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Rock Art Rocks Me

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ABSTRACT

We are looking for something primitive: a memory from before our birth. Something obvious, we all carry and that evolves within us: the first gestures of the first men. Between art, science and technology, our research tends to a virtual scene of rock art in action. Assuming that the cave paintings are the traces of oral performance or dance rites [1], they have been used as transmission and communication media for the knowledge of surrounding and environments of the early men (hunting, myth, history, art or religious content, shamanism). Through the scope of these fragmentary traces of history, we are seeking to reconstruct various performative scenarios echoing the paintings of the Chauvet's cave.

Author Keywords

Visual arts, rock art, performance, shamanism, digital painting, improvisation.

ACM Classification Keywords

H.5.2 [Information interfaces and presentation]: Multimedia Information Systems—Artificial, augmented, and virtual realities; H.5.2 [Information interfaces and presentation]: User Interfaces—Natural language; J.5 [Arts and humanities]: Performing arts (e.g., dance, music).

A CATALOGUE FOR LOST GESTURES

Based on items found in a first state of the art (Leroi-Gourhan [2, 3], Picq [4], Clottes [5] Anati [6, 7], Piette [8, 9]) we are proceeding to the establishment of a dual tabloid, allowing a parallel conception of the evolution of tools and painting techniques with cognitive evolution of the early men. From the detailed analysis of the painted walls of Chauvet's cave, their morphology, the location of the painting in the cave and the design techniques such as pigments, colors or tools (Figure 1), we will cross-model anthropometric measurements of the first men, their tools and other artefacts.

These first elements allow us to establish a link between

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object and gesture representation and form the basis of a technical and morphological reconstruction scenario: How were realized the paintings? Then what could be their function?



Figure 1. The panel of the Lions (Cave Art Paintings) of the Chauvet Cave

Schematic reconstruction works are conducted in two dimensions:

—First, during improvisation workshops from a narrative scenario, nourished by scientific hypotheses;
—Second, from recording studios (motion capture) in which we will document the actions proposed by the dancers to establish a “catalog of lost gestures.” The aim of our research is to produce a joint design between gesture use, function and performance: a “gestothèque”. We will conduct dynamic and scalable models of gestures in terms of tools and images. The gesture-recording setup closely related to experimentation will then offer a possible generation for new tools for dancing computing in choreography modeling, such as: digital avatars media set and improvisation, immersive landscapes or digital graffiti (digital painting).

These tools will be developed to allow emergence of new transdisciplinary approach of “gesture” as an object of research in many disciplines: archeology, cognitive sciences, performance studies, anthropology and digital arts.

This paper focuses on the first part of the work which consists in transmedia and experimental improvisation work (performance, beatboxing and real-time sounds and visuals).

A TRANSMEDIA PROJECT

On stage we use the double projection of composed images and 3D scans of the Chauvet's cave on the stage screen and



Figure 2. stage pictures of the scenarii; left: shaman spirits shadows (1); center: palm-painting (3); right: animals spirit (5).

a piece of tulle. Scripted from the first collection of scientific and historical data—as improvisation tool for acting and dancing, the director speaks a tale. The tale gives both context and indication of the performers to act and use the digital environment developed in real time.

The work of staging and choreography is actually written collectively. From a serial of improvisation exercises (individual and collective), the performance group are invited to dance alternatively the gestures of the shaman, the hunter, the spirits or the animals, to trance or play body percussions. All the possibilities offered by the setup are played on (shadows, digital mapping, body mapping, VJing).

From a digital and interactive device that simulates the use of fire or pigments, the dancers are allowed to play with light to illuminate the cave walls and frescos. Between digital painting and illumination, digital arts and technology provide an interface between a beyond past, a dream world, spirits presence and a world to come.

In the next step, the most relevant items will be re-enacted in order to be recorded using a motion-capture system. Sensors and accelerometers will then be used to create an acoustical environment. Our main objective is to establish a relationship between body movement, perception and cognition where the audience is invited to participate.

The idea is that the movement is a source of knowledge which is yet an unknown procedure. The work in process is the site of a vast range of experiments between sound, gesture, space, time, writing, embodiment and perception.

Next year, we plan to discuss the results and analyses of the workshop through the expertise of the senior committee researchers of the Chauvet's Cave, during interdisciplinary study and research days.

SCENARIII FOR AN EXPERIMENTAL SET UP

In order to establish the experimental protocol based on the data found in the literature, we work out various scenarios (figure 2):

1. There's a shaman in the cave, he is giving a cure ritual;
2. There is a prehistoric performance group in the cave telling a story to a wider audience;
3. Recent discoveries show that some paintings were drawn by the hands of women (Perrin [10], Snow [11]). The paintings were perhaps carried by women who were

invoking the spirits of the animals to help in the hunt;

4. Studies of Iégor Reznikoff [12] show that in some caves red dots indicate echolocation points (resonance in the cave). Chauvet's Cave is recognized as a sanctuary rituals were they practiced it? Performers are invited to practice beatboxing, to loop their own body sounds;

5. The cave could have been a school of arts. The paintings could have been made out of tracing shadows.

More explorations are to come for the next workshops.

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