Linda Dounia

Once Upon A Garden: The Complete Series





Once Upon A Garden: The Complete Series (2022 – 2024)

Introduction

Once Upon A Garden is a speculative archive of critically endangered and extinct flora that we have little to no records of, and therefore no way to remember. In this project, the artist Linda Dounia uses Artificial Intelligence as a time machine to go back in time and piece together data we didn't bother recording using data that we did record. To be able to fill gaps in the world's collective memory with synthetic memory is a unique opportunity that AI offers today. Between 2021 and now, Once Upon A Garden has speculated on what the flora population in West Africa (where Dounia is from and lives) might have looked like decades ago using increasingly faster and more refined models.

The resulting body of work, while increasingly more photo-realistic as AI became more powerful over the years, cannot be mistaken for reality due to the thin and fragmented data available for training. Global efforts to record disappearing biodiversity have not been consistent across time and geographies. In some places, when interrogating what's been lost, we have no photographic records and can only rely on herbarium records dating back to colonial expeditions.

Once Upon A Garden ultimately makes a case for more even efforts in recording biodiversity loss across the globe. It also shows an alternative use of AI that demonstrates how this technology can hold a mirror to what we care to remember and therefore record. Incidentally, this mirror also shows us what gets left behind in the making of an increasingly more influential tool in our lives and societies.

Artwork Summary

Once Upon A Garden: The Complete Series presents 50 emergent species of speculative flora across 5 chapters of making this body of work. The chapters map onto the chronological progress of this project between 2021 and 2024.

Collectors have the opportunity to purchase a 'bouquet' of flowers that includes one individually minted NFT from each of the five chapters (5 NFTs in total). Each collected bouquet of flowers will therefore represent an archive of this project, a full arch in time from the first to the final training.

The first four chapters offer static images while the fifth chapter is a 40-second video. Collectors can also get a museum grade print $(14" \times 11")$ of the video at cost.

Each bouquet of five NFTs is \$1,000.

The Chapters

There is no longer any doubt about the transformative potential of AI. Yet, its proliferation has also uncovered gaping holes in how and where data about humanity is collected, stored, and preserved. AI is only ever as good as the data it's trained on. Still, there seems to be a clear unevenness in how much information AI has about non-Western ideas, contexts, people, and environments. This is evident in how common stereotypes and hallucinations are when interrogating generative AI tools today, be it language or image based.

Each chapter of Once Upon A Garden starts with the same foundational data: records of extinct and critically endangered flora from the Sahel region of West Africa, as classified by the International Union for Conservation of Nature. This means photographic records from the internet (seldom available), photographic records from physical archives (national archives, family photo books, journals, etc.), herbarium records, encyclopaedic records, and academic records. From these records, individual species are identified and tagged with all available information about it (texts and images).

Chapter I, 2021-2022

For the first chapter of Once Upon A Garden, Dounia trained a GAN on real and imagined visual records of extinct and critically endangered flora from the Sahel region of West Africa. The 'real' visual records were all the available images gathered in the database for this project. The 'imagined' records were synthesised with a diffusion model using text records when 'real' images weren't available. Due to the fragmentary records of biodiversity in West Africa, this GAN thus featured more imagined records than real ones.





Once Upon A Garden, GAN training outputs, 2021-2022

Dounia knew that some distortion and lossiness was to be expected from the GAN's outputs, considering so much of its data was created by the imagination of another model. She believed though that this lossiness provided an apt metaphor for the ongoing disappearance of the natural world, and how thorough that disappearance was in places where we didn't care to remember what's left and what's been lost.

From this first chapter, individual flower outputs were curated, animated, and composited into a variety of artificial gardens. These gardens were installed at various exhibitions and art fairs around the world, starting as a special project commissioned by ARTX LAGOS in 2022.



Once Upon A Garden - The Gardens, ARTXLAGOS, 2022

Chapter II, 2022

Once Upon A Garden's second chapter begins with the species that emerged from the GAN, shortly after training was completed. In this chapter, Dounia attempted to further denoise images of the flowers with a text-to-image diffusion. Using the text data gathered at the onset of the project as prompt, she endeavoured to bring more life into the GAN outputs.



Once Upon A Garden - Specimens, GAN to Text-to-Image pipeline, 2022

The spectral suggestions of flowers from the first chapter turned into more recognizable and familiar objects. Dounia realised then that as AI models inevitably evolved, their ability to remember would only get stronger. It felt important to continue exploring how much more refined the synthetic memories of the flowers could be with each milestone in the evolution of models.

The flowers from this chapter have never been previously released.





Once Upon A Garden - Specimens, Text-to-Image, 2022

Chapter III, 2022-2023

The third chapter of Once Upon A Garden deepens the narrative of loss and memory, featuring the most detailed synthetic flowers up to this point. In this chapter, Dounia compares different diffusion models using a similar approach to Chapter II, starting with text data from the initial database for the project, and using the GAN to Text-to-Image pipeline outputs as reference images.



Once Upon A Garden - Specimens, Text-to-Image (first models) to Text-to-Image (latest models) pipeline, 2022

The release of Midjourney v.6 toward the end of 2023 provided the most detailed and faithful outputs to the initial data and was thus used for the release of *Flore Perdue* commissioned by Bright Moments for its Paris edition. This release also introduced a p5 algorithm that obscured the striking details from the outputs, reminding the audience that no matter how much more detailed and may have seemed, the flowers were still speculative.



Once Upon A Garden - Specimens, Text-to-Image, 2022

Once Upon A Garden - Flore Perdue, Bright Moments Paris, 2023

Chapter IV, 2023-2024

Once Upon A Garden plays with entropy. Between the first and the third chapter, it is concerned with decreasing entropy by introducing more data that is digested by more powerful models to arrive at a system where flowers have familiar and distinct embodiments.

Fellowship ARTXCODE

Starting in the fourth chapter though, Dounia starts the process of rewilding this body of work and increasing entropy. First, lossiness is added to flowers from the fourth chapter by adding non-organic materials to their make-up. Second, gardens from the first chapter are re-explored through wilder and more chaotic floral arrangements.



Once Upon A Garden - Herbarium Annex, GNS015-GNS07, Commission, 2024

Through an Image-to-Image pipeline, flowers are corrupted. Then using a p5 collage algorithm, they are randomly picked and placed on a canvas to create gardens. These gardens have only been released as private commissions.



Once Upon A Garden - Specimens, Image-to-Image pipeline, 2024e

Chapter V, 2024

The final chapter of Once Upon A Garden, titled Synthetic Rot, is the culmination of this body of work spanning four years. It traces generative AI models' evolution over this period and their ability to help us speculate on and synthesise the past.

This chapter presents 50 stills and 50 videos of randomly assorted flowers, often with multiple different species sharing the same stem, behaving erratically, making and remaking themselves with only chaos as a compass. Each video is accompanied with the reference still image that was used as a keyframe to create the video.

Flowers from the previous chapter are made even less organic through an Image-to-Image pipeline. The outputs are then used as keyframes to create animations using Runway's Gen 3 Alpha. The soundtrack for the videos is created by mixing three types of recorded sounds (nature, machinery, people at work) with desert blues musical tracks made in Suno AI.

Synthetic Rot is the wildest stage of this body of work, where flowers are composed of mostly inorganic material, exposing the fact that they are primordially data mediated through our screens by code made possible by machinery built with natural resources.



Once Upon A Garden - Synthetic Rot, Image-to-Image pipeline, 2024



Linda Dounia Rebeiz B.1994, Senegal

Linda Dounia is an artist and designer who investigates the philosophical and environmental implications of technocapitalism. Her work mediates memories using generative technologies, namely Artificial Intelligence and Creative Coding. She is an advocate for more transparency and greater agency over AI, a topic she writes and speaks about.

In 2023, Linda was recognized on the TIMEA100 list of most influential people in AI for her work on speculative archiving — building AI models that help us remember what is lost. In 2024, she was also the recipient of Mozilla's RISE25 award for her work in AI.

Her work has been featured by MoMA, Chanel's 19M gallery, Christie's, Museum Folkwang, Bright Moments, Avant Arte, Time Magazine, It's Nice That, and The New York Times. She has been shown at various galleries around the world as well as Art Basel, The Biennal Sur, The Dakar Biennale, KIKK festival, ARTXLAGOS, and Digital Art Fair Asia.

- Website
- <u>Twitter</u>
- <u>Time100</u>
- Mozilla Rise25