

E. MOTION

E.motion's experience plunges audiences into the heart of an immersive 360° tale with 3D puppets



Created by Axel Beaumont and Julie Desmet Weaver
A.D / Alain Lagarde

E.MOTION FOREWORD

E.MOTION is initially a real-time motion capture show, with 3D digital puppets, which was supported in pre-production by the National Cinema Center and which was performed 25 REPRESENTATIONS in preview as part of the scenes live, digital scenes in Avignon, 2023.

Following these first successful performances of E.MOTION in the theater, but also the commitment of distributors of immersive theaters to our side, our ambition today is to transcend the spectacle, by transforming E.MOTION into a true narrative experience and participatory designed especially for immersive rooms available in two formats:

FORMAT 1 => E.MOTION THE IMMERSIVE EXPERIENCE (SPECTATOR'S JOURNEY)

The E.MOTION experience is broadcast continuously in theaters, with a spectator tour.

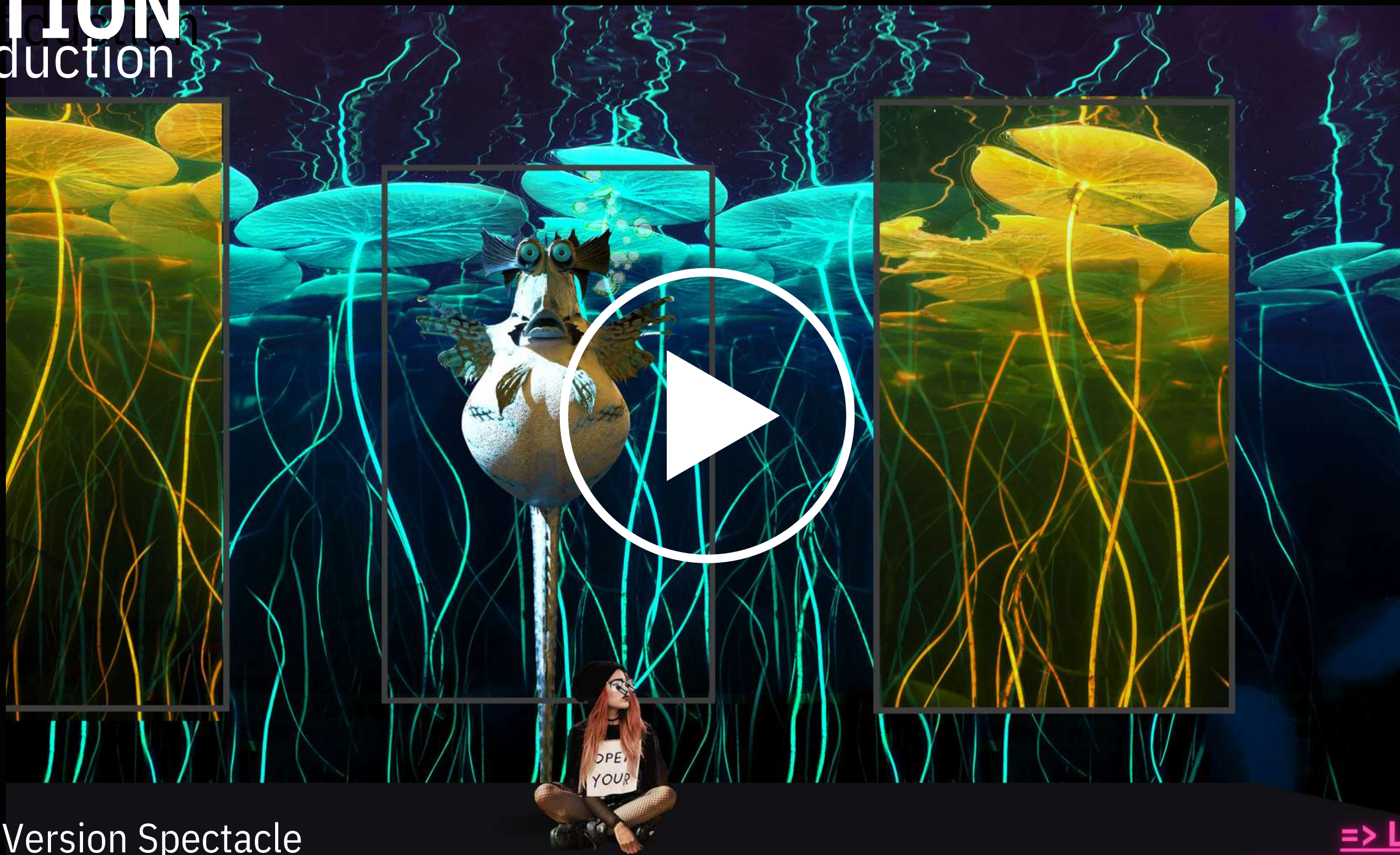
FORMAT 2 => E.MOTION THE IMMERSIVE EXPERIENCE WITH "LIVE ACTOR"

During special events, within the E.MOTION experience, actors equipped with mocap suits interact with spectators during their journey and animate 4 3D digital puppets in real time.



E.MOTION

Pre-production



Making of _ Version Spectacle
<https://www.cie-underground-sugar.com/emotion>

[=> Link to the site](#)
UNDERGROUND SUGAR

SUMMARY

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- + 3D puppets

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- + soundscape

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- The laboratory garden
- The salt desert
- The water lily forest
- The black mountains
- The meadow of broken shells


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- + The management platform
real-time mocap
- + Distribution, forecast
estimate

- + Production note
- + Underground Sugar
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- + Calendar

CONCEPT

The E.MOTION experience is designed for immersive theatres and plunges young and old into the heart of a 360° tale.



The E.MOTION experience can be adapted to all immersive spaces, offering audiences live sessions with motion capture actors who animate four 3D puppets in real time and interact with the audience.

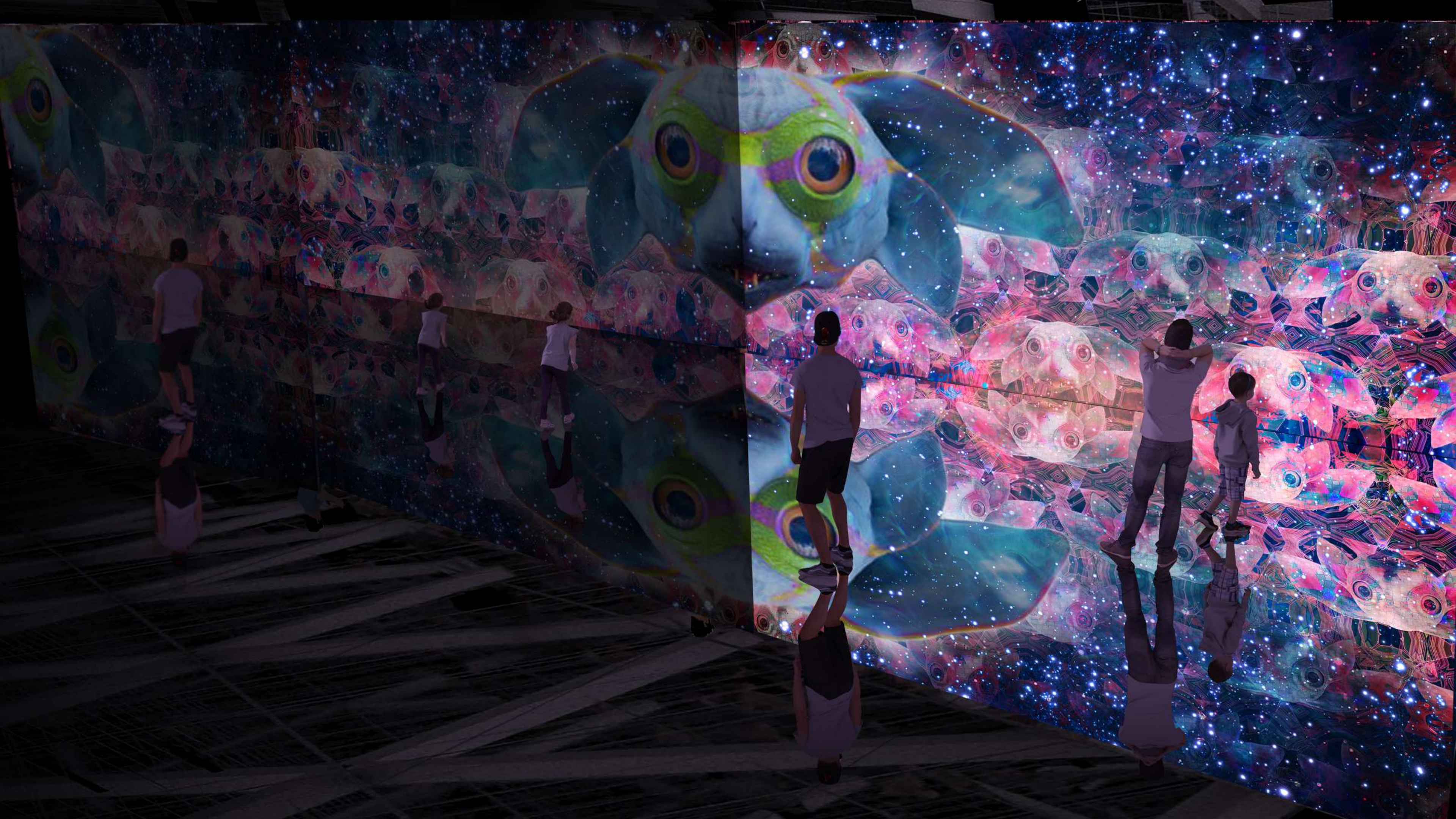
The E.MOTION experience storytelling

Discover the poetic world of a little girl with an overflowing imagination. Enter her laboratory garden, populated by strange, surprising and funny animals: new species that are half-animal, half-plant. As you explore visions of the world ranging from the infinitely small to the infinitely large, you'll be accompanying this little girl who has just lost her mum and helping her to reconnect with her emotions.

Interact with the immersive set and four 3D puppets. Throughout the experience, you'll be guided on your journey by small emotional particles that will create beautiful visual and audio alchemies around you.

Take part in live sessions, during which actors and performers equipped with motion capture suits will accompany you throughout the experience.





ORIGINALITIES

A 360° narration

Why does the story in E.MOTION enrich the spectator experience?

We believe that storytelling plays a crucial role in enriching the experiences offered within immersive rooms.

In the E.motion experience, the story, the dialogues between the little girl and the 4 animated characters, encourage very strong emotional engagement from the spectators.

The narration truly enriches the virtual environment by generating audience involvement: they are involved in the plot for the entire duration of the experience.

Four 3D puppets

How do 3D puppets bring the story to life in a unique way?

3D puppets bring a very powerful visual dimension to the experience. Animated in real time by the performer (or via pre-recorded animations broadcast continuously) the puppets are real characters who interact with spectators in the different immersive universes and bring the story to life in a unique way.

All E.motion avatars were designed from scans of real animals which were mixed to create hybrid, funny and endearing characters.

Sessions with “Live” actors

Why is it attractive for audiences to experience E.MOTION with live actors?

The actors during E.motion’s “live” sessions animate the 3D puppets in real time, and offer unique interactive scores each evening.

They bring intense and authentic emotion to the narration. This creates an even stronger connection between viewers and virtual worlds.

Active guides, the actors direct visitors through the story, encouraging them to interact even more with the immersive settings.

A public family

E.motion is aimed at a family audience

The family aspect of E.MOTION is a major asset. The story of E.MOTION is a fusion of imagination, adventure and personal transformation, making it engaging content for all age groups.

Children are captivated by the fantastical exploration of amazing worlds and Little Girl's transformation, while adults enjoy the deeper themes, such as the power of imagination, resilience in the face of loss and strength. to move forward in life.

AVATARS 3D PUPPETS

S'TRUC

Half Chameleon - Half Lemur, this animal likes to scare, play pranks, and surpass itself. It is because he is small and timid that he feels the need to assert his power.



CHOZ'

Half Mushroom - Half Fish. Choz lives in humid spaces, he is a quiet force, resilient, anchored in the ground, he adapts to the world around him. However, he has difficulty expressing what he feels. He keeps his emotions buried, and all this makes him swell, swell, really swell.

BIDUL'

Half Frog - Half Turtle. This character from the earth represents self-confidence and the need for protection. His shell protects him from the dangers of the grown-up world.



CRISPER'

Half Okapi - Half insect. This animal floats in the air. He is very angry, he curses at everyone and rejects everyone: he complains a lot. This rage isolates him, and prevents him from making friends.

NOTE DE RÉALISATION

A 360° TALE

Julie Desmet Weaver Direction

When I started working on E.Motion, my desire was to stage this story by offering an experience amplified by mocap, and 3D puppet animation and by offering synesthetic visual universes.

In this context, the first model produced for the stage with its mobile screens was a fundamental step. As a director and director, I had to harmonize the performance of the live actors with the living images mapped in space, while orchestrating and encoding the movements of the virtual cameras on my four 3D puppets via Unity or Unreal.

Virtual cameras give me the latitude to manipulate perspectives, to play with scales, frame and points of view, channeling the viewer's attention in inventive ways.

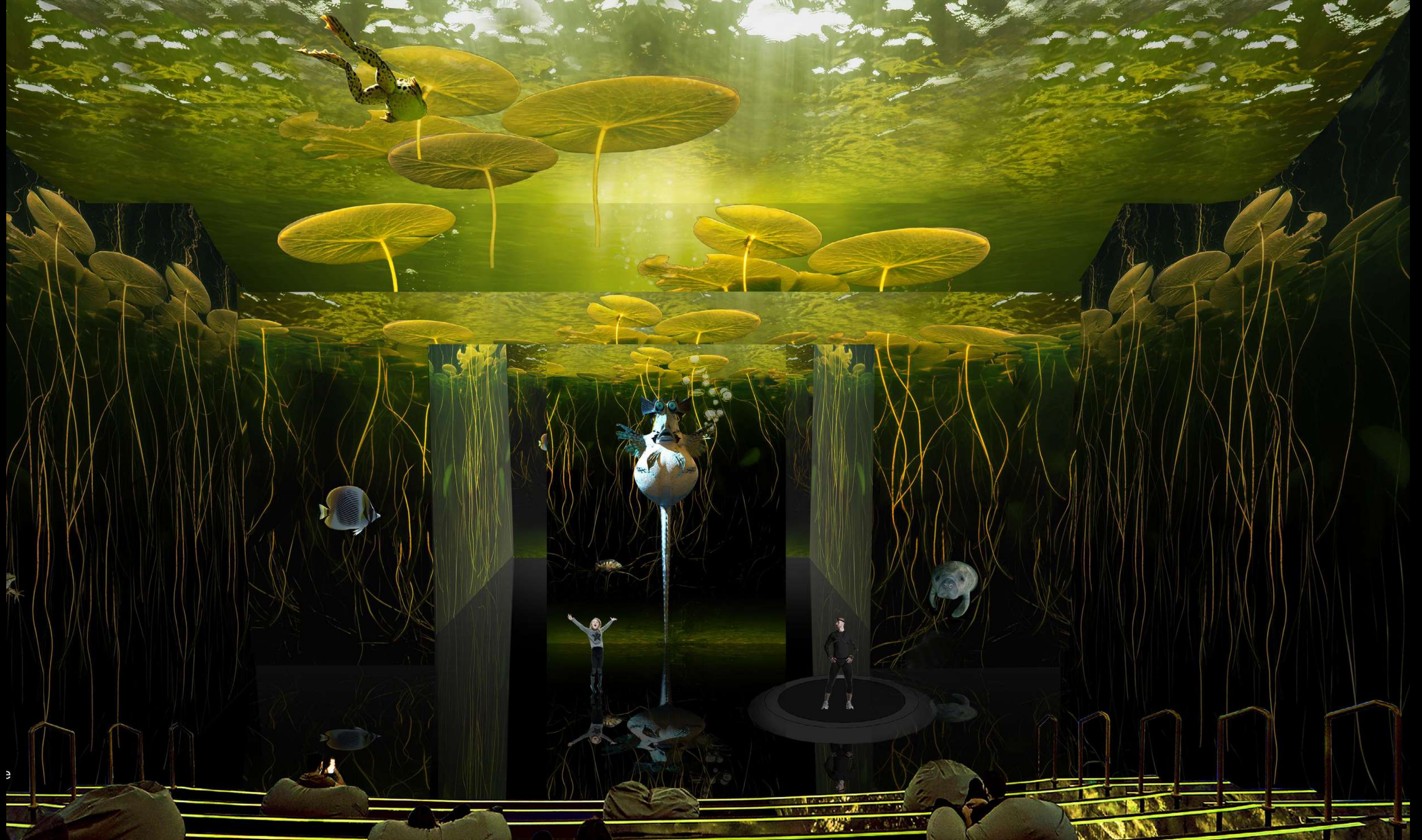
Now, the prospect of presenting E.Motion in immersive rooms pushes me forward to continue to invent relevant narrative and visual **bridges between the real world and the virtual world, while imagining original trajectories for spectators and actors.**

The major challenge here is to encourage spectators to engage with the 3D puppets and with the environment projected around them. To achieve this, we incorporated improvisation frameworks into the scenario and introduced poetic visual signals on the floor to focus attention and facilitate audience navigation in the different spaces.

Convinced by the feedback from audiences during our first performances, I can't wait to be able to adapt this story 360° and offer spectators a fun, poetic and participatory journey.



It is astonishment that is the trigger because it opens wide the doors of imagination.



VISUAL UNIVERS

IMMERSIVE SCÉNOGRAPHY

Alain Lagarde
Directeur artistique

[=> Link to the scenographer's site](#)
ALAIN LAGARDE

When I discovered the script of E.MOTION, I very quickly thought of the poetic imaginations of Gaston Bachelard, it was from these reading memories that I first constructed the universe of Choz: clear and brilliant waters of the surface of the water, to the dark depths, where the mythologies of fairy tales lie.

For the other three element-universes, I focused on designing landscapes of wonder such as the salt deserts of Atacama in Chile or the high-altitude lakes of the Andes mountain range.

We are now approaching an even more immersive dimension. For this new stage, I endeavor to deconstruct the usual systems of representation of perspective with the classic stacking of ground, landscape, sky.

These new spaces of the imagination allow us to abolish the reality of a physical space to favor only the experience of a breath of wind, the undulating sensuality of water-lilies, the twirling course of tumbleweed in the desert.



Studio A+E
Animation & immersive creation

[=> Link to the site STUDIO A+E](#)

Specialized in video mapping and large animated images format, the A+E studio designs animated visual content intended for the entertainment industry. From stage to opera, to monumental video installations.

The studio has already worked on previous creations with Julie DW and Alain, notably on L'écume des jours_spectacle
SACD Multi-screen Writing Prize



SOUNDSCAPE

David Tipper

The musical universe of the immersive show E.motion is drawn through different musical genres such as electronic music, glitch, breakbeat, dubstep, psy-trance and ambient.

The music of composer David Tipper accompanies each character, giving them a very particular identity. This reinforces their sometimes playful characters, or really slow motion slow motion, or conversely supercharged and very energetic...

The musical composition is the result of a homogeneous “mix” between electro sounds and sound design/noise inspired by Nature.

[⇒ Link to the SOUNDSCAPE](#)

E.MOTION SPECTATEURS PATH

NOTE D'AUTEUR

Axel Beaumont

“Si nous vivions sur la lune, notre imagination serait aussi aride que sa surface”...

Quand j'ai commencé à écrire l'histoire de cette petite fille. Je voulais évoquer ces scènes de l'enfance : ces heures passées à observer les étoiles, à regarder défiler les fourmis, à collectionner les cailloux et les coquilles...

Je voulais parler de ce terrain de jeu extraordinaire pour l'imagination, et de ce que représente la découverte du monde au travers des yeux d'une enfant particulièrement passionnée par le vivant, la nature, et l'espace.

Mon point de bascule dramatique m'a poussé à aller plus loin et à m'interroger sur ce que représente la perte d'un être cher pour un enfant qui se construit émotionnellement en même temps qu'elle découvre le monde. Je voulais voir comment il est possible pour de si jeunes êtres d'appivoiser peu à peu des émotions aussi intenses.

Dans mon histoire, le bouleversement survient lorsque la petite fille apprend la mort de sa mère. Elle voit, tout à coup, son précieux univers se dessécher et s'effriter. Tout semble flétri, dépeuplé, tel un désert.

La petite fille grandit subitement, bien trop vite, et se fait la promesse de ne plus jamais verser de larmes pour ne plus rien ressentir.

Le deuil, le déni et la résilience face à la perte, les enjeux narratifs et psychologiques sont explorés au travers plusieurs thématiques.

En enclenchant un mécanisme de défense, la grande-petite fille veut paraître forte et choisit d'avancer coûte que coûte, mais sans plus s'écouter. Au fil de l'histoire, elle sera confrontée à plusieurs situations qui la pousseront à affronter ses émotions refoulées.



**[=> LIEN VERS
LE SCENARIO E.MOTION](#)**

Avec une pudeur innocente, face à ce vide immense, elle se projette dans un monde imaginaire consolateur. Les dialogues et les interactions avec tous les personnages imaginaires illustrent le processus complexe de réouverture émotionnelle et son cheminement vers la guérison.

il s'agissait pour moi de dépeindre le voyage intérieur de cette “grande-petite” fille qui, progressivement, va apprendre à renouer avec ses émotions grâce aux rencontres qu'elle fera avec Bidul', S'truc, Choz', CrispeR : ces êtres étranges mi-animaux, mi-insectes, mi-végétaux qu'elle imaginait, enfant.

J'ai voulu écrire une fable profonde et amusante qui parle de ces alchimies invisibles qui s'opèrent en nous magiquement et qui nous métamorphosent pour toujours.

1

“Look, in a microsecond, my hand will open, and a wave dance, a ballet of a thousand billion particles will resonate, collide and embrace the earth...”

The room in space

As soon as you enter, you enter a room suspended in space: you meet a little girl passionate about science who tells stories. His voice takes on a little sadness when you learn that his mother is seriously ill.

A luminous path on the ground guides your journey: these are the small particles-emotions which come to rest here and there in a spiral to guide you when it comes to joy, fears, anger or sorrow. The little girl knows them well, they're very pretty, but she's a little wary of them.



A BRIGHT PATH TO ORIENT YOURSELF IN THE SPACE

On the ground, a path made of active light particles allows the public to orient themselves in space, to follow the progress of the narration; sometimes the particles form movement circuits so that spectators physically interact with the visual settings.

In addition, certain rooms offer ceiling projections, the visual worlds of E. motion are already built in such a way that they can also encompass audiences in height.



“Once upon a time... Twice, that's even better!... a little being that will be here millions of years from now, an kind of evolution... Bidul’!”

2

The laboratory garden

You enter its garden: an open-air creative laboratory where colorful neon lights illuminate lush terrariums, teeming with life. It's here that you meet Bidul', his best friend half-frog, half-snail who has just come out of his shell: you teach him to walk, to jump very high, you explore together an ultra-violet microscopic world thanks to the lenses kaleidoscopic images of the little girl.

Suddenly, a storm breaks out, the particles around you seem electrified: the little girl learns of her mother's disappearance. In her distress, she wishes to grow up all at once and makes a solemn promise to herself never to cry again, to never feel anything again.



3

“My heart became as dry as this desert... I'm going round and round in circles“

Salt and rock desert

You find yourself in a huge salt desert, the little girl is looking for a path to follow. Here, nothing is stable: the earth trembles, mounds of stacked rocks can tumble down in a cascade at any moment.

It is then that S'truc appears, a mischievous little being, half lemur, half chameleon, fond of hide and seek.

Quickly ! You only have a few seconds to find his hiding place, because he is quickly frightened by the falling rocks. When facing your fears, the emotion particles become agitated.

You slip beneath the layers.



4

“Choz’ felt a lump in her stomach, a terrible rumbling, an ocean wanted to come out, but not a nice, calm ocean. A tsunami with waves 100 meters high...”

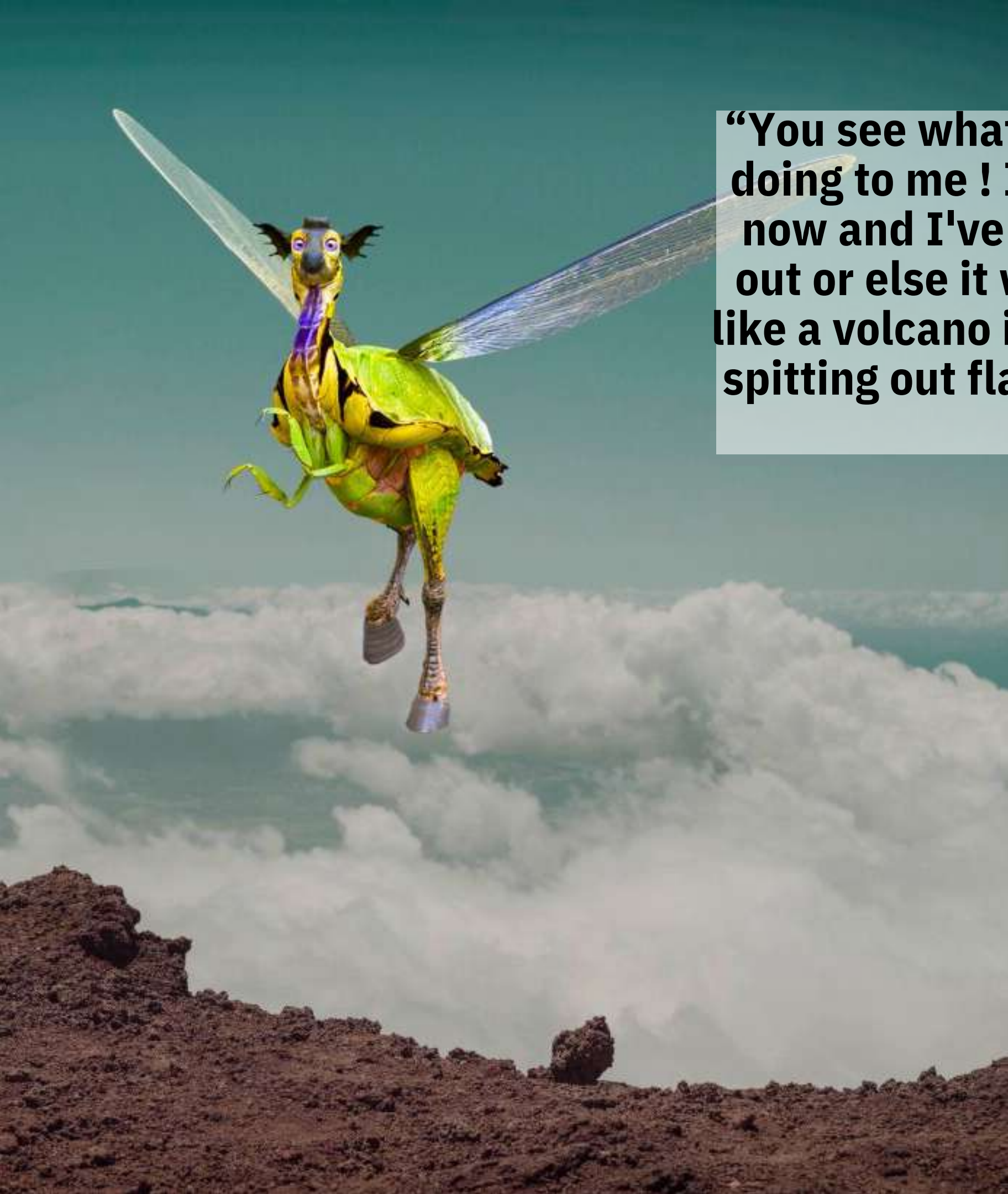
The water lily forest

You dive with the little girl and touch the bottom of phosphorescent water. On the surface, luminescent water lilies float.

From this vegetation emerges Choz’, a being half-fish, half-mushroom. Choz' is all puffed up, it's because he can't get rid of a big tsunami of sadness that he has in his heart.

By following the emotion particles which draw shapes on the ground in space, you provoke small effervescent bubbles which, little by little, rock, tickle and release Choz.





“You see what your bad energy is doing to me ! I'm very angry right now and I've got to get my anger out or else it will burn me up, it's like a volcano in my belly, and I'm spitting out flames that are fierce and hot !”

5

The black mountains

You find yourself at the top of a cliff, at the top of a volcano and hovering above the void. Crispe'R, a half-okapi, half-insect creature, appears flying. This mocking and angry being pierces clouds and geysers to disrupt your progress. The emotion particles activate again, encouraging you to move to the very edge of the void.

The Big Little Girl, annoyed by Crispe'R's mocking provocations, sees her anger rise and resonate like an erupting volcano, the atmosphere becomes boiling! There is danger, you take steep paths, jump, avoid geysers, and lava currents...

6

“The little girl is not so big any more... Her daddy is asleep next to her. Inside she feels so happy and warm. And on her face, a smile”

The meadow broken shells

As you approach the shells, you hear the familiar voice of Bidul'. Upon finding her friend, the big little girl is overwhelmed by her emotions: her dry eyes are now flooded with tears. She becomes very small again, crying and laughing at the same time.

Back in her room, she listens to her dad. Both fall asleep lulled by other stories to come and by all the memories.





TECHNICAL

SCALABITILY BY E.MOTION

ADAPTATION TO ALL IMMERSIVE ROOMS

The Studio A+E teams optimize the development of layers for all visual content so that the E.Motion experience can be easily adapted to all immersive spaces in a maximum of 10 days.

These ten days of installation allow us at the same time to train and rehearse with the live actors who will be hired on site to host the “live” sessions.

The mocap control system is designed to adapt to the video-mapping software of all immersive rooms.

3D PUPPETS APPEAR ON SCENES_PODIUMS.

Within the virtual settings are integrated stages_podiums exclusively reserved for the location of the avatars (this could be a rock, a terrarium, an expanse of fluorescent sand, etc.)

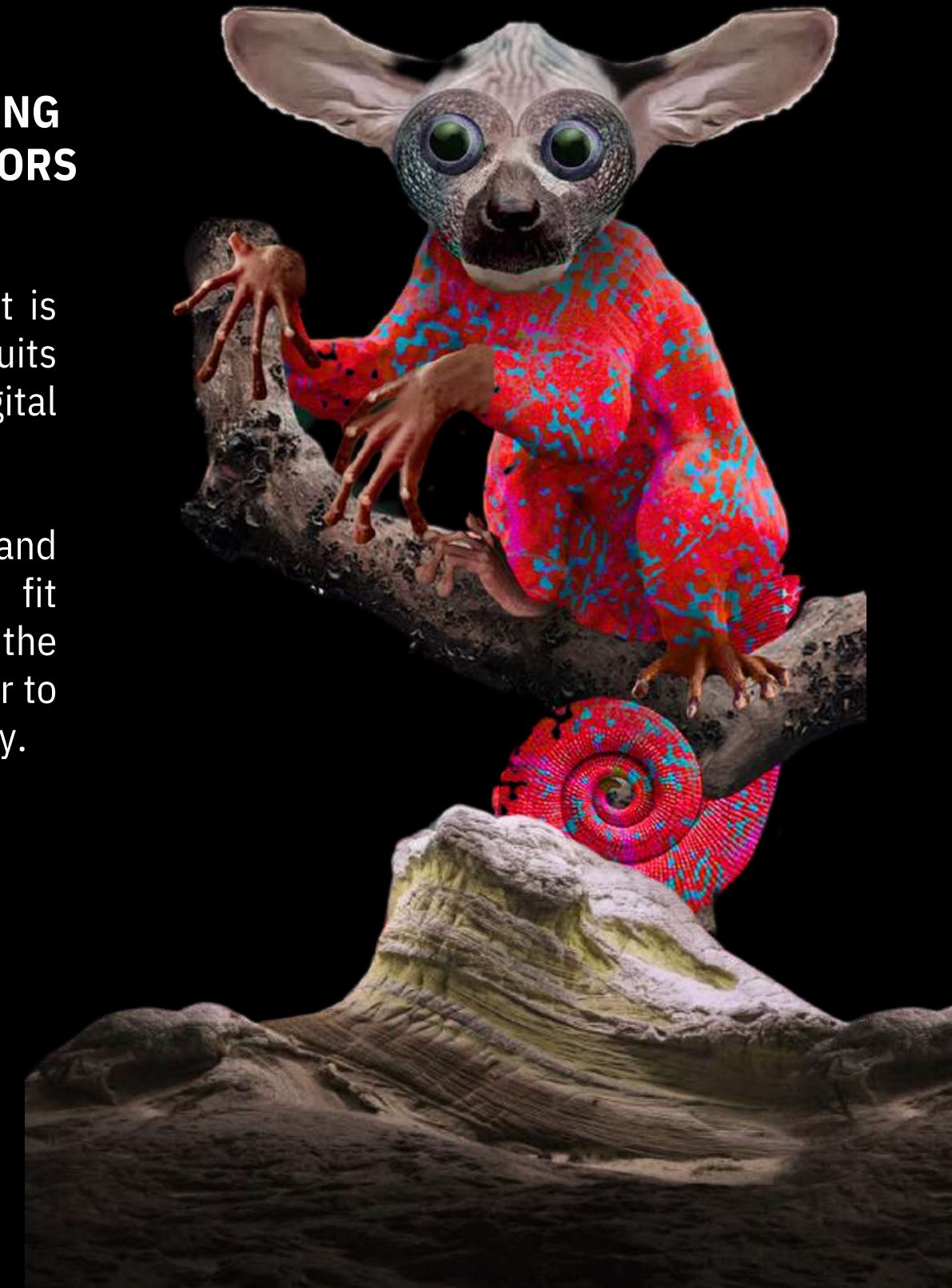
it is on these virtual podiums placed in different places in the virtual sets that the 3D digital puppets appear and disappear.

Each appearance and disappearance of avatars and each camera movement on Unity is previously encoded on a controlled behavior.

ANIMATED PUPPETS DURING LIVE SESSIONS WITH ACTORS

As part of the Live sessions, it is the actors in motion capture suits who animate the 3D digital puppets in real time.

They animate the voices and bodies of the puppets and fit exactly into the rhythm of the already encoded score. In order to maintain the rhythm of the story.



THE REAL TIME MOCAP MANAGEMENT PLATFORM FOR LIVE SESSIONS

Create bridges between live performance tools, video games (unity or unreal) and motion capture software.

Our mocap management platform has stabilized a computer device capable of processing 3D information live for 1 hour. This processing offers low latency between the actor's actions and the projections in the immersive space.

At the heart of this platform is an ultra-fast computer network which connects: the motion capture outfit, a computer dedicated to receiving and processing the actor's movements in 3D, a second computer which manages the projection process of the animated images and sound design in the immersive space.

The MoCap control platform is now functional for the full 360° theater form.

For immersive rooms, we work from the mapping software used on site.

To facilitate compatibility with immersive rooms, we add above the base video layer, a real-time alpha video layer via an NDI (Network Device Interface) video output, compatible with most current media servers.

In the event of NDI incompatibility, it is possible to directly connect an HDMI output and a video capture card from our MoCap platform.

Thanks to our technical script, this video layer (with a transparent background) is programmed in advance using the Cartesian coordinate system XYZ).

We can thus move our 3D puppet and make it appear at the desired location and at a specific moment in the show.

To reinforce the interaction between the 3D avatars and the various media (animated backgrounds, sound effects, music, etc.), command lines have been set up.

They ensure fluid communication between the different software, thus managing positions, rotations and movements in the 3D universe. We have developed visual signals and precise technical control to maintain constant communication between the actor and the management. These protocols anticipate and remedy possible bugs during the show.



Underground Sugar

UNDERGROUND Sugar creates and designs hybrid projects combining live art and new technologies. At the crossroads of literature, live performance, cinema and innovation, we explore creation as a space for sensitive experimentation. This symbiosis between technology and art brings to life innovative storytelling and unique performances, continually enriching the audience experience.

Our approach is to bring new stories to life and imagine new immersive and interactive experiences that are sustainable and accessible to all.

[+ Site Cie Underground Sugar](#)

Studio A+E

Studio A+E is a creative studio made up of image professionals in illustration, animation and communication based in Paris and Lyon since 2012.

Specializing in video mapping and large format animated images, we design and create animated visual content intended for the stage, operas, video installations and the field of live performance.

[+ Site A+E](#)

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