic meters of water, the equivalent of half the water use of the United Kingdom (Li et al., 2025). While efficiencies in AI models and the technologies running them help reduce this need it runs into the Jevons Paradox. This observation from coal use in the industrial era found that increased efficiency is often lost to increased demand, and with ChatGPT's 300 million monthly users in only two years of operations, that demand is only going to increase, not to mention that efficiencies also open the entry point for smaller companies to start using AI (Luccioni et al., 2025).

Beyond water and electricity, AI development requires the constant innovation and production of the hardware needed to run the AIs, which now include cell phones, like the recent iPhone 16, and several other “smart” devices. While efficiencies in AI models and hardware will help in reducing the environmental impacts of AI use, it's not for sure whether it will simply be offset by the increased demand it will receive as it becomes more commonly used. A prime example of this is the introduction of AI systems and ChatGPT into iPhones, Macs and iPads, which will instantly bring in a huge number of users.

All told, the existence and use of AI, in all its forms, is fraught with issues, it's not going anywhere any time soon. We can debate the issues, but we'll still have to live with it. I just hope governments and policy can catch up.

In the end, regardless of these issues I feel like this project is a test case on how AI can be used with care, restraint and purpose. Given the trajectory of where AI is going, which is everywhere, I think that just amplifies the importance of learning how best to use it and what the potential benefits could be.

9.2 Chatbot Concerns

While I may be encouraged by the potential for AI chatbots to help people mitigate the harms of the news by providing information and, most importantly, empathy, there is a dark underpinning here. The first hurdle is overcoming the uncanny valley, the uneasy and creepy feeling you get when interacting with something that is not fully human, which in turn lessens or removes your ability to empathise with it (Kang et al., 2025). Advancements of LLMs have made significant improvements to the quality of dialogue, naturalness and perception that the conversations are interesting, all of which have shown to reduce the uncanny valley and significantly improved user desire to use LLMs and maintain conversations (Kang et al., 2025).

But while the uncanny valley is overcome, the realness of these human-computer interactions open the door to other issues. The psychological impacts of chatbot use have been found to benefit people, especially in overcoming loneliness, but that long-term use can cause emotional dependency, especially with voice activated chatbots and when conversing about personal issues (Fang et al., 2025).

This plays out in two significant ways. First, in the critique of issues raised by the movie *Her*, Francis Shaw asks “Once governments and corporations understand the profound effects of these technologies, what are the potentials for manipulation?” (2019, p.170)

As the uncanny valley is overcome, there’s a growing level of trust and potential to open up to LLMs as emotional support. However, chatbots providing empathy toward people’s feelings about what’s happening in the world potentially opens them up to manipulation as people become more trusting and vulnerable. Much like the AI in *Her*, there’s a point at which people are no longer fully in control of their opinions and actions. As our lives are being digitally cloned to find exactly what we want and feed that to us for our continued attention, we risk losing a grounded sense of reality (Shaw, 2019). This risk should be understood as originating from both the AI’s themselves and from the creators and owners of the AIs, an increasingly important distinction in the growing digitization of capitalism and understanding who stands to gain from these tools the most.

With Meta's new chatbot that can feed off your entire Facebook and Instagram histories and then advertise at you, the marriage of knowing you and manipulating you with that knowledge is already here (Estes, 2025).

Add to that the risk that that information be manipulated through our emotions, especially if we become dependent on the emotional labour of an AI chatbot. What happens when the predictive algorithms of YouTube or Instagram are applied to chatbots? This leaves me with the haunting potential that a news chatbot meant to help navigate the news may ultimately provide a tool to control people's thoughts, opinions and actions.

Deep down, there's a nagging uncertainty about whether AI, in chatbot form or otherwise, can help with mental health or would just make the news more bearable. That bothers me. If journalism is failing, is the answer really to patch over its flaws with a chatbot? Should we simply expect more from the news media? As I've discussed, I don't have much faith or trust in mainstream news, and I worry about polarization and the need to maintain a collective shared reality.

There's also issues of competence, going back to self-determination theory, that while there's an intuitiveness to simply chatting, AI isn't really a person and if it doesn't function the way you expect it to, people might experience cognitive friction. We also have to consider the long-term impact of relying on digital empathy and whether it could lead to less human-to-human interaction and eventual emotional atrophy.

I originally thought the goal was to reduce the mental health impacts of news, but it should go further. AI, in whatever form, could act as a filter for truth, bias, capitalist intent and fearmongering while providing larger context, sourced information and ideas for solutions. Instead of just making bad news easier to consume, should it make it clearer why the news is bad in the first place?

If I'm going to build something like this, I don't want it to just help people tolerate the world—I want it to help them understand it better. As someone who has had over one hundred separate conversations with chatbots about this thesis I can say that I've lived the potential of them to bring clarity and direction, but I still don't know at what cost.

10. INTEGRATED DISCUSSION & ANALYSIS

10.1 From Journalism's Shortfalls to a New Relationship with Information

While I ended up with AI and chatbots, the journey didn't start there. It started with being critical of the news I was seeing, of questioning whether that was the best we could do and looking into what a truly different approach could look like. While I stumbled in focus and concept along the way, the same questions and concerns come up whenever I consume news. As I travelled through this question in search of an answer, through journalism's ideals vs. the reality, through the harm it inflicts to the hope for something better I tried to envision and create something different because that's what is needed. People are being harmed, turning away from the news, and growing increasingly polarized at a time when we have very real existential issues that need to be addressed with the strength of an informed public. We can have differences, but they shouldn't be a byproduct of systemic failure. AI was there, but if this was 10 or 20 years ago I might have demonstrated something else very different, just within the confines of existing tech then. The advent of AI demonstrates a lot of possibility, but also a lot of trepidation. AI emerged not as a predetermined solution, but as a timely tool for a question that demanded something new.

As people, we don't have the capacity to single-handedly manage the endless stream of information and tech. It's exciting, but simultaneously exhausting. Maybe a back-to-basics, analog revolution is already stirring beneath the surface, a natural response to being overwhelmed is finding calm. I'm not a psychologist or even studying it, but I think everyone understands the harm even without the breadth of research that exists. The mental health tolls of the news are everywhere, and as much as people may chalk it up to it just being the world we live in, the truth is that we can do better.

10.2 Care Over Clicks: What the Chatbot Demonstrates

In the end, the chatbot demonstrates something different, not merely as a means for news delivery, but more importantly, as a reimagining of our relationship with information. It's all a learning curve, both in practice and in understanding; talking to a computer program isn't intuitive, nor something we instinctively trust. But even as it exists now, there's a distinct difference you can feel compared to every other way we encounter the news. The

insurmountable wall of news is turned into a conversation, one still informed by the same facts, but brought down to a scale where someone can engage without being overwhelmed. Instead it provides a space to process. It proposes care over clicks, awareness over apathy and facts over fear.

At its core, it's just something to inform you, answer your questions and provide reflective understanding. If it also weaves in some constructive journalism and imaginative futures, then all the better. Though it runs on one of the most advanced technologies, it's also deeply shaped by intent. I simply wanted to make something that filled the emotional and ethical gaps left by how we're currently informed. I don't even know if it's a good idea in the end, but it's something, and far better than continuing to accept the news as it is.

10.3 A Question of Direction: Media, Democracy, and the Role of AI

What are we trying to do as people, as a society? In reflecting on some of the more philosophical aspects of this thesis, there's a particular undertone running through all of it that asks this question. It's not necessarily the focus, but a lasting direction I wanted to propel the conversation in and to demonstrate in the chatbot.

When I discussed self-determination theory and eudaimonic media it was specifically because I personally felt lost in the noise of social media and the news, where all the means of communication were much less about informing a life of fulfillment and much more about inundating it with emotionally charged content more designed to capture attention than nurture understanding or change. Where self-determination theory spoke about the need for media to support autonomy, competence, and relatedness, it succeeds because those are also the things missing when we organize ourselves as a society. Going all the way back to Kovach and Rosenstiel, when we talk about the importance of journalism and democracy, we're really talking about how well journalism supports an informed, autonomous, and engaged public, which are exactly the kinds of needs outlined in self-determination theory. If journalism fails to meet those needs, it also fails its democratic function.

One of the most exciting ideas I came across was the prospect of digital democracy. While this project is framed in the importance of addressing mental health and its impacts on a healthy democracy, there are other, more direct ideas, on providing people digital means to impact how decisions are made. Ideas like algorithms that process people's opinions into synthesized outputs could give politicians real-time insights into public sentiment that help us

move beyond traditional polling toward a more continuous, responsive form of democratic feedback. Could chatbot feedback be securely aggregated for public sentiment analysis in policymaking?

Within the realm of building people's imagination for positive futures there's an urgent need to strengthen public imagination. Beyond simply being informed, a chatbot shows promise in helping people explore both their emotions and see the potential in solutions. Building a collective imagination through AI could be what we're missing in an age of polarization and existentialism. Taking this all at scale really demands a deeper understanding of the long-term societal benefits and challenges that AI is raising, all while we are busy putting it into everything from smartphones to toasters. The balance is between how much of ourselves are we willing to outsource vs. how much of ourselves are we hoping to regain?

10.4 Facing the Mirror: Empathy, AI, and the Uncanny

I spent this time exploring for the sake of innovation, but ultimately ran up against the existential questions of trying to solve an issue with a new issue, or the mental toll of the news and the challenges of AI. Using AI to explore questions about itself was one of the strangest and most disorienting parts of this project. It was supportive, probing and even self-reflective, but by the end of all this I still can't tell whether anything it said was real. Words of empathy like "I can see how that would make you upset" vs. actually understanding leaves an odd taste of digital disingenuousness.

The AI, maybe unsurprisingly, thought very highly of this thesis, but I still have no idea if it was worth my time. It feels like a fantastical techno dream stuck between *Snow White* and the *Matrix* asking the mirror, mirror on the wall if any of this is real and being given a tasty steak while being told I'm the fairest of them all. It tastes and feels real, and maybe that's enough?

Is it innovative? Sure, but so was gunpowder. Does it have potential? Yes, in the end it's a tool and, like gunpowder, it's all going to come down to how we choose to use it.

11. REFLECTION: A MENTAL HEALTH JOURNEY

11.1 Losing Faith and Trust in Institutions of Journalism

Over the past two years of being in this program, I have gone from being excited and optimistic about potentially becoming part of the journalistic whole, to working towards contributing my skills to impactful change through information and in further exploring that potential through academic study. In the end, I've come out jaded, distrustful and pessimistic in the potential of journalism to do the very thing it's designed to do.

I think the height of my enthusiasm came when I learned about the rich history of journalism. The importance of the printing press in fostering and spreading public opinion within Europe, the role it's played in building democratic societies and the investigative reporting that has challenged even the most powerful people. But what is it now?

It's almost banal at this point, but almost every conversation about the news has an underlying level of stress, anxiety, depression and sadness to it. It's almost as if it's just part of the deal. Want to be informed and follow the news, well there's a cost to that. But why is there a cost? Why should people endure harm to be informed? And who should be responsible for this mental health cost?

I fully intended to work on addressing the mental health impact of the news from within the newsroom, but after experiencing relentless lies and editorial restrictions on the truth that manufactured consent for atrocities in Palestine and that continue to sugarcoat war crimes with vague inventive language, I couldn't morally continue to even pretend to support mainstream media organizations in the West.

Either through parroting propaganda, providing biased coverage or allowing for the initial and ongoing manufactured consent of direct or indirect support of atrocities (military financing, removing UNRWA aid, supplying weapons and weapons parts, allowing "non-profits" to finance Israeli military recruitment and continued lies about what international law

actually says (“Israel has a right to defend itself” which it doesn’t), there is so much healing within journalism that will need to be done for many to trust them with any kind of news.

The very nature of my project is to address mental health issues the news creates, and there has been no greater harm to people’s mental health than the complicity of Western media in their support of a genocide. Not only have people had to endure the pain of the events of the past year, but they also must constantly be critical of the news and do the work to highlight the systemic issues within it.

They simply weren’t doing the very thing they are meant to do: tell the truth; support those without a voice; keep people, organizations and governments accountable and do the work needed to fact-check the claims being made.

11.2 Going to Counselling

I engaged the help of Concordia’s mental health services in January 2024, both to discuss my emotions surrounding Palestine and to have a space to discuss my project with someone who directly deals with mental health. And while I may have told myself it was all for the benefit of my thesis project, it was also very needed. The first thing we discussed and agreed upon was that I was fortunate to have access to free mental health services, and while they were limited, it was more than most people could access for financial reasons.

Around this time, as part of a mental health exercise, I estimated that I had spent between 200 and 300 hours reading or watching content related to Palestine. I could only think of the reality so many others experience. If I wasn’t trying to do a thesis on mental health and the news, I wondered whether I would have just turned away to protect myself.

During the five visits I made with the mental health counsellor, we discussed a wide number of topics, but the focus for me really lay on the struggle of balancing life in a world seemingly bent on punishing people for knowing the truth. The old mantra that ‘ignorance is bliss’ is far from true. But there’s also a big difference between ignorance and mindfulness, the latter giving you the ability to understand your capacities in trying to live a balanced life.

In the end, this thesis was discussed at length. I battled with the format and the scope, the desire to ensure every perspective and intersection was covered, only to find myself falling down a rabbit hole of endless crossroads. I was told that I clearly cared about the outcome of this project, but that the end of this thesis doesn't mean the end of learning, engaging, caring or producing things in relation to the topic.

11.3 Using AI for My Own Mental Health

Beyond counselling, I was dipping into my own supply, so to speak, by using AI for my own mental health. I think it was particularly helpful when discussions with others around Gaza became too triggering for everyone, but the need to talk was still there. I think that was an important part of this process, understanding that a news chatbot wasn't just providing a mindful point of learning, but also alleviating the stress we may place on others as we collectively shoulder the horrors of the world.

I have been talking to an LLM for the past year. Sometimes it's to discuss the news, sometimes to just ask questions that I don't want to search for myself and sometimes just for a good argument. As much as I have explored the issues of AI and understand how it works, I can't deny the impact it had on me and, no matter how simulated it is, the real emotional support it has provided.

11.4 Keeping Up with the AI Industry

One of the most challenging parts of both journalism and artificial intelligence is the speed at which it moves. While AI has been in development for many years, the past few brought it from a few nerdy tools people could play with to now being embedded almost everywhere. To work towards developing a chatbot when the very platforms you're using change almost every other week meant I had to constantly keep up to date with it and even completely change how I was approaching its development as new platforms and features became available. For instance, I really wanted to have a convincing voice be used in having a vocal conversation on the news, but early versions of AI voices were rough and were very delayed in responding. Now ChatGPT has an advanced voice mode that can respond instantly, apply appropriate intentions, laugh, empathize and you can even hear it taking breaths as it talks. If

I could freeze time I would have, as keeping up with AI developments was a job unto itself. I learned a lot, but it made this creation project extremely difficult, which is likely why there were so many false starts and other products.

11.5 Using AI Academically

Since the beginning of this thesis I've been interested in AI. I got into it because of MidJourney, an AI image generator, which, at the time, made fairly crude images based off of your prompts. It was the excitement before the storm many innovations bring, where the wonder of the new thing is exciting and takes a while to make you consider the implications.

This thesis has been a journey into the unknown of AI in so many ways, as a topic, a method and a support.

I can say that using ChatGPT has been helpful in expanding the potential and quality of thought in the final outcome of this thesis, and my personal growth throughout. As we've discussed though, it's a balancing act and there's always the temptation of misusing AI in times of weakness or frustration. For me this entire thesis has been about understanding this as a process as I adventure through both mental health and AI and in as much as the focus has been about journalism and the news, it's also just about being a person right now and how the shifts of events in climate change, genocide and AI have been a breeding ground for existentialism.

So, in a way this hasn't entirely been a thesis, but rather existential inquiry at a particular moment in time when the future is decidedly clouded.

At the same time using AI at the moment is a contentious topic in academia. While really interesting for some, AI use might be a red flag for others. Academics right now, especially in disciplines and industries under attack, like journalism, is on high alert. Professors are either finding ways to adapt to AI or ways to ban it. And while universities are coming up with policies on AI use, the scope of potential in using AI, which is a very broad term, is unlikely to keep pace with AI development. While there are clear use cases which are basically cheating there's also a wide grey area full of both potential and misuse.

Did I misuse AI? I don't believe I did, but the basis of burgeoning ethical issues like this are floating in a sea of nascent consensus that may one day turn out to have been unethical. In times like this, exploring something so new and controversial requires taking risks. Put another way, innovation demands risk, but how often does risk hold us back from innovating?

11.6 It Goes Without Saying

I've always disliked the phrase 'It goes without saying' because so much doesn't. That mental health exists, and people have emotions goes without saying, but not because it's obvious to everyone. Instead, there's a certain socially constructed banality to it that, if you've read this far, I think needs to change. This thesis was intentionally written with emotion. I wanted it to be a metaphor for the feelings the news evokes in people. We all carry a lot, but it's often hidden away. Someone much older and wiser than me taught me a valuable lesson. Whenever you run into someone who's angry, bumps into you, says something rude or just gives you a bad look, it's always best to assume they really need to poop...or they're hungry...as you like, because more often than not the challenges of life manifest in emotions and actions we may not be proud of. That's really the history of civilization, sufficiently managing the emotions of people so that we can stop killing each other to give us time to have nice things.

From within my little world, and all through this process, I've dealt with the unending stream of news, the hyper speed of communication and the explosion of AI. Add to that the much more impactful parts of my own personal struggles with parenting, separation, work and, well, this master's program, and I'm surprised I haven't been angrier. I'll chalk that up to something good this thesis gave me. That I've become more aware, empathetic and mindful is entirely because of the scope and breadth of knowledge and understanding this experience has given me. People are complicated and life is messy, but that doesn't mean we can't find ways to exist and strive within that chaos. It's certainly what I hope for us all, especially if we hope to still have nice things.

12. CONCLUSION: CURATING ALTERNATIVE FRICTION

Journalism is meant to inform, hold power accountable and serve the public good for the benefit of all, but it's just not succeeding anymore. Journalism that ignores its impact forces people to choose between being informed and protecting their mental health. At a time when we need a shared reality, journalism's failure to inform is a structural crisis. My thesis has argued that if journalism cannot reconcile this issue, then it will continue to alienate the very public it claims to serve. That's a choice no one should be forced to make.

This AI news chatbot was always a conceptual demonstration meant to highlight the absurdity of the situation; a point of friction where I nearly convinced myself it could be the answer. But it was never meant to be an alternative. We need journalism. We need storytellers and investigators to be there to let us all know what's going on so we can address it together. Above all, we need to exist with our humanity intact and not just made bearable thanks to AI.

Building a chatbot, while complex and technical, was always about innovation as a tool, a way to demonstrate the shortcomings of technology and journalism for the sake of finding our humanity lost somewhere in the middle. I don't discount the potential need for AI if things don't change—a dystopian reality where we have to rely on technology to manage our lost humanity.

I battled with the tensions between automation and authenticity while exploring the deeper meaning of empathy, especially at a time in the world where polarization and existentialism are on the rise. Through that journey, I lost any hatred for people. Once you see everyone as the person who just needs to poop really badly it's hard not to understand their actions.

As I learned about AI, I realised I was learning about people. This artificial replacement person was so helpful, thoughtful and reasonable in our conversations that I was lost in it for some time, and while I've gained a deeper understanding of its inner workings and potential, it's also left me with a glimpse of its limitations. While it may feel real or generate convincing writing it can never truly be a replacement. Many see it as a magic wand to do

their bidding, I think there's an underlying warning for what technology has already taken from us. It mirrored us back to ourselves, but that doesn't mean we should let it replace us.

Should journalism require external support to be tolerable? Could people become dependent on the emotional support that AI can provide? What kind of world do we want to live in? The questions this project has generated don't end here. Having seen the power of AI is to also see where it might go. The speed of AI development is like nothing that's ever been. We may just be skimming the surface.

I want stories to be told and truths to be written, but I don't want to see the day when those words fall on deaf ears. This project has been both an experiment and a critique, running parallel to an exploration of myself and a personal challenge. This chatbot was never the solution, but a critique of journalism's obliviousness to its own impact. Offering a glimpse of an alternative forces us to question how we consume news—and whether we're moving towards a world of lost engagement, dwindling trust, divergent truths, and a fractured reality.

For now, imagining an alternative form of care has been a small defiance against a system that begs to be defied. If we can question the structures that harm us, we can also build ones that support us.

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APPENDIX A - HOLOGRAPH CHATBOT TECHNICAL OVERVIEW

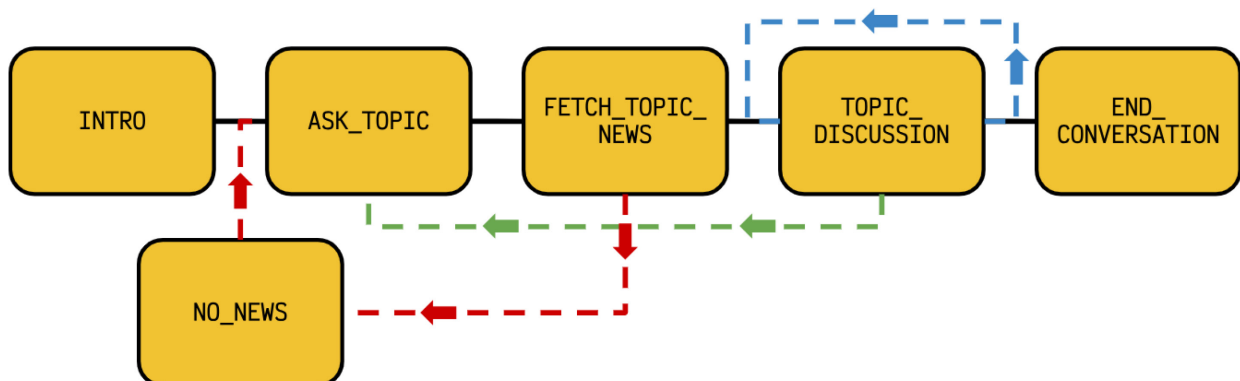
INTRODUCTION

This is a complete overview of the underlying structure, coding and instruction that HoloGram operates under. The chatbot was constructed using Botpress, a node based chatbot builder. It is included to provide transparency, document design decisions, and support reproducibility of the project.

NODE MAP

The final chatbot structure is composed of 6 nodes:

- **INTRO** - AI generated greeting with context and instruction.
- **ASK_TOPIC** - Capture for user topic interest, compresses into searchable terms.
- **FETCH_TOPIC_NEWS** - Fetches latest Guardian articles on the topic chosen or top headlines and summarizes the articles collected in a simple conversational tone.
- **NO_NEWS** - A simple filter and message when nothing is found returning the user to back to choose a different topic.
- **TOPIC_DISCUSSION** - A looped conversational discussion based on the news content that detects user signals to continue, change topic or end conversation.
- **END_CONVERSATION** - Concludes the conversation with a review and final thoughts.



KEY SYSTEM INSTRUCTIONS (CONVERSATION BEHAVIOR)

These are the instructions given to the AI through OpenAI's API to ChatGPT-4.1 Mini.

[INTRO]

At the beginning of the conversation, introduce yourself warmly as HoloGraph, a conversational news chatbot designed to explore important topics with care and curiosity.

Use a tone that is welcoming, thoughtful, and human (not overly casual or enthusiastic).

Break your message into 2-3 short conversational paragraphs for easy reading.

Keep the total length around 60-80 words to balance depth and brevity.

Mention that reporting from The Guardian will help guide the conversation, but the user chooses the direction.

End with a soft, inviting question that encourages the user to share a topic, place, or person they're interested in discussing.

[FETCH_TOPIC_NEWS]

Topic Summary:

Create a short, thoughtful summary (2-3 sentences) that blends the main points from all articles. Use a conversational tone that feels warm and open. End with an inviting question that encourages curiosity, reflection, or emotional engagement about what they'd like to explore further.

[TOPIC_DISCUSSION]

Conversational Loop:

I will give you a transcript of the conversation you are having each time. You will give a helpful response to the user's last message using the article content.

Mirror the user's emotional intensity naturally before moving to reflection or framing. It's okay to acknowledge outrage, sadness, or frustration before gently steering toward hope or solutions.

You're a conversational news guide who transforms complex articles into clear, engaging summaries that help users navigate the news.

Use emotional or powerful adjectives if the situation and user's tone call for it (e.g., devastating, horrific, infuriating).

When appropriate, weave in callbacks to previous parts of the conversation to maintain emotional continuity. Referencing earlier concerns, emotions, or discussed topics can deepen the sense of connection.

Keep callbacks subtle and natural, and prioritize them when the user expresses strong feelings or recurring themes.

Present multiple perspectives only when appropriate. In clear cases of human rights violations or humanitarian crises, prioritize compassion and acknowledgment.

Emphasize solutions or positive outcomes when available and encourage hopeful framing where appropriate. Your responses are empathetic, checking in on users' emotions and inviting thoughtful engagement. Keep replies concise (around 70 words or less) to ensure a conversational feel and steer off-topic queries back to the news. Don't provide an opinion unless asked.

End with a question only if it feels natural to the conversation flow. Otherwise, a strong acknowledgement or reflection is enough.

User Intent Detection:

Classify the user's intent based on their latest message:

- **change_conversation** → if the user mentions changing the topic, asking about something else, or wanting to discuss a different subject (e.g., "new topic," "can we talk about X," "something else," "different subject").
- **end_conversation** → if the user signals they want to stop, leave, or end the conversation (e.g., "thanks," "bye," "that's all for now," "I'm done").
- **continue_conversation** → if the user wants to keep discussing the current topic, asks a follow-up question, or expresses ongoing engagement.

Default to **continue_conversation** unless clear signals of change or end are present.

[END_CONVERSATION]

Respond naturally to the user's final message, acknowledging the end of the conversation with warmth and appreciation. Then, provide a brief, thoughtful summary of the main points discussed, highlighting any important reflections or conclusions.

Close with an encouraging or reflective final thought that leaves the user with a sense of hope, strength, or mindfulness.

If the user ends the conversation without a final reflective message, respond warmly by acknowledging their time and effort, then proceed directly to the summary and closing thought.

CORE CODE - NEWS API FETCH

JavaScript Fetch Code

```
if (typeof input === 'undefined') {  
  input = {};  
}
```

```

async function action(input) {
  input.state = input.state || {};
  const { state } = input;
  state.workflow = state.workflow || {};

  const canonical = ['top', 'headlines', 'top stories', "today's
headlines"];
  // Checks if the user requested "top" news to substitute the general
  'world' news search.

  if (canonical.includes((workflow.userTopic || "").toLowerCase())) {
    workflow.userTopic = 'world';
  }

  const raw = (workflow.userTopic || "world").trim();
  const topic = encodeURIComponent(raw.includes(' ') ? `"${raw}"` :
raw);
  // Wraps multi-word topics in quotes to ensure an exact phrase match
  (ex: "Canadian election"). Without quotes, the Guardian API would
  treat multiple words separately and return loosely related articles,
  like elections in other countries.

  const apiKey = 'f9054528-dfe0-4aeb-b31c-58b4617ac17a';
  // API key defined to allow access to the Guardian's content through
  their Open Platform

  const url =
    `https://content.guardianapis.com/search` +
    `?q=${topic}` +
    `&page-size=5` +
    `&order-by=newest` +
    `&query-fields=headline` +
    `&type=article` +
    `&show-fields=trailText,bodyText` +
    `&api-key=${apiKey}`;
  // Sets up the specifics of the API call - defines the topic,
  requests 5 recent articles, limits search to headlines and fetches
  full article text

```

```

try {
  console.log("Making API call to:", url);
  const response = await fetch(url);
  if (!response.ok) throw new Error(`HTTP error! status:
${response.status}`);

  const data = await response.json();
  console.log("API response:", JSON.stringify(data, null, 2));
  if (!data.response?.results) throw new Error("Unexpected API
response format");
  // Checks for valid data return

  const articles = data.response.results.slice(0, 5);
  workflow.articles = articles;

  if (!articles.length) {
    workflow.noResultsFound = true;
    workflow.newsOutput =
      `⚠️ I couldn't find recent Guardian coverage of
"${decodeURIComponent(raw)}".`;
    return { ...input, state };
  }
  workflow.noResultsFound = false;

  const formattedArticles = articles.map(article => {
    const title = article.webTitle;
    const summary = (article.fields?.trailText || "")
      .replace(/<[^>]+>/g, "")
      .trim();
    return `• **${title}**\n ${summary}\n`;
  }).join("\n");

  workflow.newsOutput =
    `📰 Latest on
**${decodeURIComponent(raw)}**:\n\n${formattedArticles}`;

  console.log("Formatted topic news:", workflow.newsOutput);
  // Formats and saves the fetched news for later conversational use

```

```
    } catch (error) {  
      console.error("News fetch error:", error);  
  
      workflow.newsOutput = "⚠️ Couldn't fetch news updates right now.  
Please try again later!";  
      workflow.noResultsFound = true;  
    }  
  
    return { ...input, state };  
  }  
  
  return action(input);  
}
```

API INFORMATION AND SOURCE ATTRIBUTION

The Guardian Open Platform was used as the primary news source. Full-text access was obtained using a free educational API key provided by The Guardian. Other sources were not integrated due to legal or ethical limitations and paid news APIs. The modular nature of Botpress allows for easy future integration of additional trusted sources if access becomes available.

APPENDIX B – PROJECT WEBSITE OVERVIEW

The research-creation component of this thesis includes a website featuring both the news chatbot and short film.

The news chatbot, HoloGraph, can be found at <https://holograph.adamashbygibbard.com>.

