The name Anaïs Berck has existed since 2019, and refers to "a collaboration between humans, algorithms, and trees." These organisms take an interest in the collective through the prism of intelligence: "Anaïs Berck opens a space in which human intelligence is explored in the company of plant intelligence and artificial intelligence." The collective was launched by artist An Mertens.

From 2008 to 2021, An Mertens was a core member of Constant, an organization dedicated to Art, Media, and Technology in Brussels. From there, in 2012, she cofounded Algolit with artists Catherine Lenoble, Nicolas Malevé, and Olivier Heinry. The group "focuses on research into free code and text," attentive to algorithmic narratives, in all their diversity.

At the beginning of the research project *Algoliterary Publishing: Making Kin with Trees*, Anaïs Berck found a parallel between how algorithms consider humans, a neoliberal approach where they are stripped of their humanity and individuality, to become simply usable data, and the way plant species are "managed" as categorizable data. The goal was to deal with these intelligences in such a way as to create narratives that spoke of trees, questioning the colonial biases of botanical classification and standardization methods, taking a critical approach to the effects of dominant cultures.

Trees were placed at the center of creation for this project, decentering the humancentric perspective. This was put into practice during a series of residencies. The first, titled Fruit Rains, took place at the Villa Empain in Brussels, close to the Sonian Forest, with ESA Saint-Luc (Brussels). The second residency, Bud Spotting, at the Meise Botanic Garden, produced two installations, presented at Constant in June 2022. After a call for participation, the third residency was reconfigured to include eight people, all sharing a practice linked to botanical science, decolonial themes, programming, and writing/publishing. The residency's outcomes were presented publicly in 2022 and 2023, in Belgium, France, Germany and the Netherlands.

The research continues with *Situated Portraits*, which provides visitors to nature reserves (Sonian Forest, Grenspark Kalmthoutse Heide, Landschap De Liereman, and Hoge Kempen National Park) a different perspective on the more-than-human life found there.

Art/Recherche	(A/R)
An Mertens	(A.M.)
for the Anaïs Berck Collective	

The following interview was conducted in Brussels during the summer of 2023.

 (A/R) Your artistic practice generally involves collective projects, notably with Constant or the Algolit project.
Could you tell us about this approach?

(A.M.) Over the last thirteen years (2008–2021), I've spent two days per week working as a core member of Constant, combining this collective work with my artistic practice. Constant has been operating as an art and media organization in Brussels since 1998. Constant works exclusively with open-source tools and licenses, focusing on creating collaborative practices using feminist theory as its methodology. The 2021–2023 FRArt grant meant I was able to concentrate exclusively on my practice.

Within Constant and in my own practice, I've been researching the question of being an author in the digital age. These are always collective creations, online stories, for example the hybrid novel/fiction *CIAO/CU-Tot Later*, a generative novel and film. We worked with dancers and musicians on improvisations to break with the linear narration. For three years (2009–2012), we experimented with software's role as an actor, during residencies and performances in Belgium and internationally.

Along with the artists Catherine Lenoble, Nicolas Malevé, and Olivier Heinry, in 2012, we founded Algolit, as a Constant project. Now independent, it's a place for research on free code and text. The group meets for a day every month. Since 2015, we've focused our research on the narrative point of view of algorithms, both simple 1960s algorithms, like Quicksort, and collective machine-learning algorithms. The results of these collective experiments are often presented as installations, performances, workshops, and conferences.

(A/R) And how did Anaïs Berck come together in 2019?

(A.M.) Every week, as an antidote to intensive computer use, I was going to the Sonian Forest to detox. One day, I realized that I didn't know any of the trees that were doing me so much good. In 2012, I decided to undertake training as a nature guide. Later, in collaboration with FoAM, Z33, and British artist Heath Bunting, we organized the research workshop *The Identity of Trees*,<sup>1</sup> to develop techniques

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to enable the personhood of trees to be recognized in our legal system. The project continued with a series of walks to meet trees in the city and the forest. In the meantime, I also discovered shamanism, and since then I've been trying to make the link between the world of programming and that of spirits and trees. In 2018, with Constant and Z33, we organized the collective residency Alchorisma, around algorithms, trees, spirits, and stones. The result was a beautiful online publication.<sup>2</sup>

I nevertheless always felt torn between two different worlds. In 2019, I received a research grant to work on how to best represent, manage, guide, and advocate for a collective of algorithmic storytellers. This led to the Anaïs Berck's creation, in response to the following observations.

Algorithms are written by humans. They often already have a long history, having been developed, collectively recombined, and modified each time. In turn, the data fed into the algorithms is created by other people. In addition, to create digital work, I've always collaborated with programmers and/or graphic designers. So I've always had the impression of collaborating with an indefinable number of human beings. The creation of a pseudonym representing combinations of people was a response to the tricky question of the authorship of algoliterary narratives.

Since most algorithms are serving neoliberalism and are primarily deployed to maximize financial gain, as an artist you might wonder what tasks artificial intelligence would choose if it were "freed" from this yoke. The idea that it would want to contribute to a healthier planet seemed plausible to me. Trees are living beings that engage in countless symbioses with other elements in nature. Increasingly, they are also cited as the solution in the fight against CO<sub>2</sub>.

There was another argument for choosing trees and plant intelligence. The way that commercial algorithms treat humans is very similar to the way forest managers view trees: the primary interest is as collectives with specific characteristics. Their individuality only matters when they fall into the category of outliers, when their behavior diverges from that of the group. In the case of trees, this could mean that they are very old, very sick, dead, or such.

Moreover, in the virtual world, trees are as invisible as algorithms. While a child can tell the difference between a tree and a shrub, this is much less true of databases. This is thanks to the culture of classification that has existed since the eighteenth century, particularly that of the Swedish physician and scientist Carl Linnaeus. Contemporary botanical nomenclature is based on his classification system. For example, in this nomenclature, a tree doesn't exist-in line with the idea that any plant has the potential to become a tree-depending on which climate it's found in. A cactus in Belgium might be considered a tree in Mexico. Thus, trees are at a point of intersectional discrimination: they remain invisible to the algorithm unless we consciously look for them.

Anaïs Berck creates three types of work. There's the algoliterary, which is the subject of this interview. Then there's the literary work. And finally, there's the fieldwork, walks in the forest, where the trees welcome us.

(A/R) The research project involved establishing an artistic collaboration between human, algorithmic, and tree intelligences. What kind of situations did this create?

(A.M.) In any new situation, it's important to be aware of the mechanisms of inclusion and exclusion, and to use methods that allow room for discomfort and can, if necessary, invite transformation. Collective mediation is one method, as are exercises that help us make physical contact with a tree, develop a friendship with and learn from the tree. Additionally, it's important to thoroughly examine the representations of trees in databases, the operation and history of algorithms such as *tree sorting*, and to study how algorithms work with data about trees.

Over the course of this research, it became quite clear how important it is to restore our physical, tactile, concrete relationship with trees. We breathe in and out several times every minute. It's our most natural movement, to such an extent that we forget about it. Until there's a problem: there's not enough oxygen in the room, or a cold or pneumonia makes breathing difficult. We often forget that we can breathe thanks to the trees on this planet. And thanks to the enormous jungles of the northern and southern hemispheres, which ensure enough oxygen during our winters, when the trees in our regions are resting. Oxygen is the natural waste product of trees, and our natural waste product-carbon dioxide-nourishes them. Trees are also the most natural solution to climate change. They reflect and absorb part of the sun's rays, maintaining local coolness and contributing to cloud creation through evapotranspiration. In brief, we live in an ongoing, continuous dependence with trees.

As Stefano Mancuso points out in his book *Brilliant Green* (2019), Stefano Mancuso points out: "Our relationship with plants is one of absolute, primordial dependence,

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and in that sense it somewhat recalls the relationship of a child to its parents. While we're growing up, and especially in adolescence, we go through a period of totally denying our dependence on our parental figures that frees us to attain psychological autonomy, in preparation for actual autonomy, which will come many years later. It's not out of the question that a similar psychological mechanism enters into our relationships with plants. No one likes depending on another. Dependence coincides with a position of weakness and vulnerability that we don't enjoy contemplating."<sup>3</sup>

In Celtic times, forests were considered cathedrals. Druids performed their rituals surrounded by specific trees. In Gilles Würtz's *Chamanisme Celtique* (2018) he asserts that "trees are, more than anything else, living beings, with whom we share our lives. They are an indispensable part of life on Earth. We human beings are not indispensable to life on Earth. So it is natural that we humans should show them respect and gratitude."

There is still so much to learn about trees and plants. How better to consciously integrate them as living beings, as collaborators in our collective work? By placing the tree and its representations at the center of their work, and by welcoming algorithms not in the service of extracting resources or without mercantile value, but whose goal is to make a family with nature, Anaïs Berck creates narratives that speak about trees and that also challenge the colonial perspective of classification and standardization methods, and which might peak critically of the effects of dominant cultures. Trees are placed at the center of creation, decentering the human being's perspective.

(A/R) Your earlier projects explored the issues of the colonization of knowledge and plant species. Could you describe a little these projects, which, in a way, prefigured this research?

(A.M.) After the Diversions work session Constant organized in 2016, at the Royal Museums of Art and History, Anaïs Berck was invited to work with Wikipedia's data collection and then with Wikidata.

*Wikified Colonial Botany* (2019)<sup>4</sup> is a project researching otherness in the online encyclopedia Wikipedia. In this work, trees represent otherness. These more-than-human beings are an integral part of colonial history, considering the intricate relationship that existed between botanical science, commerce, and state policies. As Londa Schiebinger and Claudia Swan say in their book *Colonial Botany* (2007), "colonial endeavors moved plants and knowledge of plants promiscuously around the world." It wasn't just a case of non-Western trees being displaced during this period; Europeans also renamed them, using Linnaeus's classification system, and these Latin names remain the global standard today. The medicinal, edible, and material uses of trees were thus commodified, and around the world botanical gardens were created as part of the colonial policy of economic exploration.

Wikipedia is the most widely used online source for fact-checking; the site is multilingual, updates are daily, and it's free. Developing and training the new software that is shaping our world is heavily reliant on Wikipedia's texts.

*Wikified Colonial Botany* shows how Wikipedia presents the major trees from various continents. By examining their quantitative and qualitative descriptions in four languages connected to colonization—French, Spanish, English, and Dutch—the work shows how the representation of these more-than-human beings depends on global perspectives and relations.

In 2020, Anaïs Berck created *When Organic Trees Meet the Data Tree*,<sup>5</sup> utilizing Wikidata, Wikpedia's structural referent, which is used across the world to create linguistic software, including translation applications and search engine autocomplete functions. Wikidata is available for free, is up to date, and available in many languages.

When investigating how biological trees are represented in this database, the cultural and power structures become visible. For example, this work shows that not all languages are equally present. Moreover, the search term "tree" leads to individual trees, such as the chestnut beside Anne Frank's house. When even a child can easily point to a tree in the physical world, the concept of tree is challenging for programmers in the digital world (see above). This work gives voice to the trees, as well as algorithms and people. Their visual stories offer a critical perspective on the creative processes of applications and on the software that we use every day.

(A/R) Between the project's beginning and today, there have of course been some changes in direction. Could you tell us about them, and why they happened?

(A.M.) The research project was organized around a variety of questions, which we divided into five themes per residency: research on a specific algorithm, collective reading sessions, questions related to graphic design, the materiality of the book, and the effects of forest bathing on writing code.

The driving force behind the first residency in Brussels was the organization of a conference and workshop for ESA Saint-Luc (Brussels), which went pretty much as we envisaged it. During the second residency, at the Meise Botanic Garden, the decolonial theme took precedence, thanks to the residency's setting, our visits to the botanical garden, and discussions with researchers and staff. This created tensions within the team. Although we drafted and reviewed the research proposal together, it turned out that not everyone was on the same page. One of the four collaborators decided to leave the project.

This resulted in profound changes in the research. I organized a non-mixed study group around white privilege, launched an open call to expand the team, and thanks to discussions with colleagues, was able to put a series of tools in place to help establish a safe space. I described this reorientation in detail in an article titled "Holding Space for Discomfort in Collective Work."6

(A/R) During the course of the research, you orchestrated three collective moments: one in the Sonian Forest, another in Meise, and the last one in the center of Brussels. Could you tell us about these parts of the residencies?

(A.M.) Fruit Rains was the first residency, in 2021, at the Villa Empain, beside the Sonian Forest. Here, the focus was on organizing the seminar and workshops for sixty students from ESA Saint-Luc. The seminar was titled "On Human Plant and Artificial Intelligence,"7 Guests, including Outi Laiti, Jara Rocha, Nathalie Grandjean, and Stephan Kempelmann, contributed immensely to our research.

Then we organized four separate workshops, with fifteen students each time. These focused on the various ingredients central to our research. One session focused on decolonial theory and Anaïs Berck's geopolitical and corporeal situation. In a second session, we executed and played with a simple tree-sorting algorithm. In a third session, we experimented with existing sensors to measure the electrical capacity of plants and interface them with code via an ESP32 (a microcontroller). And the fourth, was a forest bath, an invitation to connect with the trees in the Sonian Forest. All these projects were presented during an exhibition held as part of the school's open day.

Bud Spotting was a two-week residency at the Meise Botanic Garden. The initial plan was to hold reading sessions on decolonial theory; experiments with the random forests machine-learning model to explore the Meise Botanic Garden's databases (images, herbariums, texts); a session on the "strangeness" of a digital "book" (page numbers, cross-indexing, etc., across a number of PDFs); printing books on paper while respecting and working with trees; and daily forest baths in the park.

The garden's staff and researchers were incredibly generous with their time. We received several guided tours of the collections and were able to understand the myriad of databases that are the cocreators of scientific research.

Because of the huge amount of information in the botanical garden, both physical and digital, and due to the change in the team, we concentrated on reading sessions,

coding, and forest bathing, employing methods like slowing down, observing, meditating, reiki, and artistic expression (photography, drawing, text). We followed different threads through the data, culminating in two installations in Constant's window in June 2022: Rewilding Specimens<sup>8</sup> and Trees of Discomfort.<sup>9</sup>

The most recent residency was organized in a radically different way. Due to the changes in the team, we organized a call for participation and expanded the team to eight people, all of whom shared a practice connected to botanical science, decolonization programming, and writing/publishing. As preparation for the residency, we gathered together threads connected to algorithms, databases, and the kinds of publications that could help us envisage how we wanted to explore algoliterary practices. Participants were able to share their own expertise. We looked at various platforms, tools, and methodologies for creating editorial/publishing projects. Then, at the end of each residency, working in small groups, we shared various threads with an informal audience of interested artists, researchers, and curators. Each experiment was presented and discussed. Reactions were all really positive. Those who were there were impressed by the diversity and the ratio of women, and by the quality of the research undertaken within a very short timeframe. Alongside the programming skills and the specialized lexicons.

The results of this research have been shared in conferences, articles, and works in publications and workshops.<sup>10</sup>

(A/R) In what ways is this research still a work in progress? What's next, after these two years of research?

(A.M.) The research is continuing, in various forms. Above all, I am convinced that the work around decolonization and white privilege, which took central positions in this research, is a lifelong, all-encompassing work, professional as well as political, social, and personal. Just as Gloria Wekker insists in her book White Innocence,<sup>11</sup> the mechanisms of domination and of privilege of the Western white male—and here I dare to add, the white female academic too—are still so ingrained in our society, that we need unlearning alongside systems that are always benevolent and inclusive.

Then, within Algolit, we take up the questions of algorithmic publication and the narrative point of view of the algorithm, informed by the experiments and references from the various residencies.

Meanwhile, Anaïs Berck is following a different line of research. Through the FRArt project, we had the chance to discover the myriad of botanical databases that exist online and within institutions. Each time we visited a new database, we were amazed by the

universality of the fields and the consequent sense of abstraction. Vernacular names are mostly missing, as is the information about the local guides who led the biologists to the plant, an explanation of the Latin name, a description of the landscape in which the plant grows, the various animals and insects who visit the plant, its medicinal and other powers, its importance for the future, and such. In other words, it is very hard to image from such a database where and how the plant lives.

This is how we came up with the idea of creating "situated" portraits of nature reserves. The aim of Situated Portrait is to reveal the perspective of trees on their own lives, their symbioses, and the world, and to give visitors a different point of view on the more-than-human life in a nature reserve. We achieve this through a combination of sensors, algorithms, programming, interviews, images, and stories. Images and fragments of history change according to measurements from sensors capturing the soil's humidity, temperature, CO<sub>2</sub>, wind, and sap flow. The research will be undertaken by three artists, a series of algorithms, and the trees and plants of the Sonian Forest, Grenspark Kalmthoutse Heide, Landschap De Liereman, and Hoge Kempen National Park.

Following this research, we'd like to create a series of interactive installations that we'll present in different centers of art in 2026.

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- 2. Alchorisma: https://alchorisma.constantvzw.org/. Stefano Mancuso and Alessandra Viola, Brilliant 3. Green: The Surprising History and Science of Plant Intelligence, trans. Joan Benham (Washington, DC: Island Press 2015) 4.
  - "Wikified Colonial Botany," Anaïs Berck: https:// www.anaisberck.be/wikified-colonial-botany/.
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- 11. Gloria Wekker, White Innocence: Paradoxes of Colonialism and Race (Durham, NC: Duke University Press, 2016)

## CAPTIONS

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- fig. 01 Forest bathing, workshop with Esa Saint-Luc's (Brussels) students, Sonian Forest, 2021. Photo credit: Anaïs Berck.
- fig. 02 Wood Lab visit, Meise Botanic Garden, 2022. Photo credit: Guillaume Slizewicz.
- fig. 03 Herbarium, Meise Botanic Garden, 2022. Photo credit: Anaïs Berck.
- Sitting corner, Brussels, 2023. Photo credit: fig. 04 Anaïs Berck.
- fig. 05 Algorithmic game of tree sorting, Brussels, 2023. Photo credit: Anaïs Berck