



LETTER FROM THE EDITOR-IN-CHIEF

2026 EDITORIAL STAFF

Dear reader,

In 1996, a Citadel Chemistry professor dreamed of a way for cadets to have their work in the classroom be more than just a letter in the gradebook. Their academic work had the potential to be seen across campus. Thus, *The Gold Star Journal* was born. Thirty years later, the light that shines on academic excellence at The Citadel is brighter than ever. It is with great pride that the editorial staff present to you the 30th edition of our school's most prestigious academic publication.

As always, *The Journal* features nonfiction papers from multiple disciplines along with photographs and artwork. This year, we gave special attention to papers discussing the rise and use of artificial intelligence. We also welcomed more controversial, thought-provoking papers to add a level of "spice" for this year's edition.

Part of my duties as Editor-in-Chief is to be the informal custodian of records and historian of previous staff members. I would be remiss if I did not note the long gray line of cadets who have gone before me. In total, 87 Citadel cadets have made lasting contributions to *The Journal* as editors. To all 87 of you, thank you for your hard work, your dedication, your love of learning, and your desire to share your classmates' work with the world.

I also want to make sure that everyone knows that, for over two years, our Marketing Editor and Assistant Editor-in-Chief, Niki Kincaid, has been the expert for all merchandise promoting *The Journal*, all design and style elements within *The Journal*, and has been *The Journal's* best Assistant Editor-in-Chief since 1996. She has made *The Journal* beautiful and appealing for all readers, donors, and observers at our Academic Conference. Thank you, Niki!

It has been my honor to work with some of The Citadel's most articulate writers, talented

photographers, creative artists, and industrious editors. This year's staff is comprised of 4 returning editors: Kaitlyn Hatchew, Niki Kincaid, Noah Miller, and Quentin Walsh; 4 new faces have joined us: Patrick Burns, Luke Frazier, Olena Fedinova, and Philip Stracke.

I would also like to give special thanks to our founder and advisor, Dr. Mabrouk. She has instilled the spirit of journalism and creativity into every member of the GSJ staff. Her presence and mentorship are what makes *The Journal* truly special.

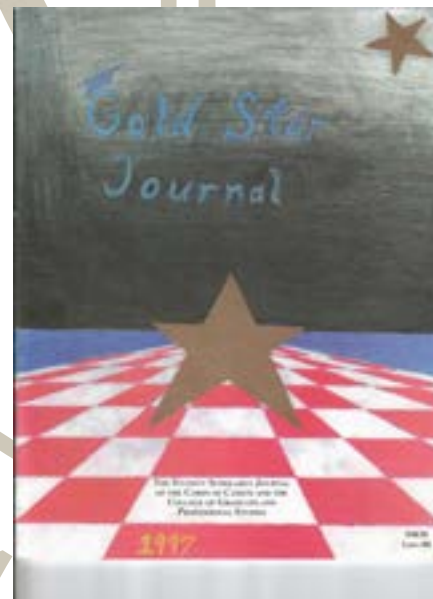
Having been a member of *The Gold Star Journal* staff for four years now, I can say that it is an organization unlike any other at The Citadel. I have grown and improved my communication skills, executive leadership experience, and have had a lot of fun. Thank you for all the memories.

Below is a photo of the original cover for the first edition of *The Gold Star Journal*, which is the only hand drawn cover. Thank you to Matthew Knox McMahon, Lima class of 2000, for your contribution to *The Journal*. Here's to 30 years of *The Gold Star Journal*, and to many, many more.

Yours Truly,



Noah Miller
Editor-in-Chief
The Gold Star Journal
Class of 2026



Olena Fedinova
Editor



Kaitlyn Hatchew
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Noah Miller
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Philip Stracke
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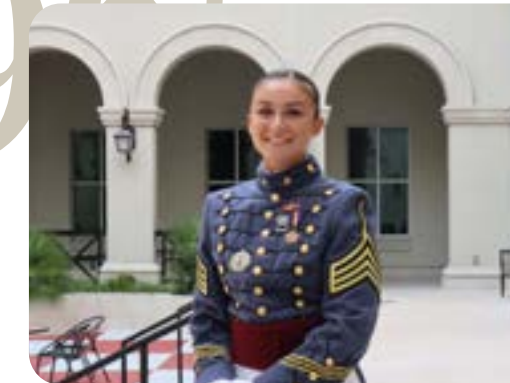
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IN HONOR OF

GENERAL GLENN M. WALTERS

The 30th edition of *The Gold Star Journal* is proudly dedicated to Citadel President General Glenn M. Walters, United States Marine Corps (Retired), Class of 1979. General Walters returned to his Alma Mater after serving 39 years as a Marine, becoming the 20th President of The Citadel in 2018. He served previously as the 34th Assistant Commandant of the Marine Corps, the Corps' second-highest ranking officer. General Walters' military awards include the Distinguished Service Medal, the Defense Superior Service Medal, the Legion of Merit, the Meritorious Service Medal, the Air Medal, and numerous campaign and unit awards. He has seen the country and The Citadel evolve and strengthen during pivotal moments of change.



Gen. Walters at United States Navy Test Pilot School, Naval Air Station Patuxent River, Maryland.



General Glenn M. Walters, USMC (Retired), '79. 20th President of The Citadel.

General Walters has always led from the front while relying on those under his command to inform his decisions. He often speaks of men and women like Gunnery Sergeant Blish, smoking unfiltered cigarettes, advising him on the best ways to lead junior Marines. General Walters learned to ask questions, seek experience, and be curious as a leader, qualities which served him well throughout his career. The General's servant-leadership inspires every cadet on campus in all facets of life.

Under his guidance, The Citadel experienced significant progress in revitalizing campus, increasing the effectiveness of academic offerings, bolstering our financial health. The Citadel achieved its ambitious goals thanks to the largest fundraising campaign in history, coupled with the 'Our Mighty Citadel 2026' strategic plan, where he played a pivotal role. We now enjoy Capers and Bastin Hall, watch the football team play on fresh turf, and look forward to a new Engineering building. Stevens Barracks is looking new, in spite of standing since 1942. The Citadel even has a surplus thanks to General Walters' relentless advocacy. He oversaw the Commencement of eight classes, soon to include the GREAT Class of 2026, creating thousands of hard-working and successful graduates who now help lead their communities, South Carolina, and Nation in every walk of life.



30TH ANNIVERSARY EDITION



Gen. Walters at the Capers Hall ribbon cutting ceremony, 2023.

To General Walters, nothing is more important in developing as a principled leader than focusing on academic excellence. The discipline instilled within a cadet is the foundation driving and sustaining excellence. "Academics is number one: never quit on school," he tells us.

General Walters praised *The Gold Star Journal* for its campus involvement. "It showcases excellence, is self-sustaining, and increases academic prowess. The Gold Star Journal is a representation of our success as a school."

We are proud to have General Walters as our President and we dedicate the 30th Anniversary edition to him. This honor is a small token of our gratitude for his service to The Citadel.



Gen. Walters and his wife, Gail, with "Gentleman Jack," 2019.

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Constance Toldo

BECAUSE IT HURTS TOO MUCH NOT TO BELIEVE



Anthony DiSalvo

Anthony DiSalvo is a sophomore in Alpha Company. He is from Lexington, South Carolina, and contracted with the Army ROTC. In addition, he is part of the Citadel's Distinguished Scholars Program, Honors Program, Baptist Collegiate Ministry, and Quadtalkers Public Speaking Club. After graduation, he will commission as a second lieutenant in the Army.

ABSTRACT

Eric Voegelin's analysis of "second reality" in *Hitler and the Germans* is applied to contemporary American algorithmic media environments. By comparing Nazi propaganda to platform-driven content curation, I argue that both build emotionally satisfying worlds that displace people from reality and elevate "representative men" who embody societal pathologies. I aim to prove that the fight for reality is a recurring condition of modern mass politics, not a historical anomaly.

Before it Turned Violent, It Made Sense

If Adolf Hitler had been a poor storyteller, history would look remarkably different. Human beings struggle to live in a world that feels chaotic, humiliating, and unresolved. When suffering lacks explanation, stories that impose order and clarity can feel not just persuasive, but necessary. These stories tell people who they are, why they hurt, and what the future demands of them. Stories become shelter. Once that shelter is built, abandoning it can be more frightening than believing a lie. Communication scholar Walter Fisher gives language to this phenomenon in his narrative paradigm theory. His theory explains how Adolf Hitler's pre-war rhetoric succeeded because it functioned as a coherent and morally resonant story that explained German suffering, assigned blame, and promised renewal. Long before it justified violence, this narrative made sense of humiliation and disorder, allowing extreme conclusions to feel like necessary ones rather than monstrous.

When Stories Outrank Evidence

Walter Fisher's narrative paradigm challenges the idea that argument is about formal logic. In "Narration as a Human Communication Paradigm," people evaluate persuasiveness through a narrative instead of just strict rational-world pros and cons. Narrative rationality has two major parts: coherence and fidelity. Coherence asks whether a story is consistent, the characters act in believable ways, and whether the events fit together without contradiction. Fidelity asks if a story's "good reasons" align with the audience's lived experiences and values; whether it seems truthful in a deeper sense, and whether its implied values lead to acceptable consequences (Fisher, 1981). Fisher's concept of "logic of good reasons" stops treating the audience as calculators of evidence but instead focuses on how they assess stories using culturally and morally grounded assurances. This theory is widely applied to political rhetoric because it can explain why emotionally



compelling stories consistently outperform fact-based approaches. Narrative does not replace evidence, but it determines which of the facts the audience will accept as relevant in the first place. By using this, we can understand the persuasion in the 1930s and see how society can slide from distress into fanatic certainty without feeling irrational in doing so.

Humiliation in Search of Meaning

Hitler's rise to power occurred in a Germany still wrecked by the aftermath of World War I and the punishments imposed by the Treaty of Versailles. Throughout the 1920s, the treaty perniciously destroyed German political legitimacy and economic stability, creating a power vacuum that fractured governance and public confidence. By the time the global Great Depression struck at the end of the decade, this fragile system was ruined, leaving Germany gripped by mass unemployment, inflation, and widespread economic despair (Myerson, 2004). By early 1933, Hitler claimed unemployment stood at nearly 35% (Hitler, 1933). Welch notes that a society suffering "a deep sense of national humiliation," compounded by inflation, depression, and mass unemployment, was unsurprisingly attracted to a promised national revival (Welch, 2004). In short, Germany's suffering was not only material but interpretive: an unresolved pain crying out for an explanation.

Framing the Crisis

When Hitler became chancellor, he quickly framed his government as the answer to chaos and dysfunction. In his February 1st, 1933, appeal to the German people, Hitler presents Germany as a betrayed nation whose "unity of mind and will" had collapsed, threatened by Marxism and "Communist anarchy," and in need of restoration (Hitler, 1933). Hitler's rhetoric embraced Germans' lived experiences of defeat and hardship into a narrative that explained their suffering and gave them a direction to follow. This framing gave them enemies to hate, told them who to blame, and promised a revived German state. This story made national humiliation purposeful, allowing extreme conclusions to be necessary

The Story That Made Sense

Hitler's success depended heavily on coherence. The story held together: Germany, once honorable, was betrayed by treason, poisoned by



Marxism, but can be reborn. In the same 1933 appeal, he repeatedly uses motifs of victimization, declaring, "Discord and hatred have moved in;" in his story, the nation has disintegrated, and the solution is to create unity and restore a strong, resolute government (Hitler, 1933). The coherence of the narrative is reinforced by Hitler's deliberate assignment of narrative roles: the German people are positioned as a wounded protagonist, and the Marxists are depicted as the force responsible for national collapse. However, his new government is the agent that will rebuild the plot's broken arc. He creates a time-bound promise: "Now, German people, give us four years and then judge us" (Hitler, 1933). This line is exceedingly important in creating that narrative, as it creates the storyline with a measurable redemption. Fisher notes that narrative probability involves how characters act within the narrative world (Fisher, 1981). Hitler's early messaging gives just that: consistency, repetition, and a stable moral map. That matters because in this disoriented society, coherence in and of itself feels like competence.

If coherence is the story's skeleton, fidelity is the moral bloodstream. Hitler worked hard to make his narrative feel faithful to shared values of honor, work, family, moral order, and national unity. In the same 1933 appeal, he frames his government "[to] take under its firm protection Christianity as the basis of our morality, and the family as the nucleus of our nation and our state" (Hitler, 1933). By grounding his message in values that many Germans already associated with social stability and virtue, Hitler's narrative aligned itself with what "good people" already believe about right and wrong, who deserve protection, and what a healthy society looks like. Fisher's point, though, is not that fidelity equals truth. Fidelity is about whether audiences perceive the story as relevant to their values and experiences (Fisher, 1981). That is where the danger lives. When people experience unresolved suffering or contradiction, stories that explain that pain and give it moral direction can feel especially compelling, and fidelity can be artificially created by exploiting real hardship while attaching false causes to it. Welch argues that Nazi propaganda did not operate on a blank slate but that the regime's messaging was "conditioned by an awareness of how the public already felt about certain issues," and propaganda effectiveness depended on "prevailing opinions and prejudice" (Welch, 2004).



In Fisher’s terms, Hitler did not merely invent “good reason;” he activated existing grievances and cultural assumptions, then placed them inside a story that made those feelings feel justified and directed.

While Hitler’s early narrative counted on restoring pride and unity, the immediate years preceding the war instead focused on a more disturbing nuance about narrative fidelity. A story can remain emotionally “true” to an audience even when it becomes openly violent and extreme. Consider

Jewish financiers... Should succeed in plunging the nations once more into a world war... the result will be... the annihilation of the Jewish race in Europe” (Hitler, 1939). Many will question how this could feel true to many German listeners. It is because narrative fidelity is not just about moral correctness but also about how it aligns with the listeners’ perceived values, fears, and lived experience. By 1939, Hitler’s narrative had long conditioned Germans to see conflict as proof of an ongoing conspiracy against them. Jews were no longer internal saboteurs anymore, but now



Blue Ridge
Gabriel Finley

a January 30th, 1939, Reichstag speech where he explicitly issued a threat saying “If the international

a transnational force that was responsible for war itself, and in this story, violence was not aggression

but defense. The narrative contained fidelity because it aligned with fear, grievance, and a desire for moral clarity. In this way, narrative fidelity showed its most dangerous quality: a story can feel righteous even as it justifies destruction.

The Story Becomes the World

Hitler’s own writing shows that he understood persuasion as narrative and emotional management. In *Mein Kampf*, he argues propaganda aims at “the emotions,” not primarily the intellect. The masses have “very limited” receptivity, so propaganda must stick to “a very few points” and “harp on these... until the last member of the public understands” (Hitler, 1926). This is how you keep narrative coherence intact: reduce complexity, repeat the central message, and prevent competing explanations from gaining traction. Once this narrative is scaled through modern media, no German could escape it. Welch describes how Nazi messaging used radio, press, posters, and mass culture to present the image of a unified “people’s community” (Volksgemeinschaft). Symbolized through cheap radios, mass events, and slogans like “All Germany listens to the Führer on the People’s Radio” (Welch, 2004). In narrative paradigm terms, this is not merely “communication” but world-building. It is saturating your everyday life with the same story so that any alternative narratives feel strange, disloyal, and unreal.

The Narratives Presented to Us Today

Hitler’s narrative achieved coherence because it simplified the world into a three-part story of betrayal, enemies, and redemption, and it pursued a counterfeit fidelity by wrapping cruelty in the language of virtue, unity, and moral restoration. To be explicit, Hitler was not merely an effective communicator; he was a profoundly evil leader who used narrative to justify persecution, violence, and ultimately the systematic annihilation of millions of people. His storytelling did not merely persuade but normalized cruelty, justified the ends of war, and rendered mass genocide defensible within the logic of the story.

Nevertheless, this is the exact reason narrative paradigm cannot stay confined to historical analysis. Think of American politics. While contemporary political actors may not seek to justify genocide, they do seek to persuade through the same narrative mechanisms. What is the story that modern political parties feed us? Once you begin to think, it is evident that all run on narrative rationality. Candidates and movements compete to define the story: who “we” are, what went wrong, who is to blame, and what redemption looks like. Stories continue to be used to channel fear, resentment, and uncertainty into moral certainty, often discouraging scrutiny by making disagreement feel disloyal or immoral.

However, that is the exact reason we must question what we are being fed critically. The use of this rhetoric wants to simplify issues, which is why we must explain to ourselves that our problems are never simple, and neither will the solution be. The enduring takeaway is simple and uncomfortable: the most dangerous messages are often the ones that feel like they finally make sense.

References

Hitler, A. (1933, February 1st). Appeal by the Reich Government to the German People. German History in Documents and Images. <https://german-historydocs.org/en/nazi-germany-1933-1945/appeal-by-the-reich-government-to-the-german-people-february-1-1933>

Cooper, J. (2019). Cognitive Dissonance: Where We’ve Been and Where We’re Going. *International Review of Social Psychology*, 32(1). <https://doi.org/10.5334/irsp.277>

Fisher, W. (1981). Narration as a Human Communication Paradigm: The Case of Public Moral Argument. <https://redmonky.net/utpa/4324/fischer.pdf>

Hitler, A. (1924). *Mein Kampf* (My Struggle). <https://gutenberg.net.au/eb-ooks02/0200601h.html>

Hitler, A. (1926). *Mein Kampf*. <https://history.hanover.edu/courses/excerpts/111hitler.html>

Hitler, A. (1939, January 30). Extract from the Speech by Adolf Hitler. <https://www.yadvashem.org/docs/extract-from-hitler-speech.html>

Myerson, R. (2004). Political Economics and The Weimar Disaster. *Journal of Institutional and Theoretical Economics*, 160(2). <https://home.uchicago.edu/rmyerson/research/weimar.pdf>

Welch, D. (2004). Nazi propaganda and the Volksgemeinschaft: Constructing a people’s community. *Journal of Contemporary History*, 39(2), 213–238. <https://psi312.cankaya.edu.tr/uploads/files/Welch%2C%20Nazi%20Propaganda%20and%20Volksgemeinschaft%20%282004%29.pdf>

rates, reducing the opportunities for reading and writing practice is detrimental (Coulson). As teachers we need to provide opportunities for our students to work through the reading and writing processes. The use of Generative AI in the classroom only removes the trial-and-error learning process created by the teacher. While Generative AI may produce what seems to be thoughtful, accurate responses to writing prompts, it does not understand the intricacies of human writing (Warner). It is imperative for teachers to inspire their students to produce thoughtful, personal, and meaningful experiences with reading and writing. Outsourcing these tasks to Generative AI removes the student from these learning processes entirely. There is a difference in using Generative AI to “produce” answers and using it to guide students to answers. If teachers cannot model for students the proper ways to produce authentic reading and writing, students will continue to rely on Generative AI to produce answers for them. With over 80% of high school students using Generative AI on their work, us teachers must make a conscious effort to reinforce reading and writing literacy practices so our students can produce quality, original work on their own (College Board).

Generative AI is not verifiably reliable.

Since its creation, Generative AI has failed to produce consistent results when verifying information (Warner). If our students are using resources that cause them to have unverified information, puts them at risk of plagiarism, or provides entirely false information, there is a major issue facing students’ writing. Generative AI “algorithms might be trained on biased datasets, leading to discriminatory outcomes” (Marais). If our students become reliant on the use of Generative AI in their research, these biases can become widespread and accepted in the minds of young learners. Nina Schick describes Generative AI as a major threat to democracy; stating “there is huge excitement around generative AI, it is simultaneously raising critical concerns around information integrity and brings into question our collective capacity to adapt to the pace of change.” If our students become reliant on this technology during their critical synthesis process, this will be a major influence in their belief systems. False information has become more present in our society than ever before, and it is affecting the

way people view the world (Ahmed). Their research states that, even with the help of AI fraud detection, over 5.5 million instances of misinformation were recorded on Twitter as of 2019 and this number continues to rise on this platform and others like it. As educators, we must ensure that we encourage our students to participate in conducting their own research without reliance on Generative AI so that they can produce authentic and verifiable research.



Back in Time
Corbin Menz

Solutions

Discussion-based learning allows teachers to focus on natural language learning processes while emphasizing important reading and writing fluency skills (Zutell). Discussion-based learning models such as seminars should aim to “break down traditional teacher roles and encourage students to talk and write about their experiences, their knowledge, and their opinions on a variety of issues” (Murphy). As educators, it is our job to structure these discussions

to be safe, productive, and inclusive. Examples of rules include respecting the thoughts of others, practicing courtesy, and engaging with the conversation, even when not speaking.

Having a set of rules in place that reflect these values will create an environment where students feel welcomed to participate without fear of judgement and ridicule. Next, teachers should consider the design of their learning environment. Thoughtful classroom layouts promote conversation and increase the

ability for student interaction (O’Hare). Lecture-style layouts put the teacher front and center in the room, allowing them to dominate the conversation. Moving desks to create a layout where student-to-student interaction is the focus will boost the productivity of discussion-based models. Students should have the ability to take notes and access literature while participating in discussions and their workspaces should accommodate these needs.

While we should not write off Generative AI entirely, it is important for educators to emphasize it is a tool to aid in literacy processes; not a tool to replace human effort. The world is not pausing its technological advancements any time soon, so teachers must continue to adjust and overcome these ever-changing obstacles. In my experience, students have a difficult time differentiating between using Generative AI to produce answers and using it to guide them through the learning process. Proper modeling and Generative AI knowledge on the teacher’s part will eliminate confusion for the students about how Generative AI can be used in the classroom. Generative AI can be beneficial for providing background knowledge for specific literature, locating conventions errors in the editing process, and other preparational strategies. However, it is important for teachers to emphasize the difference between using Generative AI as a tool and using it to produce finished work. The world is continuing to become more technologically advanced, so it would be unfair to deny students access to technology in their learning process. The safeguards and methods imposed by the teacher allow technology to be utilized as a resource and not depended on for solution production.

Discussion-Based Learning

Coulson describes the performative decline of English students throughout the twentieth century. Traditional methods began to prove themselves ineffective in continuously developing and modernizing classrooms. For example, California scores showed decline in 1994 after a reduction in phonics and structured direct teaching (Coulson). A diverted focus from oral instruction methods showed a decline in student performance. David Yamane states, “to foster student involvement we must transform classes from the traditional model based on lectures to an interactive model based on thinking, writing, discussing, and problem solving.” Nineteen years later, with the same problems showing in our

classroom, it is time for a thoughtful reevaluation of English education methods to fully address the issues in the classroom. Discussion-based models have shown to lead to an increase in “creating a democratic culture and sense of ownership,” “fostering student engagement,” and “helping students learn information” (Yamane). With proven results in these areas, it is evident that discussion-based models are an integrable method to address current issues in English education.

The argument for discussion-based models has developed over the twentieth and twenty-first centuries. Aurthur N. Applebee’s study showed that “the most effective curricula were organized around specific topics that unified the reading, writing, and discussion that took place over a semester.” Access to discussion-based models has not always been an equitable pedagogy. Students in higher levels of tracking received more access to discussion-based models than their lower-tracked counterparts (Applebee et al). The best way to negate this issue would be to implement a curriculum-wide shift to discussion-based models that promote discourse among students of all levels. Applebee reports that the study on the effects of discussion-based approaches on English classroom performance showed “when students’ classroom experiences emphasize high academic demands and discussion-based approaches to the development of understanding, students internalize the knowledge and skills necessary to engage in challenging literacy tasks on their own” (Applebee et al). When students are asked to critically synthesize literature for discussion, they develop the skills that allow them to act as critical thinkers in discussion-based forums. This translates to the democratic, social skills needed in real-world conversations, debates, and information synthesis. Robert T. Oliver introduced four achievements made possible through discussion-based learning in the English classroom. First, he states, “[group discussion] helps educate the students so that they may express what they know, believe, and feel with effectiveness, with personalized adaptation to the particular audience and situation” (Oliver 87). In situations where students might not possess the facilities to adequately articulate or write their thoughts on literature, the discussion-based model provides the framework to work through these conclusions on a situational basis. Second, Oliver writes, “[group discussion] helps to awaken the interest of those

who are slow learners and to provide additional stimulation for the quick-witted and also for those who think deeply but are slow in bringing their knowledge into focus” (Oliver 87). In the discussion process, students can respond immediately, process the discussion and then respond, or listen with the intent of processing the discussion around them to create a holistic understanding. This benefits learners of all performance levels. Whether students choose to actively participate, moderately participate, or purely listen, students of all learning styles have a positive way to learn through discussion-based models. While some “quick witted” students may unintentionally dominate discussion or “deep thinkers” may share less due to intrinsic thought, it is up to the teacher to structure and moderate the discussion in a way that, both, moves the conversation along in a focused manner and develops the conversation so that the students are able to dive deeper into the content (Yamane). This leads to the third achievement where Oliver describes discussion-based models as “a constant check on the work being done by the students and on the depth and clarity being done by the students and on the depth and clarity of their understanding of the subject matter” (Oliver 88). When teachers observe classroom discussions in the moment, they can understand the level of understanding the students are currently at and then lead the conversation that focuses on developing further understanding in the intended direction. Finally, Oliver writes that a classroom discussion model “encourages toleration for the views of others and the respect for factual accuracy” (Oliver 88). When students are focused on providing accurate information, their ability to research and write supported arguments will also increase. Facilitating structured discussions will benefit students with developing support in their writing as well as finding meaningful data to use as support. These four achievements reached through discussion-based models show that both an increase in understanding and fluency are achievable.

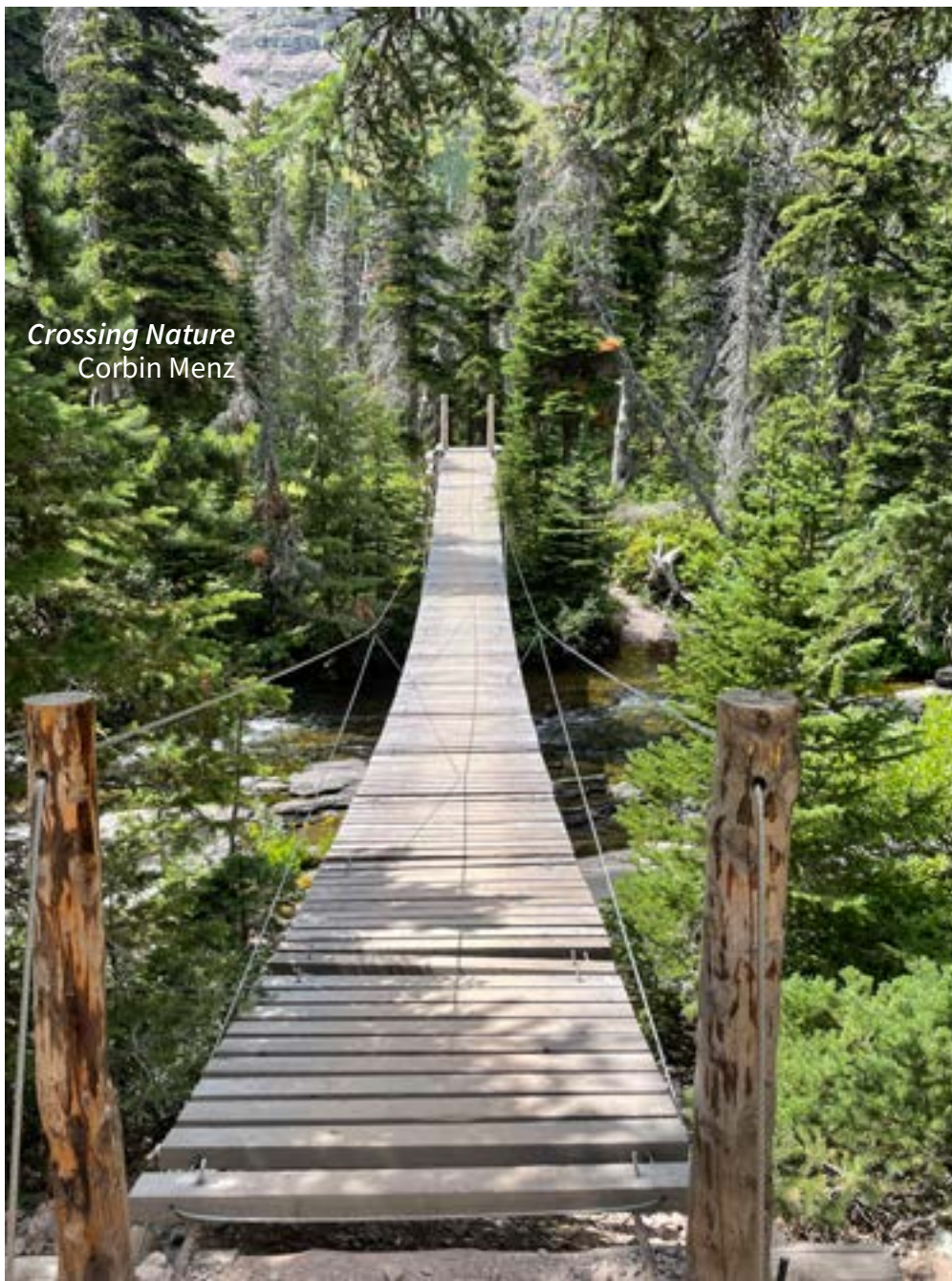
When students are held to this standard of finding relevant, factual support, they will often have to read quotes from the literature in discussion. This benefits both reading and oral fluency. Timothy V. Rasinski writes, “providing feedback to students after read orally can facilitate growth in fluent reading” (Rasinski). Not only can the teacher address the critical synthesis of literature through discussion, but they can also address the students’ level of fluency. When

the teacher introduces a topic of discussion, they will often read from a passage in the literature. This is an impactful method because “support is achieved through the student hearing a fluent rendition of a passage while simultaneously reading the same” (Rasinski). At any level, the students will continue to develop their level of fluency when following along to guided reading in the learning or discussion process. The discussion model allows students to make claims, develop them, then face critique or development. In this process, students will display their level of fluency and understanding of the current literary topic. Rasinski argues that “the reader benefits from a formative critique of his or her reading and the student critic benefits from a heightened metacognitive sense of what it means to be a fluent reader” (Rasinski 691). A student’s fluency is tested in the discussion-based model through the process of reading, synthesizing the literature to make a claim, finding in-text support for that claim, and presenting the claim to others. In addition to this, they are also developing fluently through their ability to process other’s claims and critique them based on varying understandings of the respective literature. The demand to articulate both thoughtfully and clearly in the discussion process causes the student to develop their reading and oral fluency.

Jerry Zutell and Timothy V. Rasinski described the importance of attending to students’ oral fluency. They describe oral fluency as a topic that does not receive the attention it deserves in English classrooms. Since traditional lecture methods were the standard in English classrooms when this article was written, it is evident that these models were neglecting the oral fluency needs of English students. These authors describe fluent oral reading as “fairly effortless,” while readers can “group or ‘chunk’ words into meaningful phrases and clauses”, and “readers use pitch, stress, and intonation appropriately to convey the meanings and feels they believe the author intended” (Zutell & Rasinski). The discussion model requires students to read literature, associate the literature with a claim, and find supporting evidence within the literature; all three of these processes build upon oral fluency techniques. When students must read, synthesize, then orally describe their point, they are not only building their reading fluency skills but also practicing oral fluency skills. A transition to this model will combat the declining progress of English students, address the lack of focus on oral fluency, and provide

the framework for teachers to build these fluency-based skills.

When students participate in oral discussions, they can tailor their response to a specific audience in comparison to the transcendent, objective nature of writing (Olson). With practice, students can direct their discussion responses to positively cite literature, address their audience, and fluently portray their thoughts to their peers. Olson argues that speech allows the author to maintain intended meaning. Traditional lecture methods that evaluate purely on written synthesis can lose the author's intended message, leave no room for development post-submission, and remove the ability for critique and defense. A transition to discussion-based classroom models provides an opportunity to address the holes in pure written synthesis. Allowing students to work through their thought process in the discussion forum will cause them to work through reading and oral fluency methods to create a product that is both articulate and developed. The orality aspect of classroom discussions will cause students to purposefully create holistic responses that can withstand basic criticism and argument. These skills will transcend into the student's ability to critically engage in multiple aspects of society. If this discussion process becomes integrated with the discussion process in young students, they can apply the same techniques to real world conversations. This will lead to an increase in critically thinking, engaged adults that are able to tailor their conversation depending on who they are speaking to and where they are speaking. Olson raises the point that most written documents of importance are subject to oral discourse. He writes, "written texts find their place in discourse communities, whether home, church, state, or academic discipline" (Olson). If oral discourse is a common associate of written text, why are current classroom models not fit to meet the



Crossing Nature
Corbin Menz

needs of this association? Teacher-centered classroom models that do not inspire student contribution rob young learners of their opportunity to develop discourse on various topics in a safe and structured environment. A benefit to the inclusion of classroom discussion comes from the understanding that "one's 'written vocabulary' vastly exceeds one's 'speaking vocabulary'" (Olson). By demanding that students switch from a purely written synthesis-focused model to a discussion-based model, teachers will be able to expand and develop students' speaking vocabulary. Oral fluency is a skill that does not benefit young learners independently. Oral fluency development has been proven to support silent reading fluency (Seok &

DaCosta). With a correlation between the two, a new method that utilizes oral fluency and reading fluency would be more beneficial than current, traditional methods. Seok and DeCosta concluded that a focus on well-developed oral fluency skills improves the ability to work independently during silent reading scenarios required in the secondary and postsecondary classroom. With many high-level English classrooms requiring sustained periods of independent reading, it is important that student engagement does not decline in the classroom. Research proves that the inclusion of discussion-based pedagogy leads to an increase in oral and reading fluency, yet most classroom structures still reflect traditional methods. There needs to be a collective reevaluation of the focuses and methods of English classes to address the declining performance of students. When methods proven to address these issues fail to make their way into curriculum, the students are denied access to the best pedagogy available to develop their young minds. It is imperative that teachers form a curriculum that reflects the needs of secondary classrooms and post-secondary environments (Seok & DaCosta, 2014). As educators, it is our fundamental duty to provide our students with the most effective pedagogy to meet the needs of their future demands. If the education system is blatantly rejecting a proven method that addresses our students' needs for comfortable and traditional methods, there needs to be an evaluation of complacency and effort.

Dan Burton and Dan Kirby introduce the idea that writing well is a process that requires revision and fine-tuning. This process is like a student fine-tuning their claim in a discussion through support and development. When students practice supporting their claims orally, they can develop their written claims deeply. The thought process required before making a vocal claim causes the student to stop, evaluate, and prepare to defend themselves. In writing, students will be conscious of potential discourse that would warrant a defense of their claim. By possessing a conscious awareness of opposition, student-writers can develop their writings in a deeper manner. They can produce work that will withstand surface-level critique. Like discussion, "writing is an active, thinking-filled event, the connections between writing and thinking are emerging as a topic for research and as a topic important to teaching techniques" (Burton & Kirby). The same processes facilitated through discussion are influential to

written fluency as well. When these methods are introduced to the classroom, literacy and fluency are complemented by the pedagogy (Applebee et al). Burton and Kirby advocate for writing strategies that allow the author to produce thoughtful ideas quickly. These are the same strategies emphasized by discussion-based classroom models (Oliver). With benefits to reading, oral, and written fluency, discussion-based classroom models show their effectiveness in addressing the declining academic performances from students. Victoria Purcell-Gates argues that oral and written language are constantly developing to reflect "sociocultural needs and contexts." It is a major issue if our educational practices relating to these topics are not equally developing. When students are presented with a pedagogy that reflects real-world benefits and scenarios, they are going to develop these fluency skills that expand beyond the classroom environment (Purcell-Gates). When education reflects the aspects and demands of social society, students can transcend their skills from classroom application to real-world use. Discussion-based models support the skills needed to perform effectively in these scenarios.

The implementation of a discussion-based model allows for English teachers to address the needs in which the current education system cannot. Through the discussion process, literacy skills relating to reading, writing, and speech gain emphasis. The critical thinking skills required from structured instruction relate specifically to the democratic, social skills required of productive adults. Instead of a teacher-centered, uncollaborative learning environment, the classroom discussion model allows students to develop holistic understanding through the sharing of thoughts, experiences, and analyses. A shift in focus from knowledge-retention and memorization to a critically based approach would allow students to utilize the many facets of analysis limited through pure written reflection. A transition to a new pedagogy may face opposition from traditionalists, career educators, and teachers that desire the spotlighted soapbox, but teachers determined to meet the needs of modern learners will overcome the resistance. In comparison to in-person requirements or recorded lectures, discussion-based models allow for in-person or virtual collaboration (Yu). A model that is not limited to environment, classrooms, or attendance allows for all situations to be accommodatable.

The discussion-based model provides solutions for the educational holes in the current, traditional pedagogy. With the constant development and advancement of our learners, our students require a system that can grow with them. The contrast to traditional, teacher-centered models provided by classroom discussions allows young learners to collaborate and reach holistic understandings of literature through the lenses of their experiences.

Teachers can prompt the discussion to highlight important, educational features, but students also work to create a meaning from the world as they view it. This leads to an increase in their ability to articulate their thoughts both orally and in written form. When students articulate literary synthesis orally and in writing, they have utilized facets of analysis overlooked by pure written reflection. Talking through thoughts and ideas allows students



Reflection and Ice
Wei Shan Lu

to articulate their discoveries clearly in the writing process. The discussion-based model increases strengths in reading, oral, and written fluency while creating students with a sense of democratic agency and identity.

References

Ahmed, M., Bachmann, S., Martin, C., Walker, T., Rooyen, J., & Barkat, A. (2022). False information as a threat to modern society: A systematic review of false information, its impact on society, and current remedies. *Journal of Information Warfare*, 21(2), 105–120. <https://www.jstor.org/stable/27199973>

Applebee, A. N., Langer, J. A., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Educational Research Journal*, 40(3), 685–730. <http://www.jstor.org/stable/3699449>

Bruton, D. L., & Kirby, D. R. (1987). Research in the classroom: Written fluency: Didn't we do that last year? *The English Journal*, 76(7), 89–92. <https://doi.org/10.2307/818661>

Burkins, J., & Yates, K. (2021). *Shifting the balance: 6 ways to bring the science of reading into the balanced literacy classroom*. Stenhouse Publishers.

College Board. (2025). *New research: Majority of high school students use generative AI for schoolwork*. <https://newsroom.collegeboard.org/new-research-majority-high-school-students-use-generative-ai-schoolwork>

Coulson, A. J. (1996). Schooling and literacy over time: The rising cost of stagnation and decline. *Research in the Teaching of English*, 30(3), 311–327. <http://www.jstor.org/stable/40171367>

Marais, E., Marais-Botha, R., & Coertzen, F. (2024). Constructing an artificial intelligence higher education environment: Guidelines for the future. In L. Wood & O. Zuber-Skerritt (Eds.), *Shaping the future of higher education: Positive and sustainable frameworks for navigating constant change* (pp. 173–192). Helsinki University Press. <http://www.jstor.org/stable/jj.21154984.16>

Marin, L., & Steinert, S. (2022). Twisted thinking: Technology, values and critical thinking. *Prometheus*, 38(1), 124–140. <https://www.jstor.org/stable/48676471>

McKeachie, W. (1999). *Teaching tips* (10th ed.). Houghton Mifflin.

Murphy, P. K., Wilkinson, I. A. G., Soter, A. O., Hennessey, M. N., & Alexander, J. F. (2009). Examining the effects of classroom discussion on students' comprehension of text: A meta-analysis. *Journal of Educational Psychology*, 101(3), 740–764. <https://doi.org/10.1037/a0015576>

National Literacy Institute. (2024). *2024–2025 literacy statistics*. <https://www.thenationalliteracyinstitute.com/2024-2025-literacy-statistics>

O'Hare, M. (1998). Classroom design for discussion-based teaching. *Journal of Policy Analysis and Management*, 17(4), 706–720. <http://www.jstor.org/stable/3325721>

Oliver, R. T. (1958). Group discussion in the English class. *The English Journal*, 47(2), 87–89. <https://doi.org/10.2307/808445>

Olson, D. R. (2006). Oral discourse in a world of literacy. *Research in the Teaching of English*, 41(2), 136–143. <http://www.jstor.org/stable/40171695>

Ong, W. J. (1982). *Orality and literacy: The technologizing of the word*. Routledge.

Purcell-Gates, V. (2006). Written language and literacy development: The proof is in the practice. *Research in the Teaching of English*, 41(2), 164–168. <http://www.jstor.org/stable/40039098>

Rasinski, T. V. (1989). Fluency for everyone: Incorporating fluency instruction in the classroom. *The Reading Teacher*, 42(9), 690–693. <http://www.jstor.org/stable/20200275>

Schick, N. (2023). Faking it: Navigating the new era of generative AI may be the most critical challenge to democracy yet. *RSA Journal*, 169(2(5593)), 40–43. <https://www.jstor.org/stable/48737215>

Seok, S., & DaCosta, B. (2014). Oral reading fluency as a predictor of silent reading fluency at secondary and postsecondary levels. *Journal of Adolescent & Adult Literacy*, 58(2), 157–166. <http://www.jstor.org/stable/24034707>

Warner, J. (2025). *More than words*. Basic Books.

Yamane, D. (2006). Course preparation assignments: A strategy for creating discussion-based courses. *Teaching Sociology*, 34(3), 236–248. <http://www.jstor.org/stable/20058490>

Yu, S. W. (2009). The impact of online discussion on face-to-face discussion and academic achievement. *American Secondary Education*, 37(2), 4–25. <http://www.jstor.org/stable/41406138>

Zutell, J., & Rasinski, T. V. (1991). Training teachers to attend to their students' oral reading fluency. *Theory Into Practice*, 30(3), 211–217. <http://www.jstor.org/stable/1476883>

HOW COVID-19 FUELED AMERICA'S PORNOGRAPHY EPIDEMIC



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ABSTRACT

COVID-19 significantly impacted the mental health trends of adolescents and young adults in America. The social isolation and increased dependence on technology intensified the widespread addiction of pornography. Statistical data showed that screen usage soared to 13.5 hours a day, making extended screen time a widespread coping mechanism that activates dopamine pathways to provide emotional relief. With the normalization of sexual content on non-pornographic sites, it acts as a gateway to dedicated pornography sites, fueling the cycle of loneliness during the lockdowns. The habits formed during the lockdowns normalized excessive screen usage and compulsive consumption patterns, making pornography addictions an ongoing issue

The COVID-19 pandemic has significantly altered daily life in the United States by fostering prolonged isolation and dependence on technology. While mandatory lockdowns were necessary to limit the viral spread, they also produced many unintended social and psychological consequences. Among the various consequences, there was a measurable increase in pornography consumption among adolescents (ages ten through eighteen) and young adults (ages nineteen through twenty-five). The pandemic-related isolation and extreme increase in media consumption contributed to increased rates of pornography use and addiction in a society where online sexual content was already being normalized on non-pornographic websites and streaming services. The issue of minors and young adults viewing pornographic material is not just a moral dilemma, but a concern for public health, mental health, and the ability to create important interpersonal relationships.

COVID-19, Mental Health Decline and Technology Dependence

Following its rapid spread from China beginning in late 2019, Covid-19 was declared a global pandemic by the World Health Organization on March 11th, 2020. By mid-2020, widespread lockdowns and social distancing measures were in place across the United States. By July 2020, national data began to show the psychological cost of prolonged isolation, particularly among young adults. Research consistently shows that the pandemic produced elevated rates of loneliness, depression, and anxiety. A report from Harvard's "Making Caring Common" project found that 61% of individuals aged 18-25 reported concerning levels of loneliness, a rate higher than any other demographic group. Additional studies confirmed that individuals who maintained frequent in-person social connections

experienced better mental health outcomes than those relying solely on remote or digital interaction. According to Rosenberg, "Those who maintained frequent in-person, but not remote, social and sexual connections had better mental health outcomes" (Rosenberg et al.).

According to Nielsen, data summarized by DigitalResponsibility.org, daily technology usage in the United States increased to 13.5 hours of screen time daily. While some of this increase was driven by legitimate needs such as working remotely, online education, and virtual communication, much of the increased screen time involved the passive consumption of streaming entertainment and social media content.

This extended screen time became a nationwide coping mechanism. Depression rates were astronomical, so motivation was difficult to sustain, even if it was for something as simple as turning off a device. It became easier for Americans to ignore their worsening mental health by using streaming platforms, social media applications, and online gaming as emotional relief. Neurologically, these activities activate dopamine pathways in the brain that are associated with reward. These pleasure-pathways were already under strain due to pandemic-related stress. In this environment, exposure to sexualized content became increasingly likely.

Social Media and Streaming Normalization of Sexual Content

The pandemic also coincided with increased social acceptance of sexualized online content on mainstream social media and streaming platforms such as TikTok, Netflix, Instagram, and Hulu: all applications that adolescents often use with minimal restrictions. Because these services prioritize content that generates engagement, algorithms frequently

promote content that blurred the lines between suggestive entertainment and explicit sexual material. Examples include sex-worker interviews reframed as indulgent lifestyle content, character roles portraying minors that engage in sexual acts, and emphasis on sexual appeal as a form of validation and/or income. (Oschatz et al., 2024, Table 1).

This data set is from a literature review on sexual agency and pleasure in Netflix content, the provided data gives a quantitative breakdown of the number of sexual scenes across several popular streaming series, all were accessible to watch during the COVID-19 lockdowns. While these shows are on the high-frequency sex scene side compared to the whole 2020 catalog, these titles were and are still easily accessible to adolescents. With Elite and Sex Education having characters who are minors (actors portraying characters were adults) engaging in sexual acts. When excluding children's programming and accounting for genre variation, a rough estimatesuggests an average ranging from 5 to 14 sexual scenes per non-children's title across the service.

Although this material does not always meet the legal definition of pornography, its widespread availability and normalization reduce barriers to more explicit content. Unlike traditional pornography, which is often labeled for adult audiences, sexualized social media and streaming content is easily accessible to minors. This exposure can act as a gateway, increasing curiosity, and lowering psychological resistance to seeking explicit pornography on dedicated websites.

Pornography Use During COVID-19

Empirical data supports a strong increase in pornography consumption during the pandemic. A 2021 study published in *PLOS ONE* found that Google search trends for pornography websites rose

	Total	Bridgerton	Dark Desire	Elite	Sex Education	Sex/Life	The Witcher	You
Year of Launch		2020	2020	2018	2019	2021	2019	2018
Number of Seasons	18	2	2	5	3	1	2	3
Number of Episodes	167	16	33	40	24	8	16	30
Average Duration of an Episode		60 min	35 min	50 min	50 min	45 min	60 min	45 min
Target Population		General	General	Teen	Teen	General	General	General
Genre		Drama	Drama	Drama	Drama	Drama	Fantasy Action	Thriller
		Romance	Thriller	Thriller	Comedy			
Original Language		English	Spanish	Spanish	English	English	English	English
Total Number of Sexual Scenes	323	16	88	67	53	52	5	42
Number of Mixed-Gender Sexual Scenes	271	16	87	35	41	48	4	40

Table 1, Sexual Content Across Shows on Streaming Services

significantly after late March 2020 and that traffic to major pornography websites positively correlated with rising COVID-19 case numbers.

Beyond this documented rise in consumption, researchers began to examine the social and psychological consequences associated with increased pornography usage. In particular, pornography usage and loneliness go hand in hand. 5 researchers at Brigham Young University conducted a pilot investigation of pornography use and loneliness, their findings stated: “technological advances of the last half-century have made media a dominant cultural and developmental presence, including scripting sexual relationship attitudes and behavior... Results from our analyses revealed significant and positive associations between pornography use and loneliness” (Butler, et al.).

Research also indicates that individuals may use pornography as a coping mechanism for social isolation, but excessive use ultimately reinforces loneliness rather than alleviating it. This creates a

alcohol. But with recent neuroscientific research, many behaviors have been classified as addiction. Such as internet usage, gambling, and pornography. Watching pornography produces unnatural increased levels of dopamine, which is a neurotransmitter that gives one a feeling of satisfaction, motivation, and pleasure: all the same neural reward systems as drugs and alcohol. These are all emotions many people lacked during the pandemic lockdowns.

Neurological Vulnerability of Adolescents and Young Adults

Studies indicate that adolescents are most susceptible to addiction because their brain is mostly dominated by areas focused on reward and pleasure. Adolescents are more sensitive to dopamine since their brain is at the peak of dopamine production and can react up to 4 times more strongly to elicit images. The prefrontal cortex, which governs impulse control, judgment, and long-term decision making, does not



Playing in the Water
Sadie Grove

self-reinforcing cycle in which pornography becomes both a response to and driver of social withdrawal, increasing risk of addiction.

The idea of addiction has mainly been centered around substance abuse such as drugs and

fully mature until approximately age 25. This can cause their brain to be rewired as it is developing due to the unnatural influx of dopamine.

Research published through BYU ScholarsArchive demonstrates that excessive pornography use is associated with reduced gray matter volume in the prefrontal cortex. This reduction impairs self-control and decision-making, resulting in it more difficult for individuals to regulate their behavior and can lead to increased susceptibility to compulsive use. Over time, users may develop tolerance, requiring more frequent or more extreme content to achieve the same neurological response, paralleling patterns of substance addiction.

Psychological and Interpersonal Consequences

Beyond the neurological damage pornography addiction can cause, the compulsive urge to watch often generates intense feelings of guilt, shame, and embarrassment. These emotions can lead to low self-esteem and contribute to internalized self-criticism, depression, and anxiety. Since adolescents are still forming their moral and social identities, viewing pornography may conflict with familial, cultural, and personal beliefs, creating significant internal tension between their behaviors and how they believe they are expected to act. Many adolescents feel unable to stop watching, which further intensifies guilt and can compound feelings of self-disgust, self-hatred, and shame, making them more likely to engage in compulsive hiding behaviors instead of seeking help. In some cases, these overwhelming emotions may also create a desire to self-medicate, increasing the risk of substance addiction, thoughts of self-harm, and suicide. These effects further exacerbate preexisting mental health challenges, many of which were already intensified during the COVID-19 pandemic. Pornography also distorts perceptions of intimacy and relationships. Repeated exposures to unrealistic or aggressive sexual content can create unhealthy expectations regarding sex, emotional connection, and consent. In real relationships, this distortion may manifest as decreased intimacy, dissatisfaction, mistrust, and emotional disengagement. These outcomes are particularly concerning for young adults preparing for long-term partnerships, professional responsibilities, and leadership roles.

Pornography Addiction and Positive Sexual Assault Correlation

“...96% of sexual and physical aggression [in pornography] scenes portrayed women expressing pleasure from the aggression...the nature of the scenes depicted in mainstream pornography, and the frequency with which men consume pornography, may contribute to a culture that supports both physical and sexual intimate partner violence towards women” (Brem et al.). Research shows a positive correlation between pornography addiction and the perpetration of physical and sexual violence. When consuming content that portrays sexual violence as pleasurable, the brain processes it fundamentally differently than when it is depicted as harmful and traumatic. If a violent act is paired with sexual arousal or pleasure cues, the Mesolimbic Dopamine Pathway releases dopamine that reinforces the behavior as rewarding even when the act itself is harmful and threatening.

Cognitive scripts and learning theory explain this form of neural conditioning as: the brain builds templates for what sex looks like when consuming violent pornography, who has power, and how that content is expressed. The brain learns resistance gives pleasure; coercion leads to rewards, and there is a lack of and often times no consequences for these violent actions. These scripts can shape abhorrent expectations, influence violent fantasies, and lower perceived barriers to harmful behavior.

Repeated exposure to violent pornography leads to reduced emotional response to violence, increased tolerance for coercion, and seeking stronger stimuli for the same arousal. When violence is portrayed as pleasurable, the consumer’s distress cues are minimized and sometimes even absent from the Medial Prefrontal Cortex and Insula (parts of the brain that process others’ pain). Empathy circuits are insufficiently activated, and pain signals are cognitively rewired to be “desired” or “acceptable,” weakening natural inhibition against harming others. While there is no data to support the average age of perpetrators who commit sexual assaults, most victims are between the ages of 12-34. 1 in 5 women experience rape or sexual assault in their lifetime, with over 50 percent of assaults being done by an intimate partner.

Conclusion

The increase in pornography use during the COVID-19 pandemic was not an isolated phenomenon, but the predictable result of prolonged quarantines, increased technology dependence, and widespread exposure to sexualized content. These effects did not end when lockdowns were lifted. Weakened social connections and exposure to sexualized content persist today, particularly among adolescents and young adults who came of age during the pandemic. With the impact of social media and streaming services portraying increasingly more sexual and

erotic content, most have become desensitized to seeing this kind of content, either interacting with or simply ignoring it. Through this societal acceptance, there has been a lack of understanding of how it has affected teens and young adults.

For many, habits formed during prolonged isolation have normalized excessive screen use and compulsive consumption patterns, making pornography addiction an ongoing issue. Today, these trends still directly affect mental health, interpersonal functioning, and individual discipline. Research continues to show associations between excessive pornography use, impaired impulse control,

increased loneliness, and distorted expectations of relationships and intimacy. Reduced self-control, decreased relationship stability, and unresolved mental health stressors undermine readiness and long-term leadership development. It also creates an alarming spike in the likelihood of committing sexual crimes.

Occasionally watching pornography when one is of age is not the pressing issue. Pornography becomes exceedingly obscene when the content becomes dangerous. It reveals itself as addictive when one cannot go for extended periods of time without engaging with sexual content. It becomes increasingly unprincipled when it is accepted on non-

pornographic websites or apps. It becomes illegal when people under the age of 18 can access a pornographic website without any hassle or restrictions. It becomes externally detrimental when one develops desires/intentions of sexually harming another person.

Addressing this issue in the present context requires acknowledging pornography addiction as a behavioral and public health concern shaped by technology and algorithms, not only individual choice. With the widespread social acceptance of sexual content, pornography addictions have become an epidemic in America. As the author of this article, a former best friend developed a pornography addiction due to unlimited and unrestricted internet access; it ruined their life at the age of 14. They are on a government registry for the actions they decided to commit when they were at the peak of their addiction.

Preventative education, enforceable access controls, and institutional awareness are a necessity to counter trends that were accelerated by the COVID-19 pandemic and remain embedded in digital culture. It is better to go to harsh lengths to prevent a child

from going down a pornographic rabbit hole than have them develop a pornography addiction from being able to easily access sexual content.

References

Brem, Meagan J, et al. "Problematic Pornography Use and Physical and Sexual Intimate Partner Violence Perpetration among Men in Batterer Intervention Programs." *Journal of Interpersonal Violence*, U.S. National Library of Medicine, June 2021, pmc.ncbi.nlm.nih.gov/articles/PMC6942232/.

Butler, Mark H et al. "Pornography Use and Loneliness: A Bidirectional Recur sive Model and Pilot Investigation." *Journal of sex & marital therapy* vol. 44,2 (2018): 127-137. doi:10.1080/0092623X.2017.1321601

Kasey, Moore. "Netflix Library by the Numbers 2020." *What's on Netflix*, 1, Jan. 2021. www.whats-on-netflix.com/news/netflix-library-by-the-numbers-2020/.

Carberg, Chris. "Porn Addiction Effects: Short and Long-Term Effects of Porn Ad diction." *Addiction Help*, 21 Oct. 2023, www.addictionhelp.com/porn/effects/#:~:text=Porn%20addiction%20can%20lead%20to,and%20avoidance%20of%20social%20situations.

Cashin, Ali. "Loneliness in America: How the Pandemic Has Deepened an Epi demic of Loneliness — Making Caring Common." *Making Caring Common*, 20 Oct. 2022, mcc.gse.harvard.edu/reports/loneli ness-in-america.

Council on Recovery. "How Pornography Affects the Teenage Brain – an I nfo graphic." *Council on Recovery*, 20 July 2021, www.councilonre covery.org/how-pornography-affects-the-teenage-brain-an-info graphic.

"Is Pornography Use Increasing Loneliness, Particularly for Young People?" *Institute for Family Studies*, ifstudies.org/blog/is-pornogra phy-use-increasing-loneliness-particularly-for-young-people.

Katella, Kathy. "Our Pandemic Year—A COVID-19 Timeline." *Yale Medicine*, 9 Mar.2021, www.yalemedicine.org/news/covid-timeline.

Lau, Way Kwok-Wai, et al. "Impact of COVID-19 on Pornography Use: Evidence From Big Data Analyses." *PLOS ONE*, vol. 16, no. 12, Public Library of Science, Dec. 2021, p. e0260386. https://doi.org/10.1371/journal.pone.0260386.

Lcsw, Amber Biello-Taylor Cap. "Why Is Porn Addictive? - Addiction Center." *Addiction Center*, 26 Oct. 2023, www.addictioncenter.com/drugs/p orn-addiction/why-is-porn-addictive/#:~:text=When%20some one%20watches%20pornography%20excessiv ely,gives%20 it%20pleasure%20and%20stimulation.

Muller, Kendra J. "Pornography's Effect on the Brain: A Review of Modifications in the Prefrontal Cortex." *BYU ScholarsArchive*, scholarsarchive.byu. edu/intuition/vol13/iss2/2/#:~:text=Pornography%20use%20 has%20 been%20shown,pornography%20use%20can%20be%20addictive.

Oschatz, T., Döring, N., Zimmermanns, C. et al. Women's Sexual Agency, Plea sure, and Orgasm in Popular Netflix Series: A Quantitative Content Analysis of Mixed-Gender Scenes. *Sex Roles* 90, 1534–1549 (2024). https://doi.org/10.1007/s11199-024-01519-5

O'Sullivan, Roger, et al. "Impact of the COVID-19 Pandemic on Loneliness and Social Isolation: A Multi-Country Study." *International Journal of Environmental Research and Public Health*, vol. 18, no. 19, Multidisciplinary Digital Publishing Institute, Sept. 2021, p. 9982. https://doi.org/10.3390/ijerph18199982.

Pornography Addiction – Student Counseling Center | UT Dallas. counseling. utdallas.edu/resources/pornography-addiction.

Rosenberg, Molly, et al. "Depression and Loneliness During COVID-19 Restric tions in the United States, and Their Associations With Frequency of Social and Sexual Connections." *medRxiv the Preprint Server for Health Services*, May 2020. medrxiv.org, https://doi. org/10.1101/2020. 05.18.20101840.

"Technology Addiction During the Pandemic — Digital Responsibility." *Digital Responsibility*, www.digitalresponsibility.org/technology-ad diction-during-the-pandemic.



Whisper of the Marsh
Corbin Menz

THE GRAMMAR OF GRIEF



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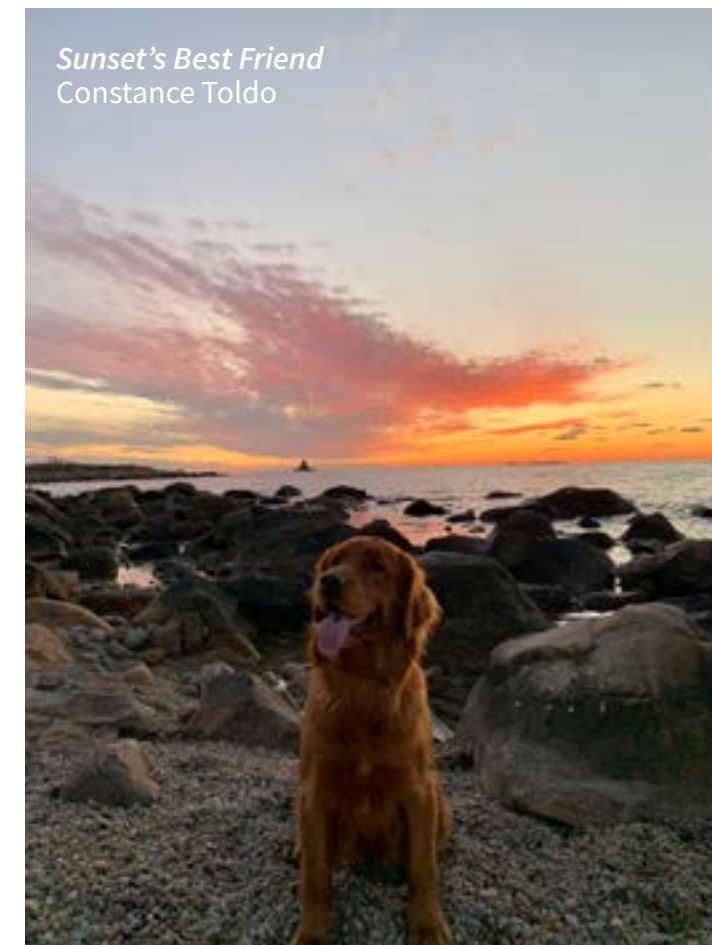
ABSTRACT

Britain's world wars forged a powerful "grammar of grief," a cultural language through which private bereavement became public meaning. The intertwined insights of Winter, Gregory, Gullace, and Noakes reveal how industrialized loss unsettled Victorian mourning. New rituals, from the Cenotaph to the Unknown Warrior, structured collective sorrow. Gendered and emotional citizenship shaped expectations of feeling. Together, these interpretations illuminate the making of Britain's modern commemorative culture and the enduring frameworks through which national grief is understood.

The historiography of mourning and remembrance in Britain during the two World Wars reveals a profound and lasting shift in how the British people viewed grief, expressed emotional duty, and forged collective memory. Although mourning had long-established cultural and religious forms, the unprecedented scale of wartime death forced the British to construct new symbolic languages capable of addressing mass loss. Historians Jay Winter, Adrian Gregory, Lucy Noakes, and Nicolette Gullace approach these developments from different but complementary directions, and together they help reveal the inception of a distinctively British "grammar of grief" – a structured set of emotional norms, civic rituals, and gendered expectations that shaped both public commemoration and private bereavement. Their work shows that the period from 1914 through 1945 was not merely a time of immense suffering but a crucible in which modern British remembrance took shape. Although more recent conflicts, such as the War in Afghanistan, reveal the longevity of these patterns, historians have located the formative moment in Britain's culture of mourning above all in the First and Second World Wars. The central historiographical questions that follow from this work concern how mourning has been examined, the approaches used to analyze it, where scholars disagree, and how the study of grief and remembrance has evolved over time.

The four core historians considered here have each framed the problem of mourning in distinct ways. Winter approaches it primarily as a cultural historian, asking how inherited languages of faith, ritual, and representation enabled the bereaved to articulate grief in ways that resonated with shared cultural expectations. Gregory, by contrast, foregrounds questions of power and social discipline, treating commemorative practices as part of a wider politics of consent in wartime and its aftermath. Gullace's work shifts attention to the gendered distribution of

grief, showing how ideals of maternal sacrifice and masculine self-control shaped who was authorized to mourn and on what terms. Noakes extends this gendered perspective into the Second World War and introduces the concept of emotional citizenship, arguing that societal classes and communities sought not only bodies and labor from their populations but also particular kinds of emotional responses. Read together, these approaches provide a range of answers to the central questions posed: they demonstrate how mourning has been studied, the methods employed to interpret it, where interpretations diverge, and how the field has evolved from a focus on ritual



Sunset's Best Friend
Constance Toldo

and representation toward an integrated history of politics, gender, and emotion.

Victorian and Edwardian Britain entered the First World War with an elaborate repertoire of mourning practices. Funerals, mourning dress, prescribed periods of withdrawal from society, and a rich language of Christian consolation structured bereavement, especially for the middle classes. Winter argues that these late nineteenth-century traditions provided "a reservoir of symbols" through

which the bereaved of 1914-1918 could articulate their sorrow.¹ Gregory likewise emphasizes that pre-war mourning was "largely domestic and familial," rooted in the stability of household and parish.² These practices were also deeply gendered. Women, especially mothers and widows, were expected to express their feelings and curate memorial objects; men were expected to demonstrate restraint. The gendered distribution of emotional labor meant that, when war came, they already possessed a moral map of how grief was to look, even if the scale of loss quickly exceeded what these patterns had been designed to bear. In this way, the historian's emphasis on pre-war culture underscores that the subsequent invention of national rituals did not emerge in a vacuum but out of a dense field of pre-existing assumptions about emotion, religion, and class.

Industrialized warfare nevertheless destabilized this inherited order. The industrialized killing of the Western Front, the inability to recover bodies, and the anonymity of many burials meant that the basic assumptions of Victorian mourning—presence, the grave, the family funeral—could no longer be guaranteed. Gregory stresses that "the normal rituals of grief were dislocated" by these conditions, forcing families and officials alike to seek substitutes.³ Winter, however, insists that this search did not break with the past so much as rework it. Bereaved families and local communities turned to names carved on village memorials, cenotaphs, and religious services that blended traditional liturgy with the new language of sacrifice and nation.⁴ In his reading, the First World War prompted a creative re-deployment of older spiritual and cultural resources to meet the demands of mass death.

The unveiling of the Cenotaph in Whitehall in November 1920 exemplified this new public language of grief. Contemporary reporting in *The Times* described the flags falling away to reveal the monument as "clear and wonderful in its naked beauty" and suggested that for a moment it seemed

¹ Jay Winter, *Sites of Memory, Sites of Mourning: The Great War in European Cultural History* (Cambridge: Cambridge University Press, 1995), 5.

² Adrian Gregory, *The Last Great War: British Society and the First World War* (Cambridge: Cambridge University Press, 2008), 38.

³ Gregory, *Last Great War*, 68.

⁴ Winter, *Sites of Memory*, 29-33.

as if time had stopped.⁵ Even in a brief excerpt, this language conveys the solemnity and ritual stillness that defined the ceremony. Winter reads the Cenotaph and the annual Two Minutes Silence as part of a wider “sacralization of the nation,” in which silence and

society strained by class conflict, political unrest, and the memory of industrial slaughter.⁶ He is particularly interested in how apparently spontaneous practices such as the nationwide pause on Armistice Day were in fact carefully coordinated and promoted, and in how they tended to marginalize more critical or dissenting responses to the war.

The burial of the Unknown Warrior in Westminster Abbey on the same day further consolidated this emerging commemorative order. Unknown bodies had been a central problem of the war; the creation of a single unidentified soldier, buried at the heart of the nation’s sacred space, offered what Winter calls a “democratized grave” for the missing, one in which any family might imagine its own son.⁷ Gregory agrees about its unifying power but underlines the choreography of monarchy, church, and people, a carefully managed performance of national unity.⁸ The contemporary press makes clear how powerfully this new symbol worked. A bereaved mother writing to *The Times* explained that, as she watched the internment, she felt as though her son “had come home” and that, for mothers, the Unknown Warrior “is ours.”⁹ Gullace takes precisely such language as evidence of the centrality of maternal grief to Britain’s moral understanding of the war. In her view, the figure

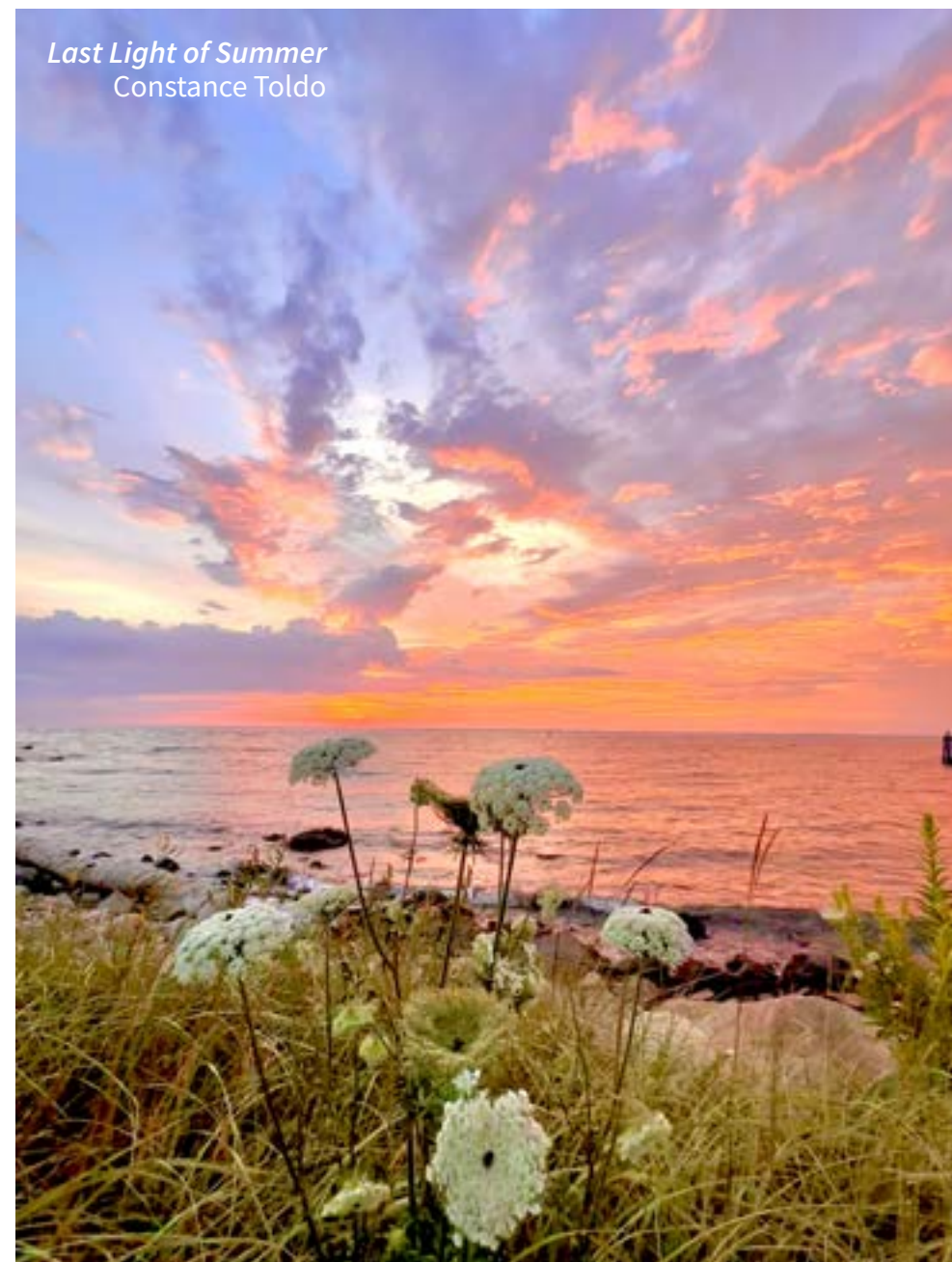
of the mourning mother, dignified, patriotic, and self-sacrificing, became the emotional counterpart to the fallen soldier and helped define who counted

⁶ Gregory, *The Last Great War*, 200.

⁷ Winter, *Sites of Memory*, 78-80.

⁸ Gregory, *Last Great War*, 200.

⁹ “Letter from a Bereaved Mother,” *The Times*, 12 November 1920, 6.



Last Light of Summer
Constance Toldo

stone provided a quasi-religious frame for mourning. For him, such rituals show that the bereaved did not abandon older religious idioms but relocated them to a civic setting. Gregory, by contrast, treats these rituals as deliberate acts of civic invention. In his view, the government and local elites crafted a “civil religion” of remembrance that helped to stabilize a

⁵ “The Cenotaph Unveiled,” *The Times*, 11 November 1920, 12.

as a good citizen in wartime.¹⁰ Her gendered reading illustrates one of the key shifts in the historiography—where Winter and Gregory focus chiefly on ritual and politics, Gullace brings the emotional experiences and symbolic uses of women to the center of the story. Gender, then, was not incidental to British mourning: it lay at its heart. Gullace argues that women’s grief was politicized, especially in recruitment and commemorative narrative, to deepen the legitimacy of sacrifice. Mothers who bore loss “well” were celebrated, while those who questioned the war risked being labeled selfish or unpatriotic. Men’s emotions were also regulated. Ideals of masculine self-control and stoicism shaped both soldiers’ and civilians’ behavior, making open despair suspect and sometimes even effeminate. These gendered norms, taken together, resemble what Lucy Noakes later describes for the Second World War as “emotional citizenship:” a set of expectations about how citizens should feel and show feeling in ways that supported the nation.¹¹ The shift from earlier social and political histories of commemoration to this more explicitly gendered and emotional analysis represents a significant development in how historians approach the topic.

By September 1939, Britain entered a second global conflict with a fully developed commemorative repertoire. The Cenotaph, the Tomb of the Unknown Warrior, and the Armistice silence were already embedded in national life. The Second World War, however, altered the social geography of grief. As Noakes has shown, this was a war “fought in the home as well as on the battlefield.”¹² The Blitz exposed civilians—women, children, the elderly—to the direct experience of bombardment and loss. The line between combatant and non-combatant blurred. With it, the boundaries of who might mourn publicly also blurred. Emotional norms of endurance remained remarkably consistent. Government propaganda and popular culture alike encouraged the British to “carry on,” to show courage and composure in the face of death. “Courage, rather than tears,” Noakes writes,

¹⁰ Nicolette Gullace, *The Blood of Our Sons: Men, Women, and the Renegotiation of British Citizenship During the Great War* (New York: Palgrave, 2002), 45.

¹¹ Lucy Noakes, *Dying for the Nation: Death, Grief and Bereavement in Second World War Britain* (Manchester: Manchester University Press, 2020), 4.

¹² Noakes, *Dying for the Nation*, 21.

became the ideal response to loss.¹³ Her work thus extends the gendered analysis of the First World War into a context of total war. This shows both continuity and change.

Noakes’ work highlights how these expectations were explicitly gendered. Women were pushed to remain cheerful, to maintain the home, to keep families together after bombing raids, and to accept the death of husbands and sons as part of a wider national struggle. Men, whether in uniform or in overalls, were expected to exhibit calm and reliability. In this context, emotional self-control was not merely a private virtue but part of being a good citizen. Noakes uses the language of “emotional economies” and “emotional citizenship” to capture how regulation of feeling operated alongside more familiar forms of wartime discipline.¹⁴ Winter, from a different angle, notes that the symbols of the earlier war, particularly the Cenotaph and the rituals of Armistice, did not lose their force in this new setting; instead, they were re-enlisted with meanings of civilian resilience and democratic endurance.¹⁵ Gregory similarly sees the Second World War as the moment when the commemorative forms created after 1918 became “naturalized,” taken for granted as part of the British identity rather than perceived as recent inventions.¹⁶ In different ways, it is explained that the Second World War confirmed and extended the commemorative culture that had been established during the First World War.

The monarchy also played a significant role in shaping this disciplined and gendered grief. Royal participation in commemorative events tied together elite and popular mourning. A telling example comes a decade after the Second World War, when Queen Elizabeth, the Queen Mother, spoke at the Bayeux War Cemetery. Reports record her urging the living to “never forget” and giving thanks for “courage” and “endurance.”¹⁷ Noakes’ framework helps explain the significance of such language. The Queen Mother embodied the idealized feminine sorrow, composed, dutiful, and grateful, offering a public script for how British women ought to carry their grief. In this sense, royal and civic rituals reinforced the emotional codes identified by Winter, Gregory, and Gullace. They

¹³ Noakes, *Dying for the Nation*, 38.

¹⁴ Noakes, *Dying for the Nation*, 41-44.

¹⁵ Winter, *Sites of Memory*, 226.

¹⁶ Gregory, *Last Great War*, 210.

¹⁷ “Queen Mother at Bayeux,” *The Times*, 7 June 1957, 8.

also suggest that, by the mid-twentieth century, remembrance had become a taken-for-granted element of national identity, its forms familiar even as its meanings continued to evolve.



Red Church
Wei Shan Lu

remembrance was shaped by the cultural turn in historical studies, seeking to recover the meanings that ordinary people attributed to loss through ritual, art, and religion. Gregory's interpretation, appearing only a decade later, responded in part to this approach by re-politicizing commemoration and insisting that historians pay closer attention to power, class, and institutional agency. Gullace and Noakes, writing in the early twenty-first century, build on both strands but redirect attention to gender and emotion, arguing that who was allowed to mourn, and how, was structured by assumptions about which emotions were appropriate for citizens to display. The direction of the field has thus been towards greater analytical complexity, away from seeing war memorials simply as documents of grief, and towards understanding mourning as a site where cultural meanings, political projects, and emotional regimes intersect. Contemporary works on memory and

Seen in this light, the evolution of the scholarship is itself revealing. Early work on

trauma, as well as on post-imperial and post-colonial Britain, are likely to further this trajectory, asking

how inclusive these traditions of remembrance truly are and whose losses they still fail to acknowledge.

Later conflicts reveal the endurance of this grammar of grief. During the War in Afghanistan, the Wiltshire town of Royal Wootton Bassett became an informal national focus for mourning as repatriation corteges passed through the center of town. Medio accounts describe the crowds standing in silence as hearses drove by, some weeping quietly, others simply bowing their heads; one BBC report remarked that it felt as if "time itself had paused."¹⁸ The resonance with descriptions of the Cenotaph unveiling in 1920 is striking. The core elements are the same—collective stillness, public visibility of the dead, and insistence on dignified, largely wordless sorrow. Winter's stress on the enduring power of symbolic forms helps explain this continuity, as does Noakes' concept of emotional citizenship; even in a very different kind of war, the British people naturally reached for familiar rituals and emotional postures. What has changed is less the form than the political context and tone. Where 1918 and 1945 were framed, however uneasily, as moments ended without triumph or clear narrative. Yet the way mourning was performed suggests that the emotional and symbolic structures forged in the world wars still help organize British responses to military death. From the perspective of the four questions posed, the pattern is now clear. Historians have examined morning not as a marginal topic but as central to understanding how the British made sense of total war, and they have done so through cultural, political, gendered, and emotional frameworks. Their approaches range from the analysis of rituals and monuments to the examination of state archives and political discourse, as well as the utilization of letters, diaries, and oral testimony to reconstruct lived experiences. They disagree over the extent to which commemoration should be read as spontaneous or controlled, and over whether it represents continuity with older religious worlds or as a decisive break toward a more secular "civil religion." The authors, however, converge on the claim that mourning has been a crucial arena in which the boundaries of the British state, and of citizenship within it, have been negotiated. The recent turn to emotions and everyday practices suggests that future work will

¹⁸ "Repatriation in Wootton Bassett," BBC News, 14 July 2008.

investigate further how grief was felt, constrained, and sometimes resisted, particularly by those such as colonial troops or conscientious objectors who have largely remained at the margins of the story.

The conclusion that emerges from this historiography is that British mourning during the world wars created a durable cultural structure that continues to shape national expressions of grief. Winter's emphasis on cultural continuity, Gregory's focus on civic ritual, Gullace's gendered analysis, and Noakes' exploration of emotional citizenship together reveal a commemorative tradition that is both constructed and deeply felt. The First World War introduced new forms, symbolic bodies, public silence, and national ceremonies that addressed mass death in unprecedented ways. The Second World War extended these practices to civilian life, reinforcing the emotional norms of stoicism and dignified sorrow. Later conflicts, though different in both scale and meaning, continue to echo this grammar of grief. Even as Britain has evolved, the emotional and symbolic structures established during the world wars remain central to the nation's identity. It is in this continuity and capacity for "re-invention" that the power of Britain's commemorative culture lies—a language of remembrance capable of bridging private loss and public meaning across a century of significant change.

References

- BBC News. "Repatriation in Wootton Bassett." BBC News. 14 July 2008.
- Gullace, Nicolette. *The Blood of Our Sons: Men, Women, and the Renegotiation of British Citizenship During the Great War*. New York: Palgrave Macmillan, 2002.
- Gregory, Adrian. *The Last Great War: British Society and the First World War*. Cambridge: Cambridge University Press, 2008.
- Noakes, Lucy. *Dying for the Nation: Death, Grief and Bereavement in Second World War Britain*. Manchester: Manchester University Press, 2020.
- The Times. "Letter from a Bereaved Mother." *The Times* 12 November 1920.
- The Times. "Queen Mother at Bayeux." *The Times*. 07 June 1957.
- The Times. "The Cenotaph Unveiled." *The Times*. 11 November 1920.
- Winter, Jay. *Sites of Memory, Sites of Mourning: The Great War in European Cultural History*. Cambridge: Cambridge University Press, 1995.

AFGHANISTAN: THE LAND OF CASH



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ABSTRACT

The US was involved in Afghanistan for two decades and had spent millions of dollars funding a war that left the country in disgrace. An analysis of the wasteful expenditure of the US and Afghan governments demonstrate the failures of reconstruction efforts in Afghanistan. With the return of the Taliban, questions arise: was the conflict worth it, and should we return to Afghanistan?

In the aftermath of the September 11 attacks, the US conducted military operations in Afghanistan to hunt and capture the mastermind of the attacks, Osama Bin Laden, and in the process, they overthrew the Taliban regime. The conversation about Afghanistan has reemerged as President Trump seeks to negotiate with the Taliban to occupy Bagram Airbase. The United States had stayed in Afghanistan for two decades, providing aid for an Afghan government that struggled to rebuild itself because of the large amount of government waste, corruption within the Afghan government, and double-dealing in Washington. These factors had led many people to question whether staying in Afghanistan was a lost cause, similar to Iraq. Reports of financial mismanagement and corruption during the occupation first came to light during the early days of the conflict, and more information has come out since the US left Afghanistan in disgrace in August of 2021.

Government waste has always been a problem within the US government; the war in Afghanistan is no exception to it. According to Brown University's Cost of War Project, it is estimated that \$2 trillion (Cost of War Project) was military and aid investment during the 20 years the US was in Afghanistan, with \$145 billion allocated for the Reconstruction of the country, according to the Special Inspector General for Afghanistan Reconstruction during the Biden administration. Out of that substantial allocation of money, \$19 billion (Foundation for Economic Education) had been wasted, according to the Foundation for Economic Education, and it can be narrowed down to the unsuccessful programs during the long stay, supplies ending up in the hands of the enemy, and the pollution the conflict generated. During the 20 years that the US was in Afghanistan, there were many aid and reconstruction programs whose funds were misused. In 2007, the United States Agency for International Development (USAID) started a program called the Afghanistan Vouchers



Traditional House
Wei Shan Lu

MOTIANI-RINCON

for Increased Productive Agriculture (AVIPA) with the primary purpose of incentivizing Afghan farmers to increase wheat production during a time period when the agricultural sector was hanging by a thread. On paper, the program was aimed to boost wheat production domestically and create short-term jobs, but it achieved the opposite. This program only crashed the local grain sector, as the free wheat and fertilizer from the program flooded the market, and many farmers abandoned farming since they couldn't compete against the farmers that were backed by AVIPA, causing wheat prices to collapse. This program cost the US taxpayer \$300 million, according to Prime Rouge Inc. Despite the failures of the program, "The agency poured more money into AVIPA, expanded operations, and celebrated it as a success" (Prime Rouge Inc), illustrating how fiscally irresponsible the US government had become during the reconstruction of Afghanistan. According to a former USAID official, David Marsden, he states that massive amounts of money and personnel going into Afghanistan was "...

like pouring a lot of water into a funnel; if you pour too fast, the water overflows the funnel onto the ground" (Washington Post), and the US was "flooding the ground" (Washington Post). With an overflow of money and a lack of accountability, the money sometimes ended up in the pockets of the enemy.

In warfare, the goal is to restrict the enemy's accumulation of resources like military hardware and access to financial resources to weaken and destroy enemy forces, but the US did the opposite in Afghanistan. In 2018, The Diplomat asked the Taliban's Spokesperson Zabihullah Mujahid how they were acquiring US-made weapons, and he stated that they have received "American weapons through many methods and also seize them from government soldiers in Kabul" and also through "personal links" (The Diplomat). Stolen American-made weapons are repeatedly replaced, only to be stolen again in an ongoing cycle. This cycle fueled the insurgency and allowed the Taliban to rearm its arsenal. According to the Special Inspector General for Afghanistan



Reconstruction, when the US withdrew in 2021, it is estimated that “at least \$7.1 billion in U.S.-funded defense articles and equipment” was left in Afghanistan (SIGAR 1.) According to CBS News, that’s “78 aircraft, 40,000 military vehicles and more than 300,000 weapons” was left behind (CBS News).

Government waste is usually an analogy describing financial fraud and abuse of the government, but the negligence could also be understood more literally as environmental pollution. In relation to the conflict in Afghanistan, a major issue would be the long-lasting effects of unexploded ordnance across the country. According to Stephanie Savell, director of Brown University’s Cost of War project, in 2019, it is estimated that “1700 square kilometers of Afghanistan’s land were contaminated by explosive remnants of war” and that it is estimated that “160 people per month were being killed by remnants of war” with a majority being children (Savell 30, 32). Unexploded munitions could detonate at any moment, inflicting more innocent casualties long after the conflict has ended. In addition, US bases caused huge contamination to their “surrounding environments with spills of oil and other toxic chemicals used in maintenance of military equipment, toxic ash, unexploded ordnance, and depleted uranium”(Savell 30) and the article, *Environmental Cost of US War in Afghanistan*, by Nazish Qureshi, reports that cleaning up the environmental waste from these bases has made the US spend an additional and unnecessary amount of “15 million USD”(Qureshi). Such contamination caused by the bases affected the air, the soil, and the groundwater of the surrounding area. Also, the large amounts of “exposure to burn pits has caused serious problems for US veterans” (Savell 30), as they increase the number of veterans needing help from the VA due to the health conditions they’ve been affected by exposure to the burn pits. This increases the number of veterans who seek help from the VA, which is already underfunded and overrun.

After ousting the Taliban, the US intended to install a new democratic government with the same goal to rebuild Afghanistan in a Western-style government, but corruption within the new government overtook that goal. This corruption created the so-called 9/11 millionaires and fueled kleptocracy within the Afghan government, who’ve lined their pockets with funds that were intended to

rebuild the country and to defeat the Taliban at the expense of the taxpayer.

The root of Afghan corruption began with a group of private individuals who’ve earned the phrase 9/11 millionaires, which comes from a CNBC article about how the US money contributed and fueled mass corruption within Afghanistan. The CNBC article, *‘9/11 millionaires’ and mass corruption: How American money helped break Afghanistan* states that these millionaires are “a tiny class of young, ultra-wealthy Afghans who made their fortune working as contractors for the foreign armies” (CNBC) and that many of them “exploited their family ties to government officials or provincial warlords in order to secure lucrative contracts” (CNBC). They would also secure these contracts through their connections with US personnel, many of whom started as interpreters working for the US. The 9/11 millionaires title didn’t only apply to the Afghan locals, but it also applied to officials of aid organizations as well. According to a Government Accountability Office report on the fraud, waste, and abuse during the reconstruction of Afghanistan, there was an instance where a UN Office for Project Services (UNOPS) official had diverted hundreds of thousands of dollars that were intended for reconstruction for “rent, a home renovation, and other luxury items” (GAO 9). Across Afghanistan, many people took advantage of the system that was in place, including government officials who profited from its own resources.

Afghanistan was never a democracy under the US, but more of a kleptocracy or a “form of government in which the leaders use their power to steal money and resources from the country they ruled” (Oxford), and it is exactly what happened in Afghanistan, especially when it comes to natural resources. Afghanistan’s rich mineral deposits make it prone to corruption and it is shown through “deliberately dismantled societal checks or established new regulations” to gain access to those resources, and

they would also “provide access to associates”(Atlas Institute). The Afghan government had sold off mineral rights to private entities to personally benefit themselves from this trade instead of using those resources to develop the country. With the abundant number of resources and the aid from the US, it would have been more than enough to rebuild and reconstruct itself, but the corruption within the Afghan government prevented such goals from being achieved. In the article, *The Karzai Administration: Challenges, Achievements, and Controversies* by Sahib Nazr Dashti, Dashti recalls how in 2011 the Kabul bank caused a financial epidemic in Afghanistan because of “over \$160 million into dubious real estate investments in Dubai”(Dashti 36). It is also reported that the individuals part of this scheme were connected to Afghanistan’s president at the time, Hamid Karzai,

and show that a small group of corrupt political elites will bail out those close to them, even if it is at the expense of the country’s citizens themselves.

Although corruption was a major problem within the Afghan government, the US was also affected by it, causing a lot of financial mismanagement within its own system. These mismanagements come in the form of prioritization of government contracts to certain companies, the large lobbying influence, and the overuse of no-bid contracts. Many of these problems came from many government officials having close ties with corporations and special interest groups.

Government bids are intended to create competition between companies at the lowest price, but during the war and reconstruction in Afghanistan, many government contracts, worth millions of dollars,



Lost on the Beach
Corbin Menz



Rock View
Wei Shan Lu

circulated amongst a selected group of companies. Companies such as Haliburton, Bechtel, International American products, Contrack International, Flour, Washington Group International, Research Triangle Institute, Louis Berger Group, and Creative Associates have contributed “nearly \$11 million to national political parties, candidates and political action committees since 1990,” indicating a preference shown by the Bush administration in its approach to awarding contracts (ICJI). Former Vice President Dick Cheney previously served as CEO of Halliburton before he was selected for VP. Also, according to an article called “Profits of War: Corporate Beneficiaries of the Post-9/11 Pentagon Spending Surge” by William D. Hartung, Lockheed Martin, Boeing, General Dynamics, Northrop Grumman, and Raytheon took up almost half the total sum of contracts that were estimated for about “\$2.1 trillion in Pentagon contracts”(Hartung 4). These longstanding institutions know how the system is played and use their influence in the federal

government to receive contracts that are pretty much guaranteed for them. They use their lobbyists to gain that influence in DC.

During the Afghan conflict, the lobbying industry skyrocketed with the enormous number of opportunities for companies to rewrite policy and gain government contracts. According to William D.Hartung, the defense industry has spent “\$2.5 billion on lobbying over the past two decades” (Hartung 20), which has led to the employment of “700 lobbyists per year over the past few years” (Hartung 20). This is more than one lobbyist per congressman. Not only that, but the revolving door has a significant influence, especially during the final years of the conflict. Secretaries of Defense such as James Mattis, General Dynamics, Patrick Shanahan, Boeing, Mark Esper, Raytheon, and Lloyd Austin, Raytheon, all have some kind of relationship with the military industrial complex as they had an executive position at the company or were board members of a company. It is reported that between 2014 and 2019,

50 different think tanks received “one billion dollars from weapons firms”(Hartung 21). This is influential because these think tanks create significant policies that many politicians push for.

No-bid contracts or noncompetitive contracts are intended to be used rarely but during the Afghan conflict, they became the staple of contracting companies, leading the US government to mismanage millions in taxpayer funds. During the Afghanistan War, this method of issuing no-bid contracts became overused. It is estimated that the number of no-bid contracts issued by the DOD has “ tripled since the United States was attacked on 9/11”(Independent Global News). The Invasion and occupation of Afghanistan intensified the need for immediate help for contractors, especially as they started to use them as soldiers. According to the Office of Inspector General, it is reported that 91 percent of contracts between October 2014 to June 2020 were awarded “to the incumbent contractor consecutively for more than 2 years” and that 64 percent of those contracts provided “programmatically support to the Afghan government”(OIG 1). This clearly shows that the majority of contracts given out by the State Department were usually given out to specific contractors instead of having open and equal competitions.

Overall, after two decades in Afghanistan and trillions of dollars, the mission was likely doomed from the start given the structures and constraints of existing Afghan and US institutions. These institutions were not prepared, nor were they willing to change to have a better outcome for the reconstruction of the country. If the democratic government in Afghanistan had not been caught up in corruption, then the country’s rebuilding would’ve gone much better and maybe even shorter. Since Afghanistan was ground zero for nation-rebuilding in the Middle East for the US, if they had not been heavily swayed by special interest groups, then there would probably be a better use for the funds. Also, if the US hadn’t invaded Iraq and occupied it, then the US could have solely focused on Afghanistan and would not have had the problem of diverting resources to another country. At the end of the day, with the return of the Taliban, all the efforts made by coalition forces were a squandered effort.

References

Bodetti, Austin. “How the US Is Indirectly Arming the Taliban.” The Diplomat, 13 June 2018, thediplomat.com/2018/06/how-the-us-is-indirectly-arming-the-taliban/. Accessed 10 Nov. 2025.

Brown University. “U.S. Federal Budget.” Cost of War | Brown University, 7 Oct. 2024, costsofwar.watson.brown.edu/costs/economic/us-federal-budget. Accessed 9 Nov. 2025.

Ellis, Nathaniel. “Political Risk, Corruption and the ‘Resource Curse’ in Contemporary Afghanistan | Atlas Institute for International Affairs.” Atlas Institute for International Affairs, 31 Jan. 2025, atlasinstitute.org/political-risk-corruption-and-the-resource-curse-in-contemporary-afghanistan/. Accessed 11 Nov. 2025.

Hartung, William. “Profits of War: Corporate Beneficiaries of the Post-9/11 Pentagon Spending Surge.” Costs of War | Brown University, 2021, costsofwar.watson.brown.edu/paper/profits-war-corporate-beneficiaries-post-911-pentagon-spending-surge. Accessed 11 Nov. 2025.

J.S, Kevin. “Top 10 Worst USAID Failures – No. 8: The AVIPA Debacle – How a \$300M Program Funded the Taliban and Wrecked Afghan Farming - Prime Rogue Inc.” Prime Rogue Inc - Intelligence Done Rogue, 22 Feb. 2025, primerogueinc.com/blog/usaids-top-10-failures-no-8-the-avipa-debacle-how-a-usd300m-program-funded-the-taliban-and/#google_vignette. Accessed 9 Nov. 2025.

McCloskey, Megan, et al. “We Blew \$17 Billion in Afghanistan. How Would You Have Spent It?” ProPublica, 17 Dec. 2015, projects.propublica.org/graphics/afghan. Accessed 9 Nov. 2025.

Now, Democracy. “U.S. Wasting Billions While Tripling No-Bid Contracts after Decade of War in Iraq, Afghanistan.” Democracy Now!, 2 Sept. 2011, www.democracynow.org/2011/9/2/us_wasting_billions_while_trippling_no. Accessed 12 Nov. 2025.

Office, Accountability. “Afghanistan Reconstruction: GAO Work since 2002 Shows Systemic Internal Control Weaknesses That Increased the Risk of Waste, Fraud, and Abuse.” Gao.gov, 9 Feb. 2021, www.gao.gov/products/gao-21-32r. Accessed 11 Nov. 2025.

Oxford. “Kleptocracy Noun - Definition, Pictures, Pronunciation and Usage Notes | Oxford Advanced Learner’s Dictionary at OxfordLearnersDictionaries.com.” Oxfordlearnersdictionaries.com, 2025, www.oxfordlearnersdictionaries.com/definition/english/kleptocracy#google_vignette. Accessed 11 Nov. 2025.

Qureshi, Nazish, and Nazish Qureshi. “Environmental Costs of US War in Afghanistan - Muslim Climate Watch.” Muslim Climate Watch, 29 June 2023, muslimclimatewatch.com/environmental-costs-of-us-war-in-afghanistan/. Accessed 13 Nov. 2025.

Robinson, Linda. “Our Biggest Errors in Afghanistan and What We Should Learn from Them.” Council on Foreign Relations, 22 June 2023, www.cfr.org/article/our-biggest-errors-afghanistan-and-what-we-should-learn-them. Accessed 9 Nov. 2025.

Sahib Nazr Dashti. “The Karzai Administration: Challenges, Achievements, and Controversies.” Spring Journal of Arts, Humanities and Social Sciences, vol. 3, no. 4, Apr. 2024, pp. 33–38, https://doi.org/10.55559/sjahss.v3i4.283. Accessed 11 Nov. 2025.

Savell, Stephanie. “How Death Outlives War: The Reverberating Impact of the Post-9/11 Wars on Human Health.” Costs of War | Brown University, 13 May 2023, costsofwar.watson.brown.edu/papers/how-death-out-lives-war. Accessed 11 Nov. 2025.

SPECIAL INSPECTOR GENERAL FOR AFGHANISTAN RECONSTRUCTION. “WHAT WE NEED TO LEARN: LESSONS FROM TWENTY YEARS OF AFGHANISTAN RECONSTRUCTION.” SPECIAL INSPECTOR GENERAL FOR AFGHANISTAN RECONSTRUCTION, Aug. 2021, pp. 1–140, www.sigar.mil/Portals/147/Files/Reports/Lessons-Learned/SIGAR-21-46-LL.pdf. Accessed 9 Nov. 2025.

The Portal: Foresight Studies on Islamist Studies. “Who Won in Afghanistan? Private Contractors.” Center for Middle Eastern Studies, 1 Jan. 2022, www.theportal-center.com/2022/01/who-won-in-afghanistan-private-contractors/. Accessed 11 Nov. 2025.

Washington Post. “The Afghanistan Papers: Read the Confidential Documents That Reveal a Secret History of the War in Afghanistan.” Washington Post, 13 Dec. 2015, www.washingtonpost.com/graphics/2019/investigations/afghanistan-papers/documents-database/?document=marsden_david_ll_05_a2_12032015. Accessed 10 Nov. 2025.

INSIDE CHINA'S INTELLIGENCE PLAYBOOK



Paul Cozart

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ABSTRACT

The People's Republic of China has established itself as a strong competitor, opponent, and enemy to the United States. As tensions continue to rise between the two nations and strategies are formed to aid in the power struggle between systems, Chinese espionage operations have become more apparent. As a near peer, China poses a unique threat to both the national security of the United States and the economic sector of American companies.

Introduction

College is a stressful time: for many it is the first point in their lives they are sent out on their own. Then they must adjust to their new responsibilities such as heavy coursework, club requirements, career planning, maintaining a social life, and of course, transnational espionage. Academic integrity is of the utmost importance to virtually every educational institution within the United States. Binding measures like honor codes and academic regulations ensure the sanctity of the student body. These protections are put in place to validate that the students' work is in fact theirs. However, there is little to validate that these students are who they say they are. A growing concern for United States national security experts is the increase in incidents involving Chinese students serving as intelligence agents for their home government.

The People's Republic of China has established itself as a strong competitor, opponent, and sometimes enemy to the United States. As tensions continue to rise between the two nations and strategies are formed to aid in the power struggle between systems, Chinese espionage operations have become more apparent. As a near peer, China poses a unique threat to both the national security of the United States and the economic sector of American companies. Present in many spheres of American industry, Chinese agents employ a variety of specialized methods designed to collect critical information.

A storied history has presented itself that includes human assets infiltrating the most secretive compartments of the United States governments and cyber-attacks that pry intellectual property theft away from highly valuable American based businesses. The Chinese intelligence apparatus plays a major part in the Xi Jinping strategy to undermine the United States as the global leader in technology, security, and economics. Unlike other countries China's intelligence organizations have been able to successfully adapt to the changing dynamic of intelligence gathering.

China's success in infiltrating the United States have been at the behest of multiple organizations.

These organizations include the Ministry of State Security, Minister of Public Security, Strategic Support Force, and the military intelligence forces. In response, the United States has moved to intercept and prevent future intelligence agents from permeating the United States' defenses. This effort has included dedicated action from the Federal Bureau of Investigation (FBI), and the larger Department of Justice umbrella, Central Intelligence Agency (CIA), National Security Agency (NSA), Cybersecurity and Infrastructure Security Agency (CISA), and the USCC which is the United States - China Economic and Security Review Commission. The wide selection of the responding US agencies is due to it the depth of the Chinese intelligence operation.

Background

China has long been considered behind the United States; however, the tides are turning to create what many are calling The China Century. This has pitted the Communist nation directly against its ideological adversary, the United States. After over a century of humiliation and painful growth, the People's Republic of China looks to undermine and overtake the US as the global leader. Using a methodological approach, the Peoples Republic of China (PRC) infiltrates the US' critical infrastructure both domestic and abroad, eroding American influence in developing nations and weakening the stability of networks at home. Amidst rumors of a cold war, Chinese intelligence services have greatedened

their workload in the interest of providing their nation the upper hand.

Chinese espionage operations in the United States are known to have started as early as the 50's with Larry Wu Tai Chin (金无怠). Employed by the CIA, Chin was tasked with translating foreign broadcasts and worked within the agency's joint research department. The depth of this security breach exposed the weak spots of the CIA during it's formative years. Through his job, Cin was exposed to information that extended to the highest degree of classification. Positioned in a room with then state-of-the-art equipment, Larry Chin had unrestricted access to premier information that allowed China powerful insight on what information the US was analyzing. His translation and interpretation were foundational in the CIA's assessment on the growing communist China. He was able to transfer the names of Chinese informants to the Ministry of State Security or MSS (Chinese Intelligence Services) and many other sensitive documents. Chin was able to retire from the CIA and evade suspicion. It was only due to a Chinese intelligence leak that the FBI was notified of his actions¹. Overall, Chin was able to operate in the United States intelligence sector for 30 years and was exposed to the nation's most secret information.

In the 2000s, Chinese intelligence assets were involved in operations that spanned from industrial to military espionage. Assets were found in industries such as aerospace, manufacturing, software, communications, and finances. They were also

¹ Dorsett, M. (2014). U.S. Counterintelligence and the Problem Posed by Chinese Intelligence. *Global Security Studies*.

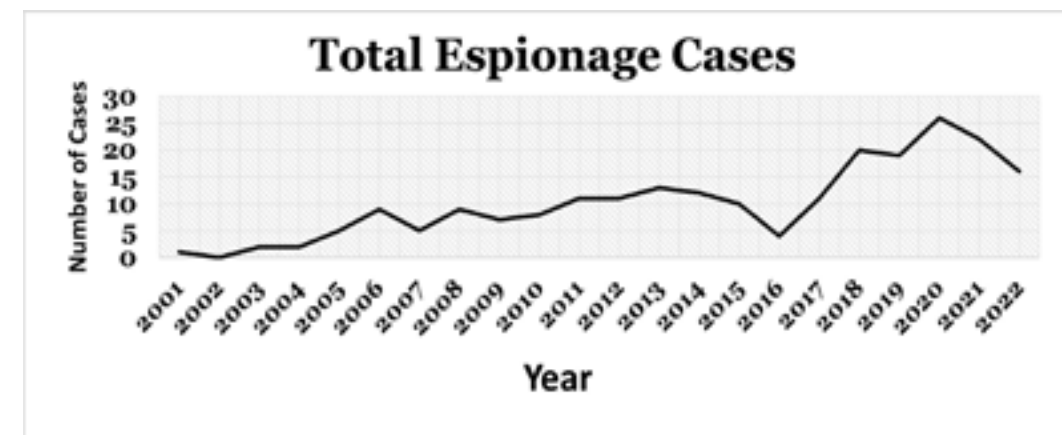


Figure 1

Survey of Chinese espionage in the United States since 200;¹ Data gathered from the Center for Strategic and International Studies.²

attributed to leaks in American agencies such as the DIA, FBI, NASA, Department of Defense, and the US Senate. This has been greatly damaging for the United States, as the loss of the technical edge the nation has gained through research and development was lost instantly. The increase in espionage in the 2000s is depicted by the Center for Strategic & International Studies². This growth can be seen in figure 1. The sheer number of cases of espionage against the US and overall Chinese presence in the nation speaks on the importance of infiltration to China's mode of operation.

Chinese Intelligence Targets

Industries such as the Aerospace, weapon, and military facilities are among the common targets of a usual military adversary and are included in the Chinese intelligence targeting portfolio. As a near peer China looks to minimize the distance between the US military power and their own. This is evident Within the Department of the Navy, a sailor was convicted of committing espionage on behalf of China. The most direct strategy of infiltrating the military is to turn a current member of the armed forces. The strength of this attack is that the larger the number of the military force the larger the vulnerability. When most consider a military spy they picture a general officer or a high ranking intelligence staff member. In reality a low level service member can provide intricate knowledge that grants an adversary the upper hand at a tactical and strategic level. This position is easily filled by recruiting someone with specific expertise that can then be applied to a larger system. For example, targeting a system repair man for radar technology or an IT specialist that services critical digital infrastructure. As reported by the Office of Public Affairs within the DOJ, Jinchao Wei (尉金朝) was convicted of espionage on August 20th, 2025. Wei worked with the Chinese government to provide Naval secrets to the Chinese government in exchange for 12,000 dollars. As a machinist, Wei was privy to knowledge pertaining to the defense systems of the U.S.S Essex. The Chinese intelligence officer made his approach online and over the course of a year a relationship was established with the sailor³. The Federal Bureau of Investigations

² CSIS. *Survey of Chinese espionage in the United States since 2000*. Center for Strategic & International Studies.

³ U.S. Department of Justice. (2025, August 20). *U.S. Navy sailor convicted of spying for China*.

Assistant Director for Counterintelligence said that this betrayal, China “continues to aggressively target U.S. military members with and without clearances”⁴.

In addition, two more PRC nationals were convicted of targeting the US Navy on behalf of the China's Minister of State Security. One of the assets, Yuance Chen, was a legal resident in Oregon, while the other asset, Liren Lai, was arrested in Houston while on a travel Visa. It is clear that Lai was the origin of the intelligence operation as he recruited Chen on behalf of the MSS in 2021. He then proceeded to ask Chen to approach US Navy personnel in an attempt to recruit more assets. This operation continued until their arrest in 2025 and in that time, Chen traveled back to China and attended a meeting with MSS officials.

Chinese intelligence agencies have evolved past targeting the previous industries a military rival would. When assessing the targeting data of other near peers, it is clear that the defense industry which includes both military and contracting installations is the primary focus. It is then followed by policy makers inside adjacent government positions who have influence over foreign diplomacy and national defense. The subsequent targets are then civilian agencies and commercial entities, mostly those with connections to military products. This is a major distinction between China and other national threats to America such as Iran, Russia, and in some cases North Korea. Like North Korea, China's espionage focuses primarily on commercial technologies through cyber operations. Unlike the Hermit Kingdom, China's infiltration into these vital economic centers generates hundreds of billions of dollars and results in the development of identical and competitive technologies in Chinese markets. A breakdown of China's most popular targets can be seen in figure two. This strategy sets China apart from other American rivals as this steadily closes the gap between American technological innovations and Chinese capabilities. China has established itself as the premier nation for intellectual property theft which targets a wide array of American companies from agriculture to high-tech. Mitigating the billions of dollars it takes the develop these products and streamlining their production straight to implementation in both the commercial sector, and military environment creates opportunity for cheaper advancements. Continuation of this

⁴ Roman Rozhavsky, 2025.

strategy often ends with advertising and marketing of these cheaper products back towards US markets. The most relevant story involves Linwei Ding (丁林为). The story of Linwei Ding starts at the moment of his employment. After his education in both Dalian China and the University of South California he landed a lofty position at a top American tech company. He was employed by Google in 2019 as a software developer. In 2022, a federal indictment alleges that he began to copy and transfer a total of 500 files⁵. Ding then returned to the People's Republic of China in order to discuss business opportunities with a Chinese technology company and held a high office within said company.

The competition between the United States and PRC in the Artificial Intelligence race is crucial for the nation's security and the economic security of American innovation. When assessing the case FBI director, Christopher Wray said, “The theft of innovative technology and trade secrets from American companies can cost jobs and have devastating economic and national security consequences. The FBI will continue its efforts to vigorously pursue those responsible for stealing U.S. companies' intellectual property and most closely guarded secrets”⁶. U.S. companies' intellectual property secrets extend past negative impacts for that specific company but affect the nation's resilience against offensive foreign technology. AI has quickly become the most powerful tool used in education, medical services, governing bodies, and military operations. AI is predicted to serve as the backbone in critical industries and advances in technologies continue to implement large platform AI models like the product Google was developing.

Another important aspect to consider is the connections between private companies and the government in China. According to the Stanford Center on China's Economy and Institutions, “65% of the largest 1,000 private owners have direct equity ties with state owners over 100,000 private owners had equity ties to the state, comprising 15% of China's registered capital in 2019.” as well as “3.5 million “indirectly state-connected” private owners, comprising an additional 18% of China's registered

⁵ U.S. Department of Justice. “Chinese National Residing in California Arrested for Theft of Artificial Intelligence-Related Trade Secrets from Google.” Office of Public Affairs, 6 Mar. 2024.
⁶ Christopher Wray, 2024.

capital in 2019”⁷. This is in contrast to the independency of firms within the United States that operate with limited influence from the Federal government. Connections between private entities and the Chinese government have grown exponentially in the 2000s which has had a positive effect on the number of private owners inside the country. State sponsoring of startups has not only created more tech companies but has also strengthened the connection between the government and these companies. A sense of dependency is then created, and the companies then find themselves at the will of the party in order to stay in good favor and continue to receive financial support. By embedding themselves into these companies, the Chinese government is able to use their financial leverage and authoritative power to bend the companies to their will. This is especially important when these companies have direct ties to critical US companies such as Google. That is why it is a severe threat for commercial technologies to be targeted by the Chinese intelligence services as well as the continuous intellectual property theft the United States falls victim to annually at the hands of Chinese perpetrators. The interconnectivity of Chinese business and government and the use of commercial technologies in the American national security sector is threatening more than just the commercial realm but also the defense of American infrastructure.

TARGETS OF CHINESE ESPIONAGE

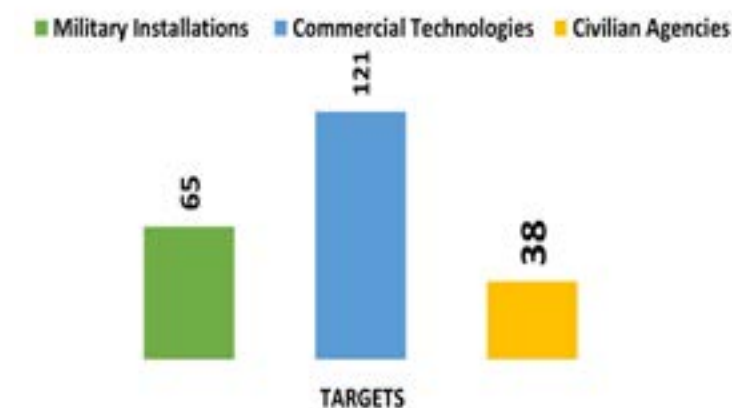


Figure 2 Targets of Chinese Espionage from 2000 to 2022. Data Gathered from the Center for Strategic and International Studies out of a total of 224 incidents².

⁷Stanford Center on China's Economy and Institutions, “The Rise of the State-Connected Private Sector in China,” FSI Stanford University, November 1, 2023.

Chinese Intelligence Methods

The MSS employs all of the standard tactics for gathering intelligence on the United States including HUMINT, TECHINT, and CYBINT. These methods are directed towards the previously mentioned industries and span through all different demographics of personnel within these industries. In what many are considering to be the world's next cold war, the US and China are stepping up their offensive espionage operations. The tactics seen in this new age confrontation mimic those seen in the height of the conflict between the USSR and the US in the 1980s. HUMINT tactics that involve bribery and blackmail are common methods implemented by the Chinese in order to gain access to valuable intelligence. The Chinese strategy has been labeled the grains of sand approach. This is a result of a series of generalizations that lead to the creation of four points: "Chinese intelligence focuses on ethnic Chinese as sources; It relies on amateur collectors rather than professional intelligence officers; It does not use intelligence tradecraft familiar to Western services; It pursues high volumes of low-grade information"⁸. It is now clear that Chinese intelligence strategy has expanded greatly past these limitations and frameworks with the introduction of higher demands and improved technologies. This has led to a historical issue when facing Chinese operations as the assets are seen as unimportant, or incapable. When looking at Chinese Intelligence Agency led operations, Chinese defense industry intelligence operations, and Technology industry operations individually, the scope of China's total presence is minimized. In a broader look, it is seen that China is on par with the United States intelligence structure as both serve to inform critical decision makers. This creates similarities in tradecraft. The breakdown between the strategies of Chinese intelligence collection can be seen in figure 3.

CHINESE CYBER OPERATIONS VS HUMINT BASED OPERATIONS



Figure 3
Chinese intelligence collection strategies from 2000 to 2022; Data gathered from the Center for Strategic and International Studies.²

The bulk of Chinese intelligence methodology consists of cyber operations. Inside China there are many private Hacking groups that are organizationally separate from the Chinese government but still act in China's interest. Chinese state sponsored groups are given the nomenclatures ending with Typhoon by Microsoft and other cyber defense organizations.

Well known examples of these organizations include Salt Typhoon, Volt Typhoon, and Flax Typhoon⁹. These criminal syndicates are known to target communication systems of the United States and other critical industries within the United States. They also use network breaches to create avenues of approach for later intelligence operations. Secure communications compromise of data and personal information are leverageable items that these Chinese cyber groups target. Cyber-attacks against the United States are additionally used to siphon funds out of the United States government. This is completed by digitally transferring money from American government accounts such as the scheme to steal 20 million dollars from US Small Business loans during COVID-19¹⁰.

⁹ CISA, NSA & FBI. "PRC State-Sponsored Actors Compromise and Maintain Persistent Access to U.S. Critical Infrastructure." AA24-038A (Cybersecurity Advisory), February 7, 2024.

¹⁰ U.S. Attorney's Office, Southern District of New York. "Chinese National Arrested For \$20 Million Scheme To Fraudulently Obtain Loans Intended To Help Small Businesses During COVID-19 Pandemic." Press release, May 21, 2020.

⁸ Peter Mattis, "Beyond Spy vs. Spy: The Analytic Challenge of Understanding Chinese Intelligence Services," *Studies in Intelligence* 56, no. 3 (September 2012): 1–13, accessed 11.18.2025

Human intelligence is a staple trademark of established intelligence agencies and serves as a backbone for the other intelligence disciplines. It is then no surprise that China commonly uses human assets to gather information or confirm alleged information gathered through the other collection disciplines. The ways in which Chinese intelligence officers recruit their assets cover an expansive handbook of techniques. When assessing the strategy through the MICE (money, ideology, compromise, and economic gain) reasoning for treason, China mainly utilizes money and compromise. Using tens of thousands of dollars per individual, China recruits both American and Chinese citizens living abroad. Services include insider knowledge of facilities, restricted information regarding technologies, and photography of sensitive sites¹¹.

The majority of these sites are military installations. Common tactics of entering these sites include posing as tourists, scuba diving, and as lost travelers. It is a common practice for intelligence officers to pressure Chinese students studying in the United States to commit these acts on behalf of the government. In one such case, Chinese students were detained for being in a restricted area. Five students from the University of Michigan were arrested after conducting reconnaissance on a training exercise between the National guard and the Taiwanese military, and, when questioned, they claimed they were there to watch a meteor shower¹².

The other method of recruiting human assets includes compromise. For the Chinese this is exhibited through blackmail and coercion. The first part of China's human intelligence collection strategy is their use of their comprehensive database of US federal employees through the Office of Personnel Managements data breach to the Chinese in 2015. This included personal information, social security numbers, and employment history which all provide a substantial pool for Chinese intelligence agencies to wade through to find sound targets for targeting. With aid from the rewards of China's cyber threat actors, the MSS and other agencies are able to

¹¹ "How China Recruits Its Spies in the U.S.," *CBS News*, May 18, 2025

¹² Congressman John Moolenaar. "FBI Charges Chinese Nationals with Spying at Camp Grayling." Press release, October 2, 2024.

accrue a damaging amount of information on certain individuals. They can also rely on the large number of Chinese immigrants in the United States who have family still in China. The Chinese government is known to pressure foreigners with familial ties to China by threatening to punish their relatives.

A common scene in the world of Chinese espionage is the successful implementation of a honey pot. Using their database, they find a suitable target and then send a honey pot, which is often a female agent sent to seduce a target. The relationship is then used to build trust and receive information privy to that individual. If this tactic is not successful, then the encounter can then be used as blackmail and provides the Chinese operative with an ultimatum¹³. The strength of these operations is the longevity and concealment of the strategy. Many times, untrained professionals do not realize they have fallen victim to a honey trap and will continue to provide information to the assets. This release of information can occur naturally to the target and may happen without the prodding of the asset. By acting impressed or intrigued by the targets position or knowledge, information is offered voluntarily.

One of the most well-known cases of a Chinese honey pot operation within the United States is Christine Fang or otherwise known as Fang Fang. Christine Fang is a Chinese operative that ingratiated herself with a number of politicians. Her dating history includes a number of Midwestern mayors, and Eric Swalwell, a Californian representative. In addition she was also a known donor of his political contributions. These individuals held high positions that helped form policy on intelligence committees. In other cases, it is clear that employees of the military and intelligence contractors are being sought out by Chinese agents. It is seen in some cases that these operations have entailed marriage and kids with the assets. In an interview with *The Times*, an American intelligence officer said, "Showing up, marrying a target, having kids with a target and conducting a lifelong collection operation, it's uncomfortable to think about but it's so prevalent."¹⁴ The United States has moved to ban relationships between US employees stationed in China and Chinese citizens

¹³ Robert Lansing Institute. "Beijing's Honey Pot Strategy: How China Adopts Russian Espionage Tactics in the United States." October 24, 2025.

¹⁴ "Chinese honey trap spies target tech, military pros to steal U.S. secrets: report," *CBS Austin*, October 24, 2025.

while at their post. This, however, does not prevent honey traps from establishing connection with tech industry leaders, which is a prominent occurrence in Silicon Valley.

US Prevention Methods

The United States has noticed the upward trend of Chinese espionage under Xi Jinping's rule. It has been made clear that the United States must adjust to a more tailored approach to counter China's offensive action. The Office of the Director of National Intelligence has listed a three-pillar response to intelligence threats from FIE (foreign intelligence entities) and listed the People's Republic of China as the primary threat. The first pillar is to outmaneuver and constrain foreign intelligence entities.

In order to outmaneuver FIE's, the ODNI has stated that intelligence partners must do more than be reactionary towards Chinese intelligence operations. Instead, the intelligence community should focus on learning what strategies and techniques are going to be utilized by adversaries. This will be achieved by using an increase in OSINT (open-source intelligence). The amount of information available on known operations led by the Chinese government and their adjacent entities on public forums or various reporting agencies can help determine China's intentions.

The second necessity for out maneuvering China is to improve intelligence sharing between American agencies. This is something the United States as struggled with since the creation of the separate agencies of the intelligence communities. Stove piping of information and inter-agency communication have been historical complications the United States has faced and have led to devastating intelligence failures. This measure will ensure that decision-makers, members of the United States intelligence community, and citizens within critical industries like technology will be made less vulnerable when facing internal threats. Due to the fact that the Chinese intelligence apparatus has advanced their trademarks to be advantageous in the current era, the United States must respond in a similar manner to develop new trademarks to counter. Creation of new practices and higher standards are the way forward to prevent a subversion of national security¹⁵.

¹⁵ Office of the Director of National Intelligence, National Counterintelligence

The second pillar of the ODNI's counterintelligence strategy is to "Counter, Degrade, & Deter Foreign Intelligence Activities & Capabilities"¹⁵. To properly defend against the loss of intellectual property theft, stronger partnerships with global allies are required. This will be done with the help of advancements in autonomous systems, especially artificial intelligence. This is why loss of these systems is detrimental not only to the commercial sector but also to the nation as a whole.

Moving forward, technology will be at the forefront of the counterintelligence imperative of the US in order to provide advanced warning to both professional and federal sectors. Previously, the focus of the US intelligence community was on actions carried out by the MSS and the People's Liberation Army's intelligence branch. It has been learned that this is not an effective way to approach Chinese intelligence. The new strategy involves accentuating China's nontraditional intelligence-gathering agencies and organizations such as companies, individuals, and criminal consortiums. Once these established groups are eliminated or negated, it will then be easier to dismantle the rest of China's intelligence operation.

The next step in this pillar is to reshape the current structure of counterintelligence divisions within the various agencies. A newer form will allow a more tailored look at China's various behaviors. The current approach was effective against addressing traditional adversaries such as the USSR, or fluid enemies such as the terrorist threat. However, with the onset of China's hybrid offensive actions, an advanced and more specialized reply is needed to sufficiently disrupt and disorganize them¹⁵. Then the United States must address cyber-attacks directly by integrating Federal government directives with business solutions to create a seamless defense against cyber intrusions.

The next pillar of defense is to "protect America's strategic advantages"¹⁵. Among the strategies listed under this, the protection of US citizens' data is fundamental. The ODNI has stressed that protecting foreign dissidents is a needed measure as they are the

and Security Center. *National Counterintelligence Strategy*. 1 August 2024

ones targeted by the governments of FIEs. The loss of personal data to the Chinese has become a great concern for counterintelligence experts. The acquiring locations, biometric, and health data will be a pressing matter for the near future as there is no way to undo what has been lost. In order to rebuild, the United States will take a whole of government approach to securing this sensitive data. The government will move to target the FIE's themselves as this is the most efficient way to respond to data breaches of this size. This effort will extend to the state and local efforts as well to apply more pressure against China. When addressing the loss of critical technology, the ODNI has outlined a strategy to work with academia and the technology sector to unify the country against foreign threats.

The third pillar is to invest in the future of the nation's counterintelligence. This will be enacted by investing heavily in new technologies and new platforms to widen the gap between the United States and China's technological capabilities. The next step is to diversify the force working to counter China's intelligence operations. By introducing more expertise into the counterintelligence field, the US will strengthen the defense against China.

Conclusion

China has a long and storied past with espionage within the United States. Starting soon after the PRC's birth, they have moved to infiltrate various sectors of the United States to both improve their own nation at the expense of the US and to purposefully sabotage the livelihoods of American citizens. Under the Xi Jinping administration, the accounts of Chinese espionage have skyrocketed, which matches the surrounding nations.

Unmatched against the rest of the United States' adversaries, China has become ruthless in its quest for power and influence inside the nation. Chinese methodology of collecting intelligence is a combination of both established tradecraft seen in espionage such as HUMINT (human intelligence), trademarks using coercion and financial incentives, as well as newer cyber techniques that steal sensitive data. The United States has formed its response against this new and evolving threat and looks to connect the different intelligence agencies impacted

by the PRC and to connect the private sector in control of critical infrastructure with threat advisories set to defend the security of those networks.

References

Alliance for Securing Democracy. "Chinese intelligence spends years spying on Californian officials." Accessed 12/1/2025. <https://securingdemocracy.gmfus.org/incident/chinese-intelligence-spends-years-spying-on-californian-officials/>

The Associated Press. "US bans government personnel in China from romantic or sexual relations with Chinese citizens." April 3, 2025. <https://apnews.com/article/chinese-beijing-honeypot-spies-diplomat-agent-intelligence/>

CISA, NSA & FBI. "PRC State-Sponsored Actors Compromise and Maintain Persistent Access to U.S. Critical Infrastructure." AA24-038A (Cybersecurity Advisory), February 7, 2024. <https://chatgpt.com/c/692f28e3-a620-8326-b760-00accdfb0aaa>

CBS News. "How China Recruits Its Spies in the U.S." May 18, 2025. <https://www.cbsnews.com/news/how-china-recruits-its-spies-in-the-us-60-minutes/>

CSIS. Survey of Chinese espionage in the United States since 2000. Center for Strategic & International Studies. Retrieved 10/16/2025.

Dorsett, M. (2014). "U.S. Counterintelligence and the Problem Posed by Chinese Intelligence." *Global Security Studies* 5: 44-50.

Federal Bureau of Investigation. "Countering Threats Posed by the Chinese Government Inside the U.S." Remarks by Christopher Wray, January 31, 2022. <https://www.fbi.gov/news/speeches-and-testimony/countering-threats-posed-by-the-chinese-government-inside-the-us-wray-013122>

Mattis, Peter. "Beyond Spy vs. Spy: The Analytic Challenge of Understanding Chinese Intelligence Services." *Studies in Intelligence* 56, no. 3 (September 2012): 1-13. Accessed 11.18.2025. <https://www.cia.gov/resources/csi/static/Beyond-Spy-vs-Spy.pdf>

Office of the Director of National Intelligence, National Counterintelligence and Security Center.

National Counterintelligence Strategy. 1 August 2024. https://www.dni.gov/files/NCSC/documents/features/NCSC_CI_Strategy-pages-20240730.pdf

Office of the Director of National Intelligence, National Counterintelligence and Security Center.

Robert Lansing Institute. "Beijing's Honeypot Strategy: How China Adopts Russian Espionage Tactics in the United States." October 24, 2025. <https://lansinginstitute.org/2025/10/24/beijings-honeypot-strategy-how-china-adopts-russian-espionage-tactics-in-the-united-states/>

Stanford Center on China's Economy and Institutions. "The Rise of the State-Connected Private Sector in China." FSI Stanford University, November 1, 2023. <https://sccei.fsi.stanford.edu/china-briefs/rise-state-connected-private-sector-china>

Stein, J. (2014). "May a Thousand Spies Bloom." *Newsweek Global* 162(3): 60-65.

U.S. Attorney's Office, Southern District of New York. "Chinese National Arrested For \$20 Million Scheme To Fraudulently Obtain Loans Intended To Help Small Businesses During COVID-19 Pandemic." Press release, May 21, 2020. <https://www.justice.gov/usao-sdny/pr/chinese-national-arrested-20-million-scheme-fraudulently-obtain-loans-intended-help>

THE ETHICS OF AI IMPLEMENTATION IN BUSINESS



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ABSTRACT

Generative AI has made software development easier for those who are unable to code. However, building production-level software for businesses requires strict adherence to security regulations. These regulations require knowledge beyond the abilities of generative AI, and businesses must possess some technical understanding for software implementation. Furthermore, the focus on AI for automation jeopardizes many jobs; preventing this requires a shift from using AI as a means for complete automation to a tool that helps people expedite their work.

1 Introduction

In an interview with Cleo Abram, Sam Altman, CEO of OpenAI, declares that if he were 22 right now, he would consider himself one of the “luckiest kids in history” [1]. Abram seems almost surprised with Altman’s sentiment, especially with the fear among recent graduates regarding the job market due to an over-saturation of white collar degrees, and she asks Altman why his opinion is this way [1]. He takes an approach from a creative perspective, describing that the implementation of AI makes it much easier for young people to build products, businesses, and innovations from the ground up without needing a budget or a team of experienced professionals. In his eyes, everything that a young adult would need is right in front of them with AI. Altman has made similar statements in the past; he does not deny that AI will replace many traditional jobs, but he takes on the position that it acts as an enabler for those who take advantage of it and use it as a creative tool, especially in the technology sector. With the programming assistance of AI, technical systems have entered a new age, with some classifying the applications built in this time as “Software 3.0.”

1.1 Software 3.0

“Software 3.0” is conceptualized in Andrej Karpathy’s talk at Y Combinator’s AI Startup School in June 2025, where he discussed the transition from three eras of software [2]. Karpathy first describes “Software 1.0” as the traditional hand-written code that dominated the technology industry since the dawn of computer programming. There wouldn’t be a shift to Software 2.0 until the rise of neural networks, where people trained them with data to yield a specific output, and fine-tune them to align them closer to the desired result [2]. Unlike its predecessor, Software 2.0 required minimal code, but rather large amounts of data and the use of sophisticated algorithms. However, just a few years later, Software 3.0 emerges

as a new way for people to build software through prompting large language models (LLMs) to direct them as they do the “hand-coding” themselves [2]. According to Karpathy, with the rise of “vibe-coding” (using exclusively LLMs to automate the building process from writing code to debugging, often lacking actual programming knowledge), plain English has become the new programming language [2].

While it is great that Software 3.0 has made it much easier for developers to build projects, there is a significant risk that comes with this advancement. Software is powerful in many ways: it can perform sophisticated tasks, it can be used by almost anyone in the world with a device when deployed, it makes people money, and it can hold valuable information, among many other capabilities. If something goes awry in the development process, or software is breached in any way, the consequences are catastrophic. Critical systems used in corporations, hospitals, and schools going down could disturb the livelihoods of billions, a data breach is a major risk to the privacy of millions, and thousands of developers could lose their jobs over one small mistake that causes major amounts of damage. Software developers carry this burden, and their expertise to handle these situations is forged by hands-on learning, deep research, and brutal failures. The new wave of developers who have learned to code with AI does not experience nearly as many of these pivotal experiences of a software engineer. There is a clear danger when it comes to giving an inexperienced person the same abilities as someone who is well aware of the risks of software development.

1.2 Position

The focus of this paper is to address the ethics of AI’s implementation in businesses of all sizes, whether it be solo founders building software products, small non-technical businesses adopting automated workflows, or corporate giants looking to stay ahead of the technological curve. While it is great that the abilities of software development and AI automation have been granted to all who are able to prompt, building production-level software that handles user data and must adhere to security regulations requires some experience outside of vibe-coding to be implemented safely. This danger should not discourage businesses or startups from implementing these powerful tools, but rather to do

so responsibly for the safety of their users and their brands. With a focus on AI as means for automation, these advancements jeopardize the careers of many, especially older people who are more complacent and struggle to adjust at the pace of AI’s growth. A way to balance this rapid implementation requires a redirection in the global mindset regarding AI from “how can AI completely automate this process” to “how can AI be used as a tool to support this process and the employees around it” to promote Human-Centered AI (HCAI) practices.

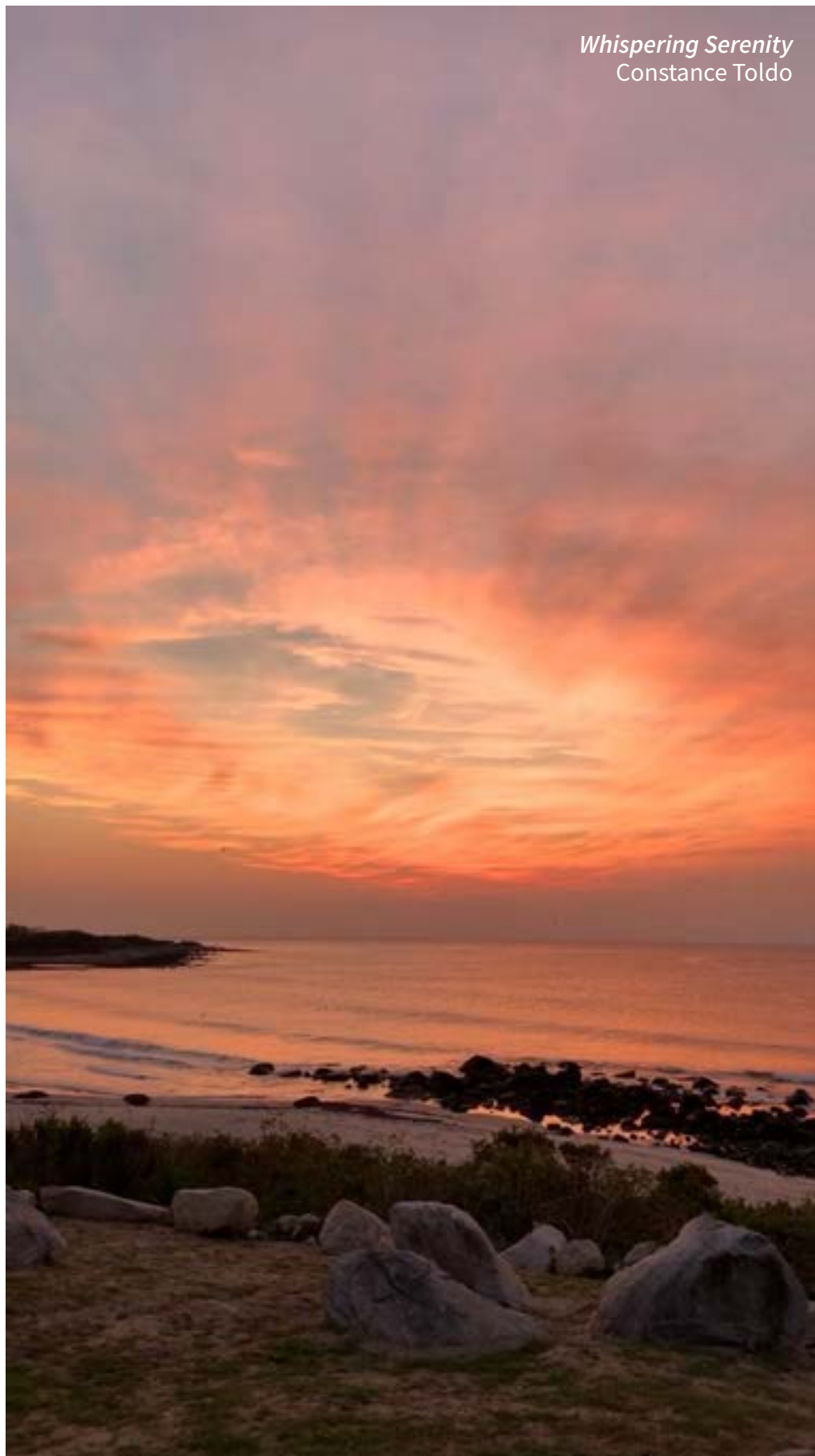
2 Introduction to App Generation Models and Workflow Automation

One of the boldest statements made by Altman in his interview with Abram was that, in the near future, there is a great possibility of a one-person billion dollar company enhanced by the abilities of AI [1]. While there has yet to be a billion-dollar company built by one man, many small businesses have emerged leveraging different AI solutions to build their own software or enhance the productivity of established organizations. In this section, the term “app generation model” will be used to refer to an LLM that builds production-ready fullstack applications, meaning they are capable of building a complex frontend, backend, and able to be hosted directly from the model’s resources.

2.1 Yannis and PrintPigeon

Yannis is a digital marketer who had barely worked with code throughout his professional career, yet he built a wildly successful website, PrintPigeon, in less than three days [3]. PrintPigeon allows its users to upload documents and have them printed out and sent anywhere in the world as physical post cards [3]. Five years ago, it would be almost impossible to believe a solo developer could make a web application with the level of sophistication displayed in PrintPigeon, but with app generation models, this timeframe becomes a norm. The tool Yannis used to make PrintPigeon is Lovable, one of the most popular app generation models today that allow users to build fullstack applications from exclusively prompts and physical “drag-and-drop” tweaks to the website’s UI. Lovable is one of the leaders in AI-driven development today, with this Swedish company boasting over 200 million in annual recurring revenue

Whispering Serenity
Constance Toldo



(ARR) since its launch in 2024 [4]. Yannis’s story is not unique, as countless other non-technical founders have risen to prominence in the past few years due to the development of these products.

2.2 Implementation of Workflow Automation

Another innovation directly affected by AI is workflow automation. Thanks to no-code workflow automation services, such as n8n, people can utilize numerous tools without needing a deep understanding of them or a developer to assist with implementation. Workflow automation tools like n8n provide simple user interfaces (UIs) with a drag-and-drop environment to create flowcharts to build the logic of processes comprised of nodes that connect to different services the user may utilize [5]. Harnessing the potential workflow automation is more challenging than prompting a website or app into existence, but it has a large amount of capabilities considering the amount of different services.

3 Over-Reliance of AI in Production Code

Despite AI expediting the process for people to build software for different businesses, there are some negative effects for relying on its capabilities too much, and because of these gaps, developers will need to keep their minds sharp in case they are unable to access AI for programming assistance or if the model hallucinates something in the code.

Generative, code-writing AI has been a part of the software engineering process for less than five years, yet it already has shown signs of negative cognitive impact on developers has already shown itself. The long term effects of AI on the human mind have yet to be observed, but there are early warnings of it. In a study conducted by Cornell researchers, a group of software engineers were given over 200 issues to complete, half with AI (using tools such as Cursor and advanced LLMs to assist) and half without AI [6]. Surprisingly, the tasks that allowed AI on average came back 19 minutes later than the ones where it was disallowed [6]. What may have caused the overhead with using AI may be unclear prompting, which led to a less desirable output that the developer had to manually debug, which is often more time consuming than writing the code without AI. It is best for software engineers to avoid the trap of allowing AI to do the majority of programming and logic to the point where their own skills begin to dwindle. With AI now authoring much of the code implemented in software today, some software engineers may pay less attention to some of the details in the code. In the event that an LLM hallucinates, falls victim to data poisoning, or has a solution with unneeded overhead, this will negatively affect the product when it is deployed for others to use.

3.1 Vulnerable Code Generation, Implementation, and the Use of Data Poisoning

Generally, in a professional team building software, code is written by multiple developers, and then pushed to a GitHub repository on their own branch. Before their code becomes a part of the main code, senior developers would have to review their junior’s pull requests and either approve or disapprove the code from merging into the main repository. Usually, senior developers will catch mistakes in the junior developer’s code. A common issue that some beginner developers and vibe-coders will push hard coded API keys to a public repository [7]. Awareness is needed when dealing with handling API keys, and if there is any mishandling of them (whether they are posted publicly or an adversary seizes and uses the key), then it is the development team’s sole responsibility to remediate the issue. This could lead businesses and contractors to losing clients or possibly ruining their reputation due to the importance of this. Although there are tools now that

can detect API keys that were posted on a GitHub repository, their accuracy scores are far from perfect as of now and it is safer to not rely on these tools but rather save them as a last resort [7].

Unlike the developer’s team, there are only two entities involved in the building process (the inexperienced user and the LLM), so there is no fallback to depend on another set of eyes that could catch vulnerabilities generated by the model. In the worst case scenario where this application is deployed, it could fall prey to attackers who can exploit the vulnerability and gain unauthorized access in the application, leading to the endangerment of users and the creator. While the error may be an easy fix for the LLM after reevaluation, the damage was done to the application’s and its founder’s reputation, which could lead to the collapse of an entrepreneurial run.

Data poisoning is when a LLM is trained with unchecked data that produces unwanted responses from the model. A relevant example to this scenario is if a coding assistant LLM is being trained or fine tuned, and its trained on code that is riddled with vulnerabilities, it will now give that same error to unsuspecting users that will implement it in their code [8]. Even larger models failed to identify the vulnerable code when sharing and implementing it, giving similar suggestions to various users who asked for similar code snippets [8]. Usually, seasoned developers would be able to identify and remediate this erroneous code if they saw it implemented, but a developer without programming experience would likely think nothing of it and implement the vulnerable code. If this vulnerable code is deployed, this would not only be a risk for company and user data from being breached, but also give the brand and the engineers behind the project a negative reputation, risking their careers on future projects or employment.

3.2 An Ethical Lens from the Association for Computing Machinery

Even with code automation emerging as a more plausible reality as new tools are released, developers, experienced or not, must remain steadfast and keep their products secure as not to risk their businesses, whether it be a large corporation or an independent teen contractor. If someone is unable to learn the proper security protocols for their application or is unsure whether it handles data as expected, then they

should hire someone more experienced than them to handle the job. A guiding document to help with cases like these can be found through the Association for Computing Machinery (ACM) Code of Ethics and Professional Conduct, which outlines the ethical way of handling software.

Section 2.4 of the ACM Code of Ethics and Professional Conduct can target non-technical developers in a company or building a business, where it states, "High quality professional work in computing depends on professional review at all stages. Whenever appropriate, computing professionals should seek and utilize peer and stakeholder review" [9]. Not only does this section encourage developers of all expertise to get second human opinions on their code, but also ensures that stakeholders are satisfied with the product delivered. Whether the product be a start-up dedicated to solving a broad problem, or a workflow for an AI agent for a specific company, it is essential for the developer to do the proper market research or consultation to build an effective service that will sell and provide a constructive service to their expected client. As long as the developer makes due diligence to ensure their product is secure and useful, usually by consulting another human software engineer or some governing board (example, Apple's app store approval process), then the program should be ready to deploy.

Another vital section to this situation is Section 2.9: it is the developer's ethical responsibility to make their product "robustly and usably secure" [9]. This section emphasizes the priority for easily implemented and effective security in any software product, meaning the security precautions (whether it be input sanitation, data handling, or anything similar) should be understood by the developer in case any change needs to be made to the code. Section 2.9 also calls for developers to implement proper monitoring, patching and vulnerability reporting, which they may not know how to implement themselves [9]. However, there are many vendors who, if their app is hosted via the cloud on their servers, handle this process themselves. Seasoned developers know this, but this is something that only comes from experience and research, so it is essential for non-technical developers to be aware of this aspect of programming.

3.3 The Safest Implementation of Fully AI-Generated Code

Despite the previous sections, there has not been any grand failure made by a service completely built by AI with very minimal human intervention, which is mostly due to the lack of many widely-used apps built in this manner. However, there is a future where the risks mentioned are seen firsthand if more of the software engineering process is taken over by AI in enterprise-level scalable applications. If AI authors mistakes in production level code, then the results could negatively affect the developer, the company they work for, and the users of the application. However, AI for personal use to learn how to code can be beneficial, especially when providing personalized explanations of different concepts.

However, one piece of software that is used by many businesses of all sizes that can be easily automated by AI without any risks of leaking user data or being filled with vulnerabilities is a minimal viable product (MVP). An MVP is used by all sorts of businesses to show a prototype of what a team plans to build. While AI generated code may not successfully implement the safest measures or deployment ready code, it can create stunning visuals and turn prompts into code in minutes. This provides a realistic framework for how a product will look and it saves developers time by giving them an instantaneous blue-print to work from. This can be used for demonstrations, visual representations for clients, and small testing groups. Without AI, creating MVPs took a considerable amount of time, but now this process can be completed in just a few prompts.

4 Implementing Human-Centered AI

With the rapid advancement of AI automation in many aspects of business, there is a general fear among workers that their work and livelihoods will be replaced by AI. Usually, AI agents cost less than the average worker, and are more productive. The main goal of AI implementation in businesses is automation, but Human Centered AI (HCAI) is a proposed solution to use and implement AI as a tool for humans rather than automating processes for humans [10]. According to Constantinides, AI innovation is focused on short term progress to make fast and productive models so companies can cut costs and produce more work, however, he believes that this will displace the work of millions [10].

4.1 Meaning-Typed Programming as an HCAI Example

One creative way of implementing HCAI is through a new programming paradigm called Meaning-Typed Programming, which is focused on building LLM integration in the language [11].

4.2 Employee-Charged Workflows

Another way to promote HCAI is by giving employees the ability to use simple AI driven tools to discover how they can automate tedious work and focus on the tasks that require their attention. By giving employees access to tools and letting them set



Baptism at Renewal Falls
James Wilson

This helps users save time switching between tabs and terminals to implement changes to code, and it also manages LLM involvement with the script [11]. For example, instead of developers spending time coming up with the perfect prompts, they can have the language come up with one based off the parameters and the context given in the code [11]. The team from Cornell that designed it noticed a large boost in productivity by using it; this could be a useful implementation of optimized programming using AI rather than full dependence. The user still has full control over the code they write or decide on, but are able to spend more time doing valuable work.

up their own practices with it, they have the autonomy to choose whether or not AI is a tool that is useful for aspects of their job.

One company where employee-driven AI tools were implemented was Fullscript, a North American healthcare company boasting over 500 employees [5]. The AI/Machine Learning (ML) department at Fullscript used n8n as a no-code solution to give their employees a chance to try AI automation and see how it can improve their day-to-day work as a helpful tool to bypass tedious tasks in different departments. To give employees a fair shot of using the new tool, the AI/ML department hosted different workshops and hackathons to give employees a chance to learn the

new tool and come up with ideas on how to complete their daily tasks faster [5]. Not only does this provide a powerful tool for employees to use to make their jobs easier, but it also gives them the chance to develop their problem-solving skills and retain intellectual agency over their solutions.

One common link between MTP and Fullscript’s implementation of n8n is that it does not eliminate the work of the employees, and they are able to build systems and prompts that expedite their work without removing themselves from the process. Instead of AI being used to automate an employee’s entire position, it is used to assist workers with their jobs and save time for tasks that require more critical thinking. This method of AI implementation allows work to be done faster while the employees keep their agency.

5 Conclusion

This paper investigated the impact of AI’s emergence into businesses varying in sizes, exploring the negative, positive, and neutral impact of its adoption. With the development of Software 3.0 in digital products and services, it is now easier for non-technical founders and consultants to emerge and reap the benefits of building software without the limitations of code. This innovation is ideal for internal solutions such as workflow automation through n8n, building MVPs to have a framework for building complex software products, and providing tailored learning to these topics.

However, there are many dangers that come with giving software development ability to laymen, as their code may lead to security measures that leaves much to be desired, vulnerabilities, and exposing API keys. The risks are heightened if the LLM they are using to assist with their coding had its data poisoned and was trained on vulnerable code. Now with more people entering the software development community, it is essential to make all aware of safe coding practices. This is especially emphasized in the ACM Code of Ethics and Professional Conduct, where it encourages developers to prioritize user security and to get help whenever they face issues they do not know how to solve.

Another danger of AI is the focus on automation rather than giving employees a tool to use. While automation causes direct productivity and profit boosts in the short term, it begins to cut out human

work from various industries. If AI automation is taken with a HCAI mindset and implemented more as a tool than strict automation, then older generations can adapt easier, preventing their livelihoods from being uprooted. Many of these AI tools can be used as HCAI compliant tools to give non-technical developers the chance to build workflows for their own job or help experienced developers save time switching between tabs and giving them all the prompting abilities they need with MTP.

With the rapid growth of AI’s capabilities, corporations, independent contractors, and all other forms of businesses should be very careful on how they implement it, ensuring that it is brought in with security in mind and that human critical thinking doesn’t become illegitimate.

References

[1] Sam Altman. 2024. Transcript: OpenAI CEO Sam Altman on Huge Conversations Podcast. <https://singjupost.com/transcript-openai-ceo-sam-altmans-interview-on-huge-conversations-podcast/> Accessed: December 8, 2025.

[2] Andrej Karpathy. 2024. Andrej Karpathy: Software Is Changing (Again). <https://www.youtube.com/watch?v=LCEmirJPtEQ> Accessed: December 8, 2025.

[3] Lovable. 2025. From Idea to Impact: Yannis’s Journey with Lovable. <https://lovable.dev/blog/2025-01-17-from-idea-to-impact-yannis-journey-with-lovable> Accessed: December 8, 2025.

[4] TechCrunch. 2025. As Lovable Hits \$200M ARR, Its CEO Credits Staying in Europe for Its Success. <https://techcrunch.com/2025/11/19/as-lovable-hits-200m-arr-its-ceo-credits-staying-in-europe-for-its-success/> Accessed: December 8, 2025.

[5] n8n GmbH. 2024. Customer Case Studies. <https://n8n.io/case-studies/> Accessed: December 8, 2025.

[6] Domenico Cotroneo, Cristina Improta, Pietro Liguori, and Roberto Natella. 2023. End-User Development with AI-Assisted Programming Tools. In Proceedings of the ACM Conference on Human Factors in Computing Systems. doi:10.1145/3643916.3644416

[7] Jayanaka L. Dantanarayana, Yiping Kang, Kugesan Sivasothyathan, Christopher Clarke, Baichuan Li, Savini Kashmira, Krisztian Flautner, Lingjia Tang, and Jason Mars. 2024. Societal and Economic Impacts of AI-Driven Software Automation. arXiv preprint arXiv:2405.08965 (2024). <https://arxiv.org/abs/2405.08965>

[8] Joel Becker, Nate Rush, Elizabeth Barnes, and David Rein. 2025. Large Language Models and the Future of Software Engineering. arXiv preprint arXiv:2507.09089 (2025). <https://arxiv.org/abs/2507.09089>

[9] Association for Computing Machinery. 2018. ACM Code of Ethics and Professional Conduct. <https://www.acm.org/code-of-ethics> Accessed: December 8, 2025.

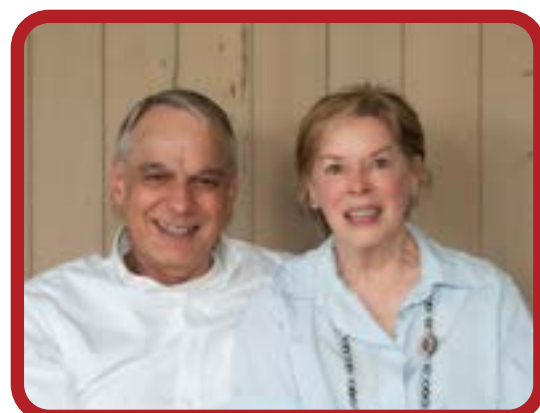
[10] Marios Constantinides and Daniele Quercia. 2024. Responsible Deployment of Generative Artificial Intelligence Systems. Proceedings of the ACM (2024). doi:10.1145/3729176.3729191

[11] Chidera Biringa and Gökhan Kul. 2024. Human-Centered Perspectives on Generative AI Development. Proceedings of the ACM on Human-Computer Interaction (2024). doi:10.1145/3744756

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