



ANDREAS GREINER

[www.andreasgreiner.com](http://www.andreasgreiner.com)



# JUNGLE MEMORY *'concept'*

In anticipation of a new work revolving around artificial intelligence and deep learning, the project Jungle Memory re-focuses on the concept of 'untouched nature' and its interpretation by a neural network algorithm. Due to human influence and subsequent climate change, there is a heightened risk for tree mortality as a result of increased temperatures, drought and forest pathogens (Allen et al. 2008). Through the documentation of untouched and ancient forests such as

the UNESCO world heritage sites both on the island Vilm and the Bialowieza forest in Poland, there is an attempt to archive their natural growth and visual aesthetic.

The Bialowieza forest, for example, is the last primeval forest in Europe - unlike many other forest landscapes it has not been logged and reforested. Stretching 140,000 hectares over the Poland and Belarus border, it has the highest

biodiversity in northern Europe with dense populations of wolves, birds and bison (Kowalczyk, 2013). This forest and others such as the Hambach forest in western Germany are at constant risk from the likes of politicians and coal miners who seek to use their age-old resources for profit. The Hambach forest has existed since the last Ice Age and is home to endangered species who exist nowhere else. Less than one tenth of the original forest remains and plans for coal extraction

see its complete destruction within the next three years. The risks of human driven environmental change motivates an attempt to document these forests in thousands, if not millions, of images.

Aside from photo documentation there is an attempt to reinterpret traditional landscape painting as the 'original' human depiction of nature. With a deep-learning algorithm we can explore the extension of the 'human gaze onto nature' through the use of artificial intelligence. Can there be an honest recreation of 'untouched' nature through a human and/or algorithmic lens? By what means do we measure what is natural?



Above: Fly-over view of the border between the Hambach forest in western Germany and the RWE coal mine. Plans to expand the mine will destroy the forest within 3 years.



Right: Traditional landscape painting by Carl Gustav Carus, 'Eichen am Meer'



# Dragonfly & Current Project

The past installation Dragonfly, has explored the use of deep learning algorithms such as google deep dream. A hovering drone films an indoor palm tree while its camera images are transformed by a neural algorithm trained on a vast pictorial database of various animal images like birds, dogs, snakes etc. The resulting images shown on a screen reflect a distorted interpretation of the original palm tree as well as the exhibition visitors. In this setting two separate entities, one recent and technological and one ancient and natural, are put into a contextual dialogue. Frame by frame, a growing loop of artificial hallucinations unfolds on the screen

---



3 images from Tokyo wondersite: video projection of ,Dragonfly' installation - a drone films a palm tree and reinterprets it as bird and dog faces. The video is fed into the algorithm google deep dream.





Photo Archive Collage, Island of Vilm, DE. Photo archeive was recorded in order to train an algorithm.





Beginning attempts of translating an urban landscape into a forested scenery by training an algorithm selectively on images of trees and forests.



# *The Algorithm:*

Similar to Dragonfly which translates an existing image into a landscape of animal faces, the new algorithm developed for Jungle Memory is to be fed thousands of forest pictures with an aim to synthesize its own original images. By recording pictures of trees and shrubs in this archive and then using them to teach a deep learning algorithm - we can appreciate the way that technology synthesizes nature. Hallucinations of an artificial-romantic experience of



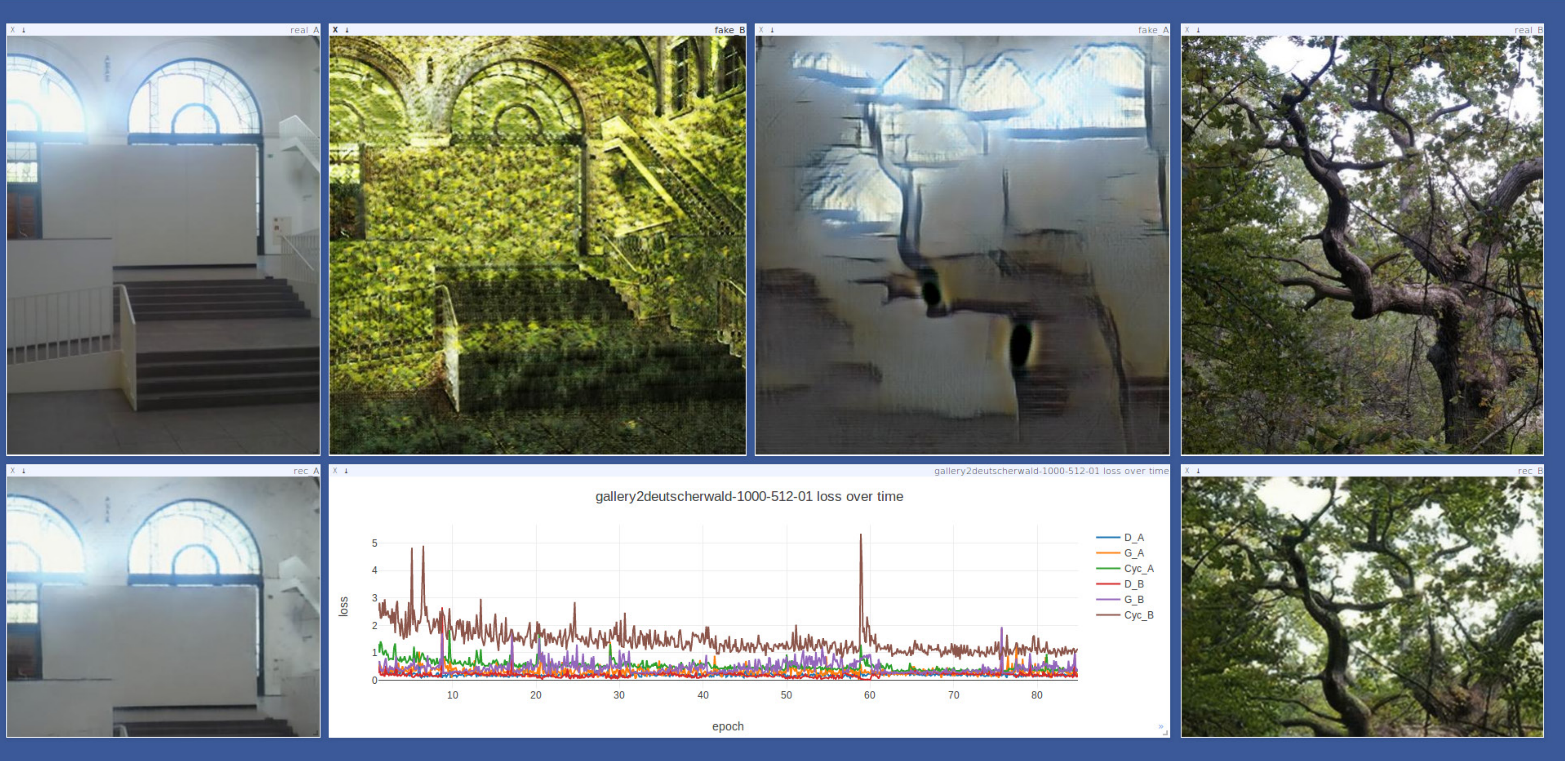
Images: 2 views from the untouched forest on the Island of Vilm, Germany. Included in the forest archive



nature are generated by an intelligent machine instead of a sentient human being. The continuation of this project depends heavily upon collaborators who share an interest in algorithmic coding. We require an expert in the field of deep learning who is excited at the possibility of sharing their ideas and expertise. The importance of this project increases with the documentation of each forest threatened by environmental change and human impact.

---





Trial algorithm which turns an urban building into a forest in steps of learning