Art, Activism, and AI: Generating Visual Narratives of Injustice through Research-Creation with a Feminist Lens

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Abstract

This research explores the potential of text-to-image generative AI systems to convey sociopolitical messages through artmaking within Feminist standpoint theories, in the context of the Woman Life Freedom movement in Iran. Combining academic research with creative practice, this Research-creation study aims to embed illustrations onto curated images of the martyred from the Movement using generative AI systems. The conceptual framework of this study emphasizes body autonomy, marginalized voices, and the importance of Feminist Standpoint theories as a source of knowledge and potential liberation. The resulting artwork will serve as a visual representation of the research findings, conveying complex ideas and concepts in an accessible and engaging manner. The implications of this research are twofold: contributing to our understanding of the potential of generative AI systems for sociopolitical advocacy through the arts, and highlighting the role of body autonomy and marginalized voices in the Woman Life Freedom Movement in Iran through feminist and queer theories including standpoint theory.

Introduction

The use of text-to-image generative AI systems to create visual art has become increasingly popular in recent years, especially since the public releases of diffusion-based tools like Stable Diffusion, Mid-Journey, and Dalle2. However, as Zylinska asserts, we must go beyond the aesthetic realm to truly harness AI's promise, engaging with issues of creativity, intelligence, perception, and our human role and position in the world (Zylinska 2020). When considering humans' positionality, particularly that of the oppressed, a standpoint is earned through collective political struggle, requiring both scientific and political effort (Harding 2004). With the lived experience of a woman in Iran, the Woman Life Freedom (WLF) Movement spurred the author to make these scientific political, and artistic efforts to amplify the voices of the movement through AI arts.

We chose to work with AI generators in this project, employing a research-creation methodology, not merely for their potential to produce visually appealing outcomes but for their power to facilitate timely creation of diverse collage pieces in collaboration with the human artist. AI generators enable an iterative, exploratory process that allows for many alterations and rapid evolution of visual narratives, mirroring the dynamic and multifaceted nature of social movements like the WLF. They represent a new generation of tools that enable artists to manipulate the digital canvas in ways previously unachievable, making them ideal for our goal of embodying the visual stories of the WLF movement.

Our methodology allows us to conduct research through art (Frayling 1994) and understand the potential and limitations of text-to-image generative AI systems for sociopolitical advocacy, through tacit knowledge gained in the process of artmaking, while making art that amplifies the voices of Iranians fighting against injustice. The resulting artwork will contain the knowledge that is gained through this research and will be available to public for interpretation, maximizing the advocacy of this matter.

This paper explores the techniques and processes of data curation, artmaking with AI, and artist reflection in an effort to answer this research question: How can Research-creation using text-to-image generative AI systems create artworks that express collective sociopolitical messages represented within online media of WLF Movement in Iran through Feminist intersectional theories including standpoint and queer theory? The paper continues with a brief background of the text-to-image generative systems, the WLF movement, and theories and methodology used in this work. We then explain the data collection methods, and the final artwork, and conclude by covering our contributions and opening up new discussions for future work.

Background

Text-to-image Genertive AI

Text-to-image generative networks were initially developed by integrating the Contrastive Language-Image Pretraining (CLIP) (Radford et al. 2021) with the Vector Quantized Generative Adversarial Networks (VQGAN) (Crowson et al. 2022). This rapidly evolving technology has undergone significant advancements through the substitution of Generative Adversarial Networks (GAN) with diffusion models (Ho, Jain, and Abbeel 2020; Ramesh et al. 2022) and by expanding the size of the training datasets (Schuhmann et al. 2022). These systems output a still or video and as input accept, 1) just a text prompt (ie. text-to-image or 2) a text prompt plus an input image (ie. image-to-image) as well as

many parameters to affect the result.

Text-to-image generative diffusion models are a class of neural networks that generate realistic images by simulating a stochastic process in reverse, using textual prompts as guidance. The model learns to transform noisy image data back into the original image through a series of iterative steps, conditioned on the input text. The public release of the Stable Diffusion (SD) code and model (Rombach et al. 2021) has facilitated the development of numerous resources with varying capabilities, including image-to-image generation. In this process, noise is introduced to an initial image before the diffusion process commences with the provided prompt.

Woman, Life, Freedom Movement

Under the gender apartheid regime of the Islamic Republic in Iran, women are treated as second-class citizens, as evidenced by government laws and systematic discrimination. Women in Iran are derived from basic rights such as body autonomy, the right to divorce, automatic custody of children, and equal testimony right, to name a few. Furthermore, the strict binary norms that segregate men and women in all aspects of life, leave no room for other expressions of gender identities or sexual orientations. The state uses politics of the body (e.g. mandatory hijab, public lashing, and execution) to intervene in private aspects of women and Queer lives, bodies, and sexuality, and gain power over them. It also imposes a moralistic view of the righteous woman, which is protected by the "Morality Police".

In September 2022, Mahsa (Jina) Amini was arrested, beaten, and murdered by the Islamic Republic Morality Police in Iran for not wearing her hijab properly. The news resulted in protests across Iran and worldwide rallies with the motto "Woman, Life, Freedom". The uprising has continued to this day and is recognized as the first female-led revolution [1]. It's worth noting that this movement is distinct from Islamophobia because the state exploits Islam to impose the wearing of the hijab as a form of religious dress, which serves as a means of oppression and ignores individual expression (Kohan 2022).

Methodology and Theories

Feminist standpoint theory is an organic epistemology, methodology, philosophy of science, and social theory that arises whenever oppressed peoples gain public voice (Harding 2004). By questioning epistemic objectivity, this theory posits that knowledge is socially situated and considers marginalized perspectives as important sites of epistemic privilege for potential liberation. Feminist standpoint theories aim to challenge the traditional ways of knowing and create a more inclusive and accurate understanding of the world. In this context, a standpoint is not merely occupied by individuals based on their socio-historical position, but it

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[1] McGrath, Maggie. "Mahsa Amini: The Spark That Ignited A Women-Led Revolution." Forbes. Accessed April 30, 2023. https://www.forbes.com/sites/maggiemcgrath/2022/12/06/mahsa-amini-the-spark-that-ignited-a-women-led-revolution/.

is a collective consciousness that emerges through the experience of a political struggle.

Queer Theory, which emerged from intersections of Feminist and gender theories, critically challenges normative assumptions about gender, sexuality, and identity by emphasizing the fluidity and complexity of these concepts. It attempts to destabilize binary categories, such as male/female and homosexual/heterosexual, by exploring how they are socially constructed and maintained. Queer theory also focuses on how these normative sexual ideologies create power dynamics that marginalize and oppress individuals who do not comply with them.

Feminist standpoint theory and Queer theory both contribute to understanding the Woman, Life, Freedom Movement by examining how social and cultural structures contribute to oppression. Feminist standpoint theory highlights the importance of marginalized perspectives, while Queer theory interrogates fixed categories of sexual identity and normative ideologies. Both theories critique patriarchal and heteronormative systems, making them relevant to examining the movement, which seeks to dismantle oppressive norms and promote autonomy and equal rights for all individuals.

Research-creation is an interdisciplinary and speculative approach to knowledge production that combines artistic practices with scholarly research. This approach values the creative process as an integral part of research, focusing on the intersection of thinking and making, often resulting in different species of output, such as a book or a performance (Loveless 2019). It can be understood as a speculative, embodied, experimental, and future-focused process (Manning and Massumi 2014). Research-creation is a complex, practice-based framework that encourages experimentation and collaboration across disciplines, embracing emergent ideas and failures as opportunities for new perspectives and growth in artistic dissemination within the arts, humanities, and social sciences. Given our research question, and the urgency to make a contribution in a timely manner, this methodology enabled us to think-through-action and create artwork that advocates for the Woman Life Freedom movement while helping us understand generative systems and their capabilities better.

The use of AI generators in this work is not simply a methodological choice, but a fundamental part of our research exploration. Our aim is to explore how these advanced technological systems can be harnessed to transcend traditional aesthetic boundaries and amplify the voices of marginalized communities. AI generators offer the ability to integrate vast amounts of data and complex narratives into cohesive, impactful visual representations. This capacity aligns strongly with the principles of standpoint and queer theories, which advocate for the acknowledgment and integration of diverse, often marginalized perspectives. In the context of our work, AI generators have allowed us to not only depict the experiences of Iranian women but to layer these depictions with a complexity and depth that mirror the multiplicity of their lived experiences.

Furthermore, our choice of AI generators is deeply intertwined with the very nature of activism. Activism calls for

adaptability, for the use of innovative approaches to challenge existing systems and norms. AI, in its essence, embodies this adaptability and innovation, evolving constantly to create novel, unexpected outputs. In aligning our work with the tools of AI, we aim to reflect this spirit of constant evolution and challenge.

Methods

Content Warning: Please be advised that this section, and the subsequent images, include discussions and depictions of sensitive topics such as gender-based oppression, violence, and references to assault. The content is intended to convey the realities faced by women in Iran and is part of our endeavor to raise awareness and advocate for social change. However, we understand that these topics might be distressing for some readers. If you prefer to avoid these discussions, you may choose to skip this section and jump directly to the Discussion section. Please proceed with caution.

The brutal death of Mahsa Amini in Islamic Republic custody resulted in nationwide protests against the state. As the days unfolded, more protesters were murdered, imprisoned, and injured by the forces. Social media was flooded with videos of Iran's streets showing people in protest, images, videos, voices, names, and stories of the martyred and freedom fighters. People were repeating their names to amplify their bravery, reveal the state's brutality, and scream for this injustice. Artists began making different art forms, from music and fine arts to digital arts and public performances. The author initiated a data curation from social media to reserve some of the narratives and make art that speaks for this matter. The visual data includes portraits of the ones who lost their lives in this movement and the textual data is their stories including news, voice and video messages, the state reports attempting to cover their murders, along with their family and friend's testimonies opposing those lies.

Results

One of our initial challenges was leveraging text-to-image generative AI systems, which are trained on generic data not tailored to specific issues or media, to create artwork that represents the WLF movement and incorporates symbolic elements, characters, and events. To overcome this, we settled on the concept of a collage, where individual details could illustrate various events and the overall image would be connected to the movement. The choice of collage as a medium of expression was not a mere workaround but a conscious artistic decision, aligned with the principles of standpoint and queer theories. In a reflection of these theories' emphasis on the multiplicity of perspectives, a collage facilitated the integration of diverse experiences and perspectives. It was an artistic method capable of embodying the intersectionality of Iranian women's lives and their collective political struggle or Standpoint. In our approach, the central figure represents a particular martyr by using their image as an initial input for the system, while additional details are generated using prompts that describe the circumstances and the individual's story. Some of the illustrations depict

the atmosphere such as a street filled with protesters or fire and smoke in the city, while others incorporate collective experiences such as imprisonment, torture, and assault. By leveraging the versatility of text-to-image generative AI systems (in our case, Stable Diffusion), we were able to generate contextually relevant images from these prompts, transforming each collage into a resonant visual narrative of the WLF movement.

The artmaking process started by cutting the curated image into pieces and giving each section as an initial image (image-to-image) input to a local implementation of SD. Each generation requires a text prompt and parameters that control the output of the system; some of the main ones are *seed*, for random weight initialization; *guidance scale*, to control text prompt impact; and *input strength*, to indicate similarity of the initial image and the output. The text prompts were inspired by the curated textual data for that person, as well as general descriptions to illustrate the scene (e.g. "women protesting in the streets"). For ethical reasons, we refrain from using any artist names in the text prompt to avoid stealing their style. After generating image pieces, some are chosen and juxtaposed together to form an image with a cohesive visual aesthetic that illustrates this narrative. Figure 1 shows an overview of the process, which was improved later by using multiple sectionings of the original image, and combining layers with masking in Adobe Photoshop.

This work started with personal data curation, continued to become an expressive way for the author to contribute to the movement, and evolved into a collection of artwork. The collection is named Tulips of Freedom (Figure 3), as the tulip is a metaphorical symbol for martyrs in Persian literature. It consists of 8 images portraying *Mahsa (Jina) Amini*, the 22-year-old whose death sparked the movement; *Nika Shakarami (16)*, *Sarina Esmailzadeh (16)*, *Hadis Najafi (23)*, who were murdered in the protests; *Yalda Aghafazli (19)* who committed suicide after her release from state detainment for participating in protests; *Mohammad Mehdi (Koumar) Karami (21)* and *Seyyed Mohammad Hosseini (39)*, who were executed by the state for participating in the protests, and an *anonymous Queer couple* kissing in Azadi square, whose sexuality is punishable by execution in the country.

Discussion

Our principal objective with this project was to safeguard and narrate the stories of the ones who tragically lost their lives during the WLF movement. The exploratory nature of research-creation can lead to unexpected insights and outcomes, sparking engaging debates within and beyond the field. Here, we elaborate on some of the technical and tacit knowledge gained during this process, which might inspire discussions in the realm of computational creativity and activism.

The use of collage as an artistic medium in our work was both a workaround and a deliberate choice. It allowed us to adapt an AI generator trained on generic data, and generate imagery related to a specific subject. The collage format encapsulated a multiplicity of perspectives and illustrated the

Figure 1: (top left) original image (of Yalda Aghafazli) sectioned for SD initial images, (bottom left) text prompts used to generate illustrations, (middle) sample of outputs positioned together in the juxtaposition step, (right) the final work.

collective political struggle, aligning with the principles of Standpoint theory. Finally, It offered the artist more control over the final aesthetic and composition, as it provided different variations for each section. The artist could fine-tune variables indicating how far to deviate from the original image, the guidance scale of the prompt, and so forth.

An essential element in this collaborative partnership with AI is control over the generative process, a crucial indicator of AI autonomy and its collaboration with the artist (Daniele and Song 2019). A recurring criticism amid the surge of AI generators in artistic practice is the limited control over the generated output. Technical observations during our artmaking process further emphasized this aspect. Depending on whether you run the code locally or use a specific software, artists have varying degrees of control over the system's output. We somewhat addressed this by running our model locally and fragmenting the one-time choice of prompt and parameter for the whole outcome into smaller, separate choices for each section.

The exploration of societal atrocities through the text prompts was admittedly harsh, mirroring the brutal realities faced by many women. Our intent was to create powerful visuals that induce visceral reactions in the audience, both as an expressive outlet for the artist and as a catalyst for proactive response. Some of these text prompts, inspired by the dark fates of these women, were too gruesome for the user guidelines of publicly available AI generators. However, this did not deter us as we used our local model.

While some argue that AI generators should contain guidelines to prohibit violent and sexual content, we believe this can limit their potential for sociopolitical advocacy. For instance, many keywords associated with Queer identities are interpreted as slurs and automatically rejected. This stems from the training process where many datasets are scrubbed of content by Queer authors. This censorship,

intended to reduce abusive content, inadvertently silences a section of creators who may use these words in a different context. The debate thus arises: Do these guidelines act more as censorship or risk restrictors? Is the potential misuse outweighed by the potential for creating societal good? Our research aims to open up this conversation and encourage the consideration of how AI generators can be better employed for social advocacy.

Conclusion

In conclusion, this paper has pioneered an exploration of the synergies between computational creativity, sociopolitical activism, and intersectional feminist theory. Through our research-creation approach, we have harnessed the capabilities of text-to-image generative AI systems to produce the Tulips of Freedom series - a set of innovative, politically charged collage artworks that center the lived experiences of women within the Woman Life Freedom movement in Iran.

Our work illuminates the potential of AI as a creative partner, capable of expanding the artistic vocabulary and empowering artists to amplify the voices of marginalized communities through their creations. In so doing, we've shifted the lens of computational creativity towards addressing pressing sociopolitical realities and fostered new spaces for dialogue and awareness.

This research also underscores the importance of ethical considerations in AI-driven creative practices. Issues around potential biases in AI outputs, data usage ethics, and the responsibility of AI practitioners are all highlighted, prompting necessary discussion within the field.

In presenting the Tulips of Freedom series, this paper extends our understanding of the Woman Life Freedom movement, spotlighting the ongoing struggle for gender equity in Iran. Our interdisciplinary approach stands as a testament to the power of a coordinated interplay between technology,

Figure 2: Nika Shakarami, from *Tulips of Freedom*

art, and activism, in sparking social change and fostering meaningful, global conversations. We believe this work underscores the transformative potential of integrating computational creativity with activism and hope it inspires further research and creative efforts in this direction.

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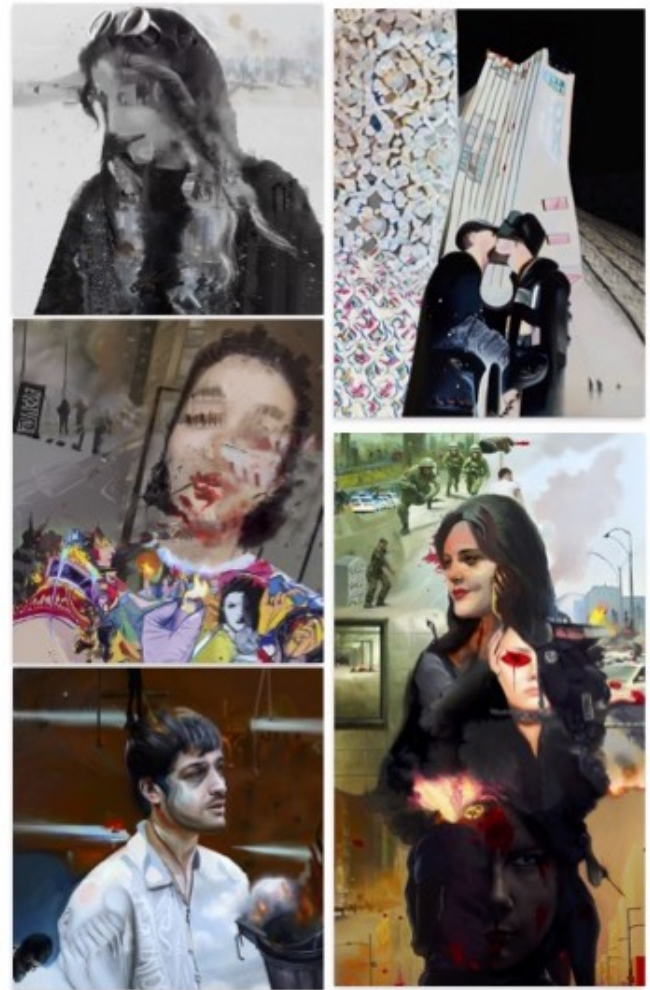
Figure 3: *Tulips of Freedom* collection

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