

À la Recherche tells the fictional story of a person generated by artificial intelligence. The story is read through a series of different texts, following the ages of life, from birth to death. Mirrors of our lives, because generated from human data, the texts and images answer each other, questioning the notion of identity and aesthetic norm. This generated person, incarnation of each one or of nobody, summarizes and questions the way of producing with a tool which does not know how to do anything, if not to imitate everything.

Born in a will to prolong a synergy of work in common begun for several years, this project carries the ambition to be a space of explorations and questioning around our contemporary production tools, as graphic designers.

Our three theses presented a common notion, the protocol, that we wished to approach around an experimental subject. Our goal was to explore new graphic territories, with a contemporary subject.

It is with a critical look at the traditional use of AI in graphic design that this project emerges. We go against *logo-makers*¹ who abandon sensitive intelligence in favor of a logic of execution, against the use of « photo filters on steroids² » and against a dazed fascination with these autonomous tools³. This project is a critical exploration of one of the major potential techniques of the coming decades in graphic design.

The fact that the precise functioning of these intelligences escapes⁴ the most expert of engineers is also a major axis of interrogation towards these contemporary tools in front of which we lose little by little the total control, sliding towards a control of function restricted to the inputs and outputs of the machine.

Generally used for the production of photo-realistic images⁵,

the programs allowing the generation of images are first trained from gigantic image banks. These, once perfected and coupled with an AI that understands natural language, are able to transform a sentence into an image. The first part of the construction of these AIs seems very interesting to us, offering a lot of modulations according to the training images provided. Thus, this exercise becomes a mirror game. The machine returns what we give it, it makes from us. This us is oriented by a curation of specific data which are then distributed to the artificial intelligences.

With the objective of learning and reproduction, the machine seeks to get closer to our sensitivity as human beings. À *la Recherche* is a project that also questions the absence or presence of sensibility in automated productions. The absence of sensitivity in the machine is a fact. Its production of images, judged as sensitive by our eyes, comes then from its understanding of what gives birth to beauty in an image.

Putting aside a hypothetical definition of beauty, common to all societies, this reflection returns to the question of who makes the sensitive: the receiver or the creator?

Tom Lahat, Yali Saar, et Nadav Shatz, « Make A High-Quality Logo In Just 5 Minutes For Under \$30! », E-commerce, Tailor Brands, 2015, https://www.tailorbrands.com/.

Anthony Masure, « Pour un design alternatif de l'IA ? | Anthony Masure », Blog de recherche, Anthony Masure | Enseignant-chercheur en design (blog), consulté le 12 mai 2022, https://www.antho-

³ Masure.

Anthony Masure, « Résister aux boîtes noires. Design et intelligence artificielle | Anthony Masure », Blog de recherche, Anthony Masure | Enseignant-chercheur en design, consulté le 12 juin 2022, https://www.anthonymasure.com/articles/2019-12-resister-boites-noires-design-intelligences-artificielles.

Aditya Ramesh et al., « DALL-E: Creating Images from Text », Service d'Intelligence Artificielle, OpenAI, 5 janvier 2021, https://openai.com/blog/dall-e/.

À la Recherche settles in the heritage of programmed graphic explorations by exploring AIs not as a tool of reproduction⁶ or completion⁷ but as a creator of singular pictorial and narrative productions. The AI having no knowledge of the aesthetic criteria governing our societies - what we qualify as «beautiful» - it does not seek to surprise us but to reproduce what we appreciate.

If it does not wish to create beauty, AI answers in the most efficient way possible to the request we submit to it. By becoming aware of this mechanism, we wish to avoid it and use the AI in the opposite way of its objective. Its missteps, wrong answers, incomplete images and incoherent sentences are evidence of so many attempts and failures to understand and perceive the data. The error is considered as inherent to the human beings, it would make of us sensitive beings. These extracts are thus singled out by a rediscovered sensitivity, thus offering a second reading to the images and the words. We then guess a perception of the machine by observing it with our own sensitivity.

Our research began with the exploration of different types of use of artificial intelligences, by observing how to use them and how to manipulate them technically. After experimenting with several AIs, we turned to GAN (*Generative Antagonistic Networks*⁸) tools for visual production.

The operation of the network is based on the generation of images with random noise, until it manages to reproduce visuals close to the database provided. The system is twofold: one part of the program, the so-called generator, produces images with noise, while the other, the discriminator, examines the image and decides whether or not it is close enough to the data provided.

Developed mainly in *Python*, this technique allows us to import the collections of images we have assembled. This function allowed us to submit to an AI that we developed many different subjects (e.g. animals, faces, websites awarded for their *webdesigns*, etc.) afin d'en apprécier les différents résultats générés par notre outil. in order to appreciate the different results generated by our tool. This protocol has partly defined the positioning of our graphic gesture, in a posture of reflection of the aesthetic and narrative standards present in our societies.

We evoked previously the norms and aesthetic criteria governing our societies. Codes are now amplified and conveyed by social networks and especially Instagram. We can find a common aesthetic to many popular photographs, they all propose a certain sensitivity. So would artificial intelligences be able to understand able to understand the codes and aesthetics that make these images a standard of beauty? We built databases of images from a curation of *Instagram* accounts to submit to an artificial intelligence. Its learning testifies to errors, sometimes successes, in capturing a common pattern in photographs. The failures were the source of a newfound sensitivity and it was from them that we selected our final images.

The generation of our texts was done thanks to *OpenAl's Playground*. L'eThe company is dedicated to the study of artificial intelligence and the development of this technology. It defines itself as a philanthropic company with a humanistic approach⁹. It has developed several image and text generation systems, including GPT-3 (*Generative Pre-trained Transformer*) that we used. These systems allow the generation of writings that can pass the Turing test¹⁰.

⁶ Katharine Schwab, « This AI Designs Balenciaga Better than Balenciaga », Journal de mode, Fast Company, 22 août 2018, https://www.fastcompany.com/90223486/this-ai-designs-balenciaga-better-than-balenciaga.

Anthony Masure, « Copier/Varier. Standards, critiques, et contre-emplois des logiciels de création | Anthony Masure », Blog de recherche, Anthony Masure | Enseignant-chercheur en design, mai 2021, https://www.anthonymasure.com/articles/2021-05-copier-varier.

^{8 «} Generative Adversarial Network (GAN) & Machine learning », *Formation Data Science* | *DataScientest.com* (blog), 22 février 2021, https://datascientest.com/gan-machine-learning.

⁹ Sam Altman et Elon Musk, « About OpenAI », Service d'Intelligence Artificielle, OpenAI, 11 décembre 2015, https://openai.com/about/.

Ronald Schmeizer, « What Is GPT-3? Everything You Need to Know », Blog de recherche, SearchEnterpriseAI, juin 2021, https://www.techtarget.com/searchenterpriseai/definition/GPT-3.

The model has been trained from many human writings and is based on the same logic of imitation as the GAN mentioned previously.

This system being used for the imitation of a writing style or an author,

we wanted to impose another type of exercise on it: submit only a keyword and a series of themes, correlated to different ages of life.

Left to its own devices, the machine will then express itself on a subject linked to the information we give it. It can then generate stories, articles, reviews and many other types of texts. We have kept only the texts relating the stories of various and varied characters from this work. This selection has in common that it is close to our reality as perceived by the machine.

We can consider this exploration as being an heir to the experiments of the man-machine dialogue, whether they are scripted like that of Chris Marker¹¹ or guided by Artificial Intelligence like that of Fabien Zocco¹².

This corpus of texts and images, linked by the logic of reflection, is transcribed in several media.

The main support, the edition is divided into twenty-seven chapters, that is to say as many keywords provided to the AI. During these chapters, stories and short texts around the different ages of life follow one another. These miscellanies of text are read in parallel with images produced and selected to offer a second reading.

In order to preserve the strength of the texts and images, we chose to limit our graphic gesture to the only tabulation, the composition in a single body of text and a page layout in mirror; just like the philosophy of this project.

This exploration continues with the creation of posters playing with our perception. Built from the images generated upstream for the edition, they propose another vision, another look on the symbolism of the visuals. Thanks to the play of scale and a larger format, the images tell other stories and our perception evolves.

Our experiments around the perception of forms are also found in another format. We have chosen to accompany the edition with maps presenting the chapters.

A support that is perceived as a tool and graphic object. The composition of the images and the applied frame give us a new vision by associating it with the titles written with the typography generated during this project.

Typography is also part of the fields of graphic creation that we wanted to explore. Being a subject already present in the fields of explorations crossing graphic design and artificial intelligence¹³, we wished to continue these researches by leaning on the already existing works¹⁴. We therefore submitted to an artificial intelligence a database composed of more than fifteen thousand characters. From its learning, we were able to extract an experimental typography which is present in the edition. In order to present it, we worked on a specimen in its original format, a square of ninety-six pixels, as the machine proposed it to us.

All these supports are the result of a long period of tool handling and experimentation. In order to retrace the genesis of this project and to present the contents created but not retained, we open the doors of our reflection in the heart of a logbook available online.

Marie Lechner, « Chris Marker redonne sa langue au tchat », Journal, Libération, 6 décembre 2013, https://www.liberation.fr/culture/2013/12/06/chris-marker-redonne-sa-langue-au-tchat_964739/.

Fabien Zocco et Gwendal Sartre, *Attack the Sun, Un Film de Fabien Zocco et Gwendal Sartre* | *Cnap*, Long-métrage, Expérimental (Cnap, 2019), https://www.cnap.fr/attack-sun-un-film-de-fabien-zocco-et-gwendal-sartre.

Martin Grödl et Moritz Resl, « Alfont: AI-Generated Typeface », Process — Studio for Art and Design, 10 octobre 2018, https://process.studio/works/aifont-ai-generated-typeface/.

¹⁴ Jean Böhm, « Pathfinder », Portfolio, Jean Böhm, 2020, https://www.jeanboehm.de/work/pathfinder.

This project, born from the desire to experiment with new graphic tools that could become the future tools of designers, pushes us to reflect on its use.

Realistic reproduction seems today to be the point of escape of the research in automated creation. Although often at the heart of debates, the standards and aesthetics that diffuse, aggregate social networks sometimes have difficulty being understood as a whole,

a reflection of our sensibilities. À *la Recherche*, proposes a poetic vision of creation by artificial intelligence, using its flaws to highlight our aesthetic standards. The human-machine relationship is then devoid of feelings; but, by accepting the errors of learning, our sensitivity gives a sense to the production of the machine. Accompanying thus its forms by our structure and layout, seeking a vision closer to the sensitive than to the spectacular, abandoning any fascination for the program. Beyond this aspect of creation, this project questions the notions of identity and life cycle seen by a virtual intelligence.

This questioning, around what the programs understand and retain from the Big datas that are provided to them, is a question that will undoubtedly continue to grow over the years. Is this synthesis of norms a cynical observation of the mimicry of content authors? Up to what point, by synthesizing shapeless masses of sensitive data, can we imitate them, falsify them and put them in front of an observation: the singularity of the forms seems to disappear in the measure of the production of the contents.

The movements of fashions, of aesthetics are already proposed to AI to be analyzed in order to anticipate the next cultural movements. Gathering and compiling data in order to create new similar ones, artificially, could be one of the next ways to generate content, introducing a blur on the identity and on the nature of the creators behind it.

In the age of multiverses and metaverses¹⁵ eand an ever-growing virtual presence, many questions related to identity arise. Does its multiplication imply a division? Who, of our avatars or ourselves, will be the refuge of our humanities?

Will the generated identities become commonplace, and could they lead to new ways of making society $?^{16}$

Anthony Masure, « Le métavers, paradis ou enfer virtuel ? | Anthony Masure », Blog de recherche, Anthony Masure | Enseignant-chercheur en design, 2022, https://www.anthonymasure.com/conferences/2022-06-metavers-faut-pas-croire-rts.

Simon Puech, *Mon histoire d'amour pas comme les autres*, Youtube, 2022, https://www.youtube.com/watch?v=UoTVdnMfcfI.