

Endless, Nameless : Hack the Craftivism through AI

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Abstract

Ubiquitous visual images occupy screens of various sizes in people's daily lives in seemingly freely transmitted network channels. However, the generation of activists' creativity and the communication of social issues in conflicting ideas seems to have encountered bottlenecks under the existing human cognitive framework, as well as the algorithm hegemony censored by the tech-corps and government. It's time to consider voices from post-humanity.

A common way to generate art by AI nowadays is training the machine to

simulate human thinking. That is, the image data set, and the models are bundled in the same linguistic logic. However, in the context of global protest aesthetics, such linear application ignores the fact that the protesters' utterances frequently utilize ambiguous ways to emphasize discord, resulting in limiting the metaphorical interpretation of abstract symbols.

Therefore, I collect images from the search engine (could be indicated as information collectively generated by the public) as materials, and import them to RunwayML, an artificial intelligence creation platform with unsupervised machine learning technology, to generate countless abstract images based on different social-political issues trained by customized, conflict symbols of ML model, then I convert inspiring 2D images into 3D sculptures by Smoothie-3D, a Web-based 3D modelling application.

I hope that through the interaction with the abstract creations of artificial intelligence, we could surpass the norm of human-centred art and bring out the following propositions:

How could digital activism learn what AI learns from us?

1. Introduction

As a new explorer at the intersection of visual research and art education, I believe that only by actively participating in social and political issues and promoting reflective ability through art and public communication can public education practice democratic universal values. Therefore, I explored popular culture, activism and cultural jamming from the perspective of critical public pedagogy, and through the process of practicing digital media activism, I try to challenge the limitations of culture jamming and craftivism.

1.1 Background : the struggle as a culture jammer

"Culture jamming,... is directed against an ever more intrusive, instrumental techno culture whose operant mode is the manufacture of consent through the manipulation of symbols."-Dery, M. (1993).

Culture Jamming was developed from the critical theoretical context of the Frankfurt School. In the 1980s, as a rebellion against mainstream culture and consumerism, culture jamming manipulate daily commercial symbols to transform meaning and context with the intention of "disrupting the information flow"(RéGINE, 2017). At the same time, it is regarded as a "creative and participatory forms of resistance that are reclaiming the public spaces in the context of rapidly changing communication technology" (Nadaf, 2018, p.1). However, whether out of fury or satire, cultural jammers may become

victims of emotional hegemony while searching for the persuasiveness or enticing reasons for public acknowledgment and motivating behavioural changes. (Sandlin, & Callahan, 2009).

1.2 Motivation: hacking the Craftivism

After the Arab Spring Movement in 2011, the network power of social media exerted an important impact on activism. However, the research gap shows that from the perspective of protest aesthetics, the importance of visual images and performance actions in media communication lies in the meaning-generating machine. (Milan, 2015). The protest movement attempted to communicate their vision using visuals and symbols in order to garner public support. Additionally, the research underlines the potential for creative visual images, such as memes, to challenge mainstream media and stimulate innovative public conversations. (McGarry et al., 2020)

Creative expressions of image metaphors for sensitive issues are particularly important in countries that restrict and monitor Internet access, such as the Tank man incident that was forced to be eliminated from the Chinese firewall due to Internet surveillance. (Hillenbrand, 2017). However, the social bubble or message shielding caused by the algorithm creates a bottleneck in message transmission and the danger of polarization. In addition, angry emotions and expressions can isolate people from the information they want to convey, so a combination of craftsmanship and activism creates new possibilities of civic participation space as craftivism, which

means activities that incorporates the techniques of craft with the goals of activism (Fitzpatrick, 2018). Next, I will discuss the use of AI to create endless sculptural ideas.

2. Jamming with the AI arts

The innovation of the StyleGAN (generative adversarial network) calculus model is that it allows unsupervised machine self-learning, and humans can control the input image training data (Horev, 2018). The example below shows how one set of AI-generated faces is created by adopting the 2 style set from the top row and left column.

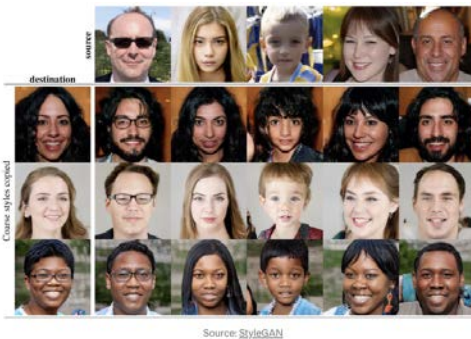


Figure 1.A Style-Based Generator Architecture for Generative Adversarial Networks. Credit: Karras, et al., 2018

I try to challenge the linear logic and purpose of the algorithm originally designed, that is, to pursue a more realistic image of the human world that cannot be distinguished from the true and false. Instead, I get inspiration from my culture jamming experience, that is, (anonymously) create nonlinear connection between symbol and

metaphor-appropriation (DeLaure, & Fink, 2017). Therefore, I scraped the visual dataset from Google under three themes of controversial socio-political issues, manually filter information that violates privacy policy, then trained my own customized StyleGAN2 model (by the paradox symbols within the issues) to generate latent abstract animation.

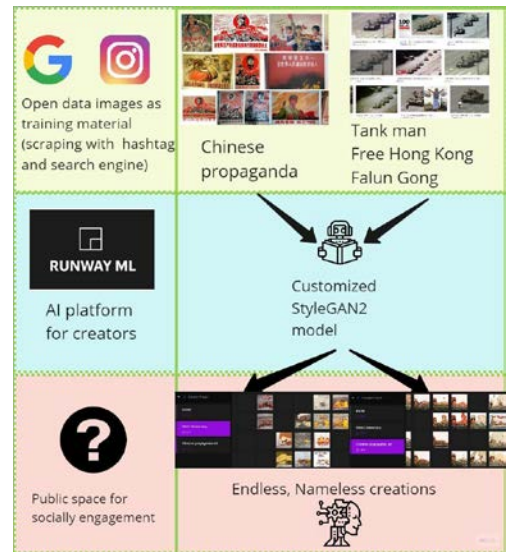


Figure 2. The concept of this project, take the topic DemoGanda as an example

You could visit the project results titled in **Ideological War of GAN** (2021) by the following link, consisted in 3 chapters:

<https://youtu.be/DiJjymuKmV8>

The purpose of the juxtaposition of the images is to present the ai images trained due to the opposition of ideologies under the same issue, which also echoes the opposition of the GAN design principle. Below, I will briefly introduce a series of social-political related works.

2.1: Ch1-DemoGanda: Chinese Democracy vs. West Propaganda?

Using a customized StyleGAN model trained by human faces, this AI abstract art series uses numerous politically sensitive images blocked by the Chinese government, such as 1989 Tiananmen Square/Goddess of Democracy/Falun Gong, etc., while Chinese propaganda arts advocating atheism are re-rendered by AI using the model of multi-religious art images such as Buddhism/Christianity/Islam, etc.



Figure 3. screenshot of chapter1

2.2: Ch2-NoFuture: Nuclear Powered Dog vs. Coal world forest?

Using pre-trained AI generative art models of cats and dogs, this series' image source scraped keywords from nuclear power plants and radioactive waste. Furthermore, image datasets from coal mines and coal-fired power plants are trained by antagonistic forest image models to produce abstract results.



Figure 4. screenshot of chapter2

2.3: Ch3-Invade: Migration Scenery-Inner Planet vs. Interplanetary

The source of these series' images: Interstellar Immigration-related keywords are extracted and re-render into abstract AI generative art using pre-trained models of worldwide military exercises on the other side. On the other side, styleGAN models trained on refugee situations like the EU and the Rohingya people in Burma are used to make controversial AI artworks.



Figure 5. screenshot of chapter3

3. The transition from 2D to 3D

After AI assisted in producing images with metaphorical meanings related to social issues, I took the first theme(Ch1-DemoGanda) in the previous section as an example to show the intuitive interface how I applied the free 2D-to-3D web

service smoothie-3d.com to achieve the purpose of inspirational sculpture.

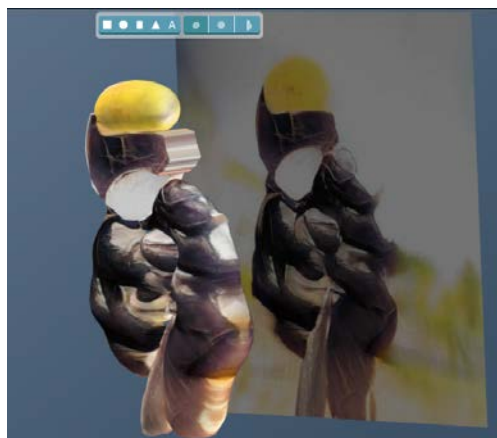
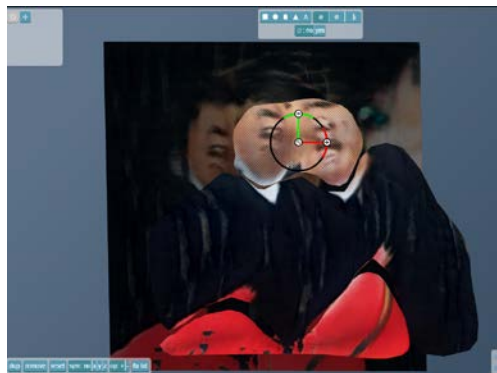


Figure 6. Transforming 2D images to 3D -Chinese Democracy V.S West Propaganda

4. Discussion

I am passionate about exploring creative/critical methods for socially engaged art to raise the unjust awareness of the public, especially reflect on the ubiquitous hegemony behind the screen.

Images are the carrier and a collective cognitive database of human thought. Among various sizes of screens in modern lives have been occupied by

ubiquitous visual images in seemingly freely transmitted network channels. However, the communication of social issues in conflicting ideas seems to have encountered bottlenecks under the algorithm hegemony, or so called the social media filter bubble, censored by the big tech & gov.

In response to future digital media activism should recognize open data (McGarrigle, 2018) and post-humanity (Wright, 2018), I hope artificial intelligence can help me to realize a social data activism that promotes the reflective interaction for the audience.

Keywords:

culture jamming, craftivism, Chinese propaganda arts, AI art, StyleGAN

References:

Régine, D. (2017, March 22). Culture Jamming. Activism and the Art of Cultural Resistance. *We Make Money Not Art*. <https://we-make-money-not-art.com/culture-jamming-activism-and-the-art-of-cultural-resistance/>

Nadaf, A. H. (2018). Culture jamming: activism and the art of cultural resistance. *International Journal of Performance Arts and Digital Media*, 14(2), 1–3. <https://doi.org/10.1080/14794713.2018.1487536>

Sandlin, J. A., & Callahan, J. L. (2009). Deviance, Dissonance, and Détournement. *Journal of Consumer Culture*, 9(1), 79–115.

<https://doi.org/10.1177/1469540508099703>

Milan, S. (2015). From social movements to cloud protesting: the evolution of collective identity. *Information, Communication & Society*, 18(8), 887–900.

<https://doi.org/10.1080/1369118X.2015.1043135>

McGarry, A., Erhart, I., Eslen-Ziya, H., Jenzen, O., & Korkut, U. (2020). The Aesthetics of Global Protest: Visual Culture and Communication. In A. McGarry, I. Erhart, H. Eslen-Ziya, O. Jenzen, & U. Korkut (Eds.), *The Aesthetics of Global Protest* (pp. 15–36). Amsterdam University Press.

<https://doi.org/10.2307/j.ctvswx8bm.6>

Hillenbrand, M. (2017). Remaking Tank Man, in China. *Journal of Visual Culture*, 16(2), 127–166.

<https://doi.org/10.1177/1470412917703154>

Fitzpatrick, T. (2018). Craftivism as DIY citizenship: the practice of making change. [https://minerva-](https://minerva-access.unimelb.edu.au/handle/11343/219289)

[access.unimelb.edu.au/handle/11343/219289](https://minerva-access.unimelb.edu.au/handle/11343/219289)

Horev, R. (2018, December 30). Explained: A Style-Based Generator Architecture for GANs - Generating and Tuning Realistic Artificial Faces. Towards Data Science.

[https://towardsdatascience.com/explained-a-style-based-generator-](https://towardsdatascience.com/explained-a-style-based-generator-architecture-for-gans-generating-and-tuning-realistic-artificial-faces)

[architecture-for-gans-generating-and-tuning-realistic-6cb2be0f431](https://towardsdatascience.com/explained-a-style-based-generator-architecture-for-gans-generating-and-tuning-realistic-artificial-faces)

Karras, T., Laine, S., & Aila, T. (2018). A Style-Based Generator Architecture for Generative Adversarial Networks. In arXiv [cs.NE]. arXiv.

<http://arxiv.org/abs/1812.04948>

DeLaure, M., & Fink, M. (2017). *Culture Jamming: Activism and the Art of Cultural Resistance*. NYU Press.

McGarrigle, C. (2018). Augmented Interventions: Redefining Urban Interventions with AR and Open Data. In V. Geroimenko (Ed.), *Augmented Reality Art: From an Emerging Technology to a Novel Creative Medium* (pp. 115–130). Springer International Publishing.

https://doi.org/10.1007/978-3-319-69932-5_5

Wright, R. (2018). Post-human Narrativity and Expressive Sites: Mobile ARt as Software Assemblage. In V. Geroimenko (Ed.), *Augmented Reality Art: From an Emerging Technology to a Novel Creative Medium* (pp. 357–369). Springer International Publishing.

https://doi.org/10.1007/978-3-319-69932-5_20