Jorge León

In Search of Lucy

This research project entails the invention of a character: Lucy, believed to be one of the oldest, known specimens of Australopithecus in existence. Lucy will act as a guide within the project by filmmaker Jorge León. The film, which bears the working title *Incandescences*, will address the notion of immortality as promoted by transhumanist ideology, and what this millenary specter might represent in the present day, at a time when the survival of the human species has been called into question more than ever before.

Lucy was essentially recreated in three ways. In his quest to create the most credible incarnation possible, the artist decided to reconstitute the entire skeleton using digital imaging, which was carried out in close collaboration with Maurice Taieb (one of Lucy's discoverers) and France's CNRS national research center. This modeling led to 3D printings of each bone, which were then reproduced in a symbolically highly laden material: glass. During his artist residencies at CIRVA (the International Research Center for Glass and the Visual Arts), Jorge León supervised the skeleton's complete reconstitution in this translucid form. And after creating Lucy's body, he then created lenses and other mechanisms to invent her "visions." This proved a way to construct and assert the subjectivity of this character, as well as that of the artist. The third aspect of this recreation consists of how the character expresses itself. In collaboration with the writer Caroline Lamarche, Jorge León sought to give Lucy her voice, to define her music. Several personalities will soon be asked to lend their voices to their illustrious ancestor. This discursive and collective dimension, amidst other developments in this interdisciplinary research and a variety of unforeseen events, not the least of which was the pandemic, led León to focus first on staging the project before producing the actual film. This theatrical work will be featured during the National Theater in Brussels's 2022-2023 season.

(A/R) The research you performed with the support of FRArt concerns the reconstitution of Lucy, but it forms part of a much vaster research project. Can you tell us about it?

(J.L.) The project questions the specter of immortality. This topic originated with *Before We Go,* a feature-length film that I had made with residents of a palliative medicine clinic, people who knew they had an incurable disease. Topaz is a day center created by Professor Wim Distelman with the support of UZ VUB [Vrije Universiteit Brussel] that provides an alternative to traditional hospitalization. I worked there a lot, both as a volunteer and an artist. My contact with these people inevitably led me to question the issue of end of life, which remains an abstraction for me, even though I saw death all around me. I thought it was relevant to question how we portray death when dealing with people for whom it feels so immediate.

The film was shot at La Monnaie, with some of the residents of this center and with artists and friends I invited (Meg Stuart, Simone Aughterlony, Benoît Lachambre, and Walter Hus, among others). These very emotionally loaded encounters produced visual and acoustic forms that question this notion of an end by asserting life through the act of creation. After this major experience, I was invited to speak at a conference at Bozar titled *The End of Death*. That's when I met Aubrey de Grey, one of the major theorists of transhumanism. He believes that death is simply an illness that will one day be eradicated. This striking assertion is at the heart of my new project. It raises philosophical and political issues. We know that an entire economy has grown up around the specter of immortality, even though, paradoxically, most scientists are incessantly telling us that humanity is coming to an end. This was the tension, the paradox that I addressed in a project that will become both a film and an exhibit-performance.

(A/R) Where does your interest in the figure of Lucy stem from?

(J.L.) I really loved the idea of developing a character, a being whose existence was confirmed following the discovery of fifty-two bones, but whose biography remains fragmented. What we know about Lucy is what we have imagined her to be based on a few scientific findings that are routinely called into question (her date of birth, age, gender, lifestyle, and so on). But apart from this incomplete skeleton, which is named differently, depending on the place (Ethiopians call her "Dinknesh," and her scientific code name is AL 288-1), Lucy has not left any other traces; nevertheless, she remains embedded in our imaginations.

(A/R) It was in the context of the specter of immortality that you decided to reconstitute Lucy as a person, eminently mortal for having died so much longer ago than anyone else. Is the ironic aspect of this character intentional?

(J.L.) Yes, it was entirely deliberate. Lucy is a character who symbolizes our origins, who is mortal but also immortalized in museums and in our imaginations, who through her incarnation in the film, questions our contemporary world. In this sense, she is comparable to the character created by Frankenstein, with the major difference that Lucy is aware of the system that was enacted to create her. This is an opportunity for her to cast a critical glance on the technological and artistic modes of production that brought her to life. It begins with a fairly simple dramaturgical question: which character could embody this question of the end of the end? It's not a question of making a film about Lucy, rather embracing this figure so that she can guide us as she is being created. The FRArt fellowship was an absolutely incredible opportunity to work on this character who is becoming what she is.

(A/R) If I understood correctly, you wanted to recreate the character in three ways: through a digital reconstitution of her skeleton, through an invention of her voice, and through the design of works in glass. Where did you start?

(J.L.) I embarked on these three paths without any sense of priority. I worked on her voice, which led me to contact the IRCAM sound and music research center to be able to work with specific softwares, but the process was undermined by the pandemic. I conducted the purely digital work on the bones with the CNRS research facility in Marseille, where we were able to digitize all the bones, something that had never been done in France. So, it was at the behest of this FRArt research that the CNRS scanned all the elements of Lucy's skeleton. We now have a 3D file for each of the fifty-two elements. When I contacted the CNRS with the support of Thierry Botti, I naively thought I would be able to access these files to start working on a potential animation. I was very surprised that this first phase has yet to be completed, but this allowed me to document the process of digitizing Lucy.

(A/R) So, at your initiative, the Belgian FNRS encouraged the French CNRS…

(J.L.) Yes, that is concretely what happened. It was laborious and complex. They used photogrammetry. The CNRS researchers began to print some of the bones in 3D and I continued my work in Brussels, because the pandemic had made traveling harder. The iMAL FabLab in Brussels let me work on printing these bones and then, transforming some of them. Of course, the idea of cloning arose in this process, given the issue we were addressing. We explored what happens when the deregulation of a digital logic gives birth to other forms of bones. These 3D printings were then used for the next phase: the molds and the glassblowing.

(A/R) Where does your desire to use this singular material come from?

(J.L.) Metaphorically speaking, there is this promethean idea of the civilizing fire, the phoenix reborn out of its own ashes. I wanted to invoke this archaic imagery in the narrative. I liked this idea of Lucy emerging from the flames. It's a way for the film to relate the character to the unsettling environmental realities we are now living through. Lucy was born out of the fire to remind us that the earth is on fire. There is this paradox that she immortalizes by becoming incarnated, and this serves to confront us with our own finite nature.

(A/R) The work with this material sought to recreate the bones but also to create filters.

(J.L.) The glass filters are about inventing a form of perception that represents what Lucy "would choose." It wasn't an issue of claiming any sort of truthfulness about how Lucy saw the world; to the contrary, it allows us to see the world differently. We began to work on traditional filters, which follow the model of the film industry to some extent: standard filters that you mount in front of the camera. Then, with the glassblowers, we made some that were totally unconventional, these disproportionate bubbles that I mounted on the camera lens and with which I shot a few tests. It's rather visually intriguing. We conducted a whole series of studies on thickness, deformation, and coloration. We conducted this research with the glazier technicians at CIRVA, the International Center of Glass and Visual Arts in Marseille, which helped me generate a series of lenses and then record images. This work is still in progress. The CIRVA residencies will continue past the FRArt fellowship and they will lead to a specific filming period tied to the film. This filming will depend on the project's production, and it will be the culmination of this long research period.

(A/R) Are you going to reconstitute the entire skeleton in glass?

(J.L.) Yes. During the research process, I met Maurice Taieb, the geologist who co-discovered Lucy. He was the one who gave the green-light for the digitization of the bones. Mr. Taïeb died this summer. He had expressed his wish for the glass skeleton to be exhibited alongside Lucy's skeleton in Addis-Abeba in 2024 for the fiftieth anniversary of her discovery. I would like to visit the site where Lucy was discovered, but the pandemic and the current political situation have seriously complicated my travel plans.

(A/R) When we met last year, you mentioned problems with the Ethiopian component of the research. You talked about the practical difficulties of traveling there due to Covid, but also about the doubts that this component elicited in your work on the project, especially in terms of cultural appropriation. Where does this all stand now?

(J.L.) I would like to go to Ethiopia before this research officially ends. As I said in a text published in *La Part de l'œil*, the dimension of the narrative is very important. Lucy responds to a Western narrative, and I want to understand to which narrative she responds on site as *Dinknesh*, her Ethiopian name, which translates to something along the lines of "You are marvelous." I would like for the project to question how archeologists work, how the West has gone looking for the origins of humankind in such a historically tumultuous region. And I would rather go there first before I formulate anything; hence, the importance of this trip.

(A/R) Let's come back to the vocal dimension of Lucy's character. The creation of a voice presupposes both an acoustic and somewhat technical research, as well as writing, defining a tone, a music. To do that, you consulted both scientists and a writer, Caroline Lamarche.

(J.L.) I had not planned for this last aspect to form part of the research. But the IRCAM closed down during the pandemic, and it wasn't possible to meet with anyone. The point of the research was to discover the potential of their software by working on-site with their engineers. I didn't want to place an order with someone to produce a voice. I instead wanted to work on the cracks, which an engineer might not have had the intuition to explore. So, I thought it was essential for me to be there on site. This part of the research was impossible because of the healthcare situation, which is why I asked Caroline Lamarche to work with me. This gave us the chance to spend time together to imagine Lucy's voice, both in terms of its content and its form. What kind of consonances should her voice be given? Caroline thought of "slam poetry", for example. That's not a form she uses herself, but it's interesting in terms of political assertion. The poetic writing that Caroline is doing summons that. We conducted this phase of the research at the Fondation Camargo in Cassis, in the south of France. Isabelle Dumont joined us for the work.

(A/R) Did you want to involve Caroline Lamarche because you were unable to work on the technical part of the voice?

(J.L.) No, I was already considering the idea of writing, and I had already asked Caroline, but during the FRArt research, I first had to work on the technology part. The moment I couldn't do that, I proposed that we work on this part of the project.

(A/R) In technical terms, how do you envision producing Lucy's voice?

(J.L.) The idea is to summon a series of strong personalities to read out this text. I am thinking first of all of Claron McFadden, who participated in my previous project, *Mitra*. She is an African American soprano, whose voice, both sung and spoken, inspire me greatly, and she is also very aware of discrimination, especially racism. I thought if her as the first spokesperson for Lucy, her distant African relative. I would also love to use the voice of Christiane Taubira, a representative from the political sphere who was once called a "monkey" for standing up for gay marriage, as well as the voice of Paul B. Preciado, a philosopher whose article "Monkeys of the Republic," published in his book *An Apartment on Uranus*, uses this label of a monkey as a way "to no longer reclaim our belonging [that of black and gay people] to humanity by denying the primate in us."
The idea is to collect a series of singular voices that will be blended together to create a unique voice.

(A/R) A synthesizing voice, one could say.

(J.L.) A synthetic voice that was fed with human voices.

(A/R) Your work on this project, as on your previous films, is by nature highly collaborative. Had you already worked with scientists?

(J.L.) The logic of collaboration is important to me. I love involving people who come from different spheres and having them meet to see what comes out of this difference. That said, this was the first time that I myself had worked with scientists, and these collaborations helped me see that the logic underlying the research is ultimately the same. I had the pleasure of working with people whose creativity was highly comparable to that of artists. We are driven by the same thing: the desire to explore uncharted territory. The researchers I met completely incorporate the notion of faults and errors into their working process; they know that the impasses they run up against sometimes open the door to possibilities they had never dreamed of. What I initiated with the reproduction of the bones in glass led to the meeting of two worlds that were not necessarily likely to mingle. Valérie Olléon, the glazier at CIRVA, visited the laboratory at the Institut Fresnel in Marseille, where we discovered a very impressive glass coloring technique. The scientists from the Institute came to CIRVA and were able to see the results of the work on the bones. They were able to comprehend

more concretely what I was trying to do, and they proposed making more precise interventions. My research fed off these two worlds of craft and high technology. These intersections yielded many new lines of inquiry.

There was one, very important event that was not at all foreseen within the research: the Institut Fresnel produces lenses for telescopes used to observe very faraway planets. The researchers tint the lenses to correct for the chromatic aberrations when light passes through their measuring devices. This tinting is done in special ovens where the glass, which is placed in the upper part of the oven, is tinted by metals placed at the bottom of the oven that are brought to extreme temperatures. The vacuum sealing of the oven allows for differences in temperature between the upper and lower parts, which prevents the already polished lenses from cracking from thermal shock. The temperature is so high that the metals emit vapors that rise and come to rest on the lenses. The type of metal determines the color it leaves. With this tool, the scientists are able to gauge the thickness of the deposit almost down to the micron. Seeing this technique was like a shock for me. I had spent all this time with glaziers whose work is very organic and intuitive, where gesture and breath have a decisive impact on a form in the making, and here I was, suddenly confronted with the ultra-scientific side of the research. I also realized that there were these really beautiful iridescent colors on the metal walls of the ovens at the Institut Fresnel. These came from the uncontrolled metal vapors, residues that had dispersed. At the same time, I was working at CIRVA on constructing museum display cases to hold Lucy's bones, which are traditionally transparent. I had the different idea of rendering them very visually prominent by coloring them with these residual vapors. So, we placed the sheets of glass that would be used for the display cases along the oven walls. The researchers at the Institute continued their tinting work, routinely replacing these sheets that came out of the oven with this randomized iridescence. They were both surprised and amused by the result. Where their work entailed extreme precision and control, I participated by recovering the residues of their production. I liked this idea of recovering a surplus. It illustrates fairly concretely the porousness that arises when scientific and artistic practices meet. The next working week at CIRVA will involve producing an initial prototype of the display case.

(A/R) It's an interesting detour, and interesting way to reconcile science and art, fields that are traditionally hemmed in by their respective needs for exactness and imagination.

(J.L.) Yes, this encounter yielded something unexpected, both for the scientists and for me. I think it's important to underline that the relationship to fiction is equally important in scientific research. Researchers transmit narratives to us and they also need to invent stories to conduct their research successfully. The simple fact of imagining a name for a discovery is in itself revealing. It entails and imposes an imaginary realm. For Lucy, this was because the archeologists were listening to the radio during the excavations, and they heard the Beatles song *Lucy in the Sky with Diamonds*. This poetic dimension is part of a researcher's DNA, even if some of them deny it. And even though we talk about "scientific rigor," rigor and a certain kind of logic are equally at work in artistic creation. The meeting of these working logics can yield interesting things.

(A/R) You were talking about the unexpected. The pandemic was a good example of that. Your project addresses illusions of immortality, of being all-powerful, and suddenly a virus came along that proves to the whole planet—as if we needed this—how precarious humanity is, how fragile our bodies are. In a certain way, the virus confirmed your approach. Were you able to integrate this event into your research process?

(J.L.) As for everyone else, it was something I had to deal with. I found myself locked down in Brussels, even though the research involved interacting with collaborators who lived elsewhere. So, I invented rituals to maintain a link with the work, and during this period, I assigned myself the task of molding a bone per day with modeling clay. This became a meditative practice. I accumulated all these forms, and they inspired the digital forms we later printed in 3D. Despite the setbacks, I was able to preserve a connection to Lucy. She somehow helped me get through this period. The questions that this issue of immortality raises are dizzying, if not abyssal, and yes, the current state of the world makes me think that this blossoming market of immortality at a time when we are constantly being told that the end is nigh is tied to our anxiety of… disappearing. Oddly, I sense that this is producing a desire for lightness in my work. I tell myself that if all these strands are converging to remind us that the world is going to hell in a handbasket and coming to an end, art is perhaps a way to do something different, not naively or just for the sake of amusement or distraction, rather to connect us to this fundamental urgency to be alive right as a certain death drive is undercutting us. I feel the need to implement a kind of ritual, a connection. That is why the theatrical version of the project is for now taking up more room than the purely cinematographic version. The stage reminds us of this need to share. Pierre Thys, Director of the National Theater in Brussels, has included the project in his programming for the 2022-2023 season. Like *Mitra*, the last project I did and which also took the form of a film and a performance, the artistic practices will be porous.

(A/R) You explained that one of your previous films, *Before We Go*, took place at the Opéra de la Monnaie and had a choreography component to it. And your film *Mitra* also had an operatic part. So, there is a continuity also in terms of the performing arts.

(J.L.) Yes, the piece was created in Brussels as part of the Kunstenfestivaldesarts festival. This time, the stage as a space will be a means of incorporating all the aspects of the research. There will be a glassblower, museum display cases, animated images, multiple voices, performers, and more. As a space, the stage will evoke both the space of the museum and of the workshop, toying with this idea that the museum is a space that immortalizes works, that makes itself responsible for their surviving their creators and the workshop where creation happens, where it materializes. The body of Lucy will be at the center of this piece. To some extent this piece will be a response to the lockdown; it is born of a desire to create a connection in the present, with the active participation of the audience.

(A/R) Have you already presented the research to the public in some way? Do you foresee doing other such presentations?

(J.L.) I presented my work at the School of Fine Arts in Aix-en-Provence to students enrolled in a specific curriculum called "skeletal animation," a course that involves producing movement with skeletons that are predefined by their software program. One of the scientists who worked on the digitization of Lucy's skeleton came to present his work during a workshop, and he gave them some 3D files on a provisional basis. The students were able to work on animating these bones. My proposal to them was to ask young people who are entering adulthood at a somewhat critical juncture to animate Lucy, to imagine her today and to envision her as a future being. I hope to make that one of the scenes in the film.

There was this written contribution with Caroline Lamarche in issue number 35-36 of *La Part de l'œil*. We have also planned a documented presentation of the work at the INSAS. Lastly, I hope we can organize a presentation at the Fondation Camargo so we can once again have a meeting between the scientists, the people from CIRVA, and everyone else in France who made this project possible.

CAPTIONS

fig. 01 Interview opening page: Molding in progress, CIRVA, Marseille, 2021. All photos by Jorge León.
fig. 02 Lucy's jawbone made at CIRVA and iridescent showcase at Institut Fresnel, 2021.
fig. 03 Lucy's sacrum made at CIRVA, 2021.
fig. 04-05 Creation of a lense, CIRVA, Marseille, 2021.
fig. 06 Uncut lens, CIRVA, Marseille, 2021.
fig. 07 Camera test with lenses, 2021.