

# TEXT-TO-IMAGE AI

## ERNIE-ViLG

### BACKGROUND

Ernie-ViLG is a new type of AI developed by a Chinese tech company called Baidu. This AI allows you to "generate images that capture the cultural specificity of China" (1). This AI makes better anime, for example, "than DALL-E 2 or other Western image-making AI" claims MIT Technology Review. This AI was trained on a data set of 145 million image-text pairs and 10 billion parameters. This helped it to discern the different art styles and concepts.

### BENEFITS

Despite these rules there is also a huge opportunity for this type of AI. Due to its specificity on Chinese culture some of the most accurate versions of Chinese art and society are able to now be formed from this text to image AI. This opens up huge opportunities for this up-and-coming digital art style. With this type of ability a whole new realm is open to the community which is exciting.

### HOW TO HELP

One way this AI can help is that it is a breakthrough in this type of Tech. Since western AIs are trying to be super broad they are necessarily doing a better job.

While they can get a vast variety of styles and cultures they are not always accurate. This AI is showing that there can be many different forms of AI and that maybe more of them should be focusing on a specific style or culture in order to master it and gain the most insight on it. This can help make the accuracy of the art improve by leaps and bounds just like ERNIE-ViLG is doing.

### FUTURE

Now, even with all of these worries will there even be a future for AI in China? Yes. I believe that this type of AI will inspire others to create AI that is more specific to one's own culture as a way to honor it in their work. If this continues the amount of culture specific AI text to image that will be created is exciting.

### ISSUE AT HAND

The main problem that people had with this new AI was that the AI would refuse to show specific events relevant to China, such as Tiananmen Square. So when users would input words associated with said event or other events like it the AI would spit back "Sensitive words found. Please enter again(...)" (1). What also started to happen later in the AI development was that a ton of Chinese words that were considered to be politically sensitive were blocked. This also included the names of high-profile Chinese political leaders as well as words like "revolution" and "climb walls". Many other phrases and words were blocked because they violated China's laws on speech.

### HARMS

Even though there is some good that can come out of this there is still not a completely free version of the artform yet. Artists can not fully express themselves because of the strict guidelines. This is creating a ton of controversy around this AI in particular. And people are confused.

### WORRIES

There are still a ton of worries though with this AI and its creators in particular. Many people are wondering if they are being forced by the laws to keep things censored or is it a more internal need to abide by what they believe in? Is it actually the stance of everyone involved in the project or is it being forced by the government. If there is still a limit on someone's voice and what they can and cannot say in China will it always have an impact on how these types of AI are created in the future? Will they all have these types of limitations? If some company does decide to break the rules, especially in China, will the consequences be more dire than previously thought?

### SOURCE

Slashdot. There's No Tiananmen Square In the New Chinese Image-Making AI. (n.d.). Retrieved October 7, 2022, from <https://yro.slashdot.org/story/22/09/14/2236211/theres-no-tiananmen-square-in-the-new-chinese-image-making-ai>

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