

# FeelOpo

## Feel(ing) the beat of Oporto

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### ABSTRACT

This digital art installation has as main goal to introduce an interface through which the image of the city of Oporto (in Northern Portugal) is designed and activated by the presence of one or more people standing in the exhibition space. It brings up the metaphor of the city as a living organism allowing visitors to explore, at different levels, several features very typical of this city. A diversity of possible routes is embedded in the outfit and activated as visitors move across the exhibition space, revealing experiences by means of projected videos related to the cultural specificity of the city. In this way, as the human body interacts with the space and the screen, uncovering stories, memories, expressions, sounds, colours, textures, new designs and emotions are presented in the form of videos that narrate life fragments of Oporto and its people. Being supported by a mix of audio-visual records, FeelOpo intends to build "the beat of Oporto" through striking visual narratives.

### CCS CONCEPTS

• Arts and humanities → Media arts; Performing arts

### KEYWORDS

Body as interface, cultural identity, digital art.

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### 1 INTRODUCTION

Our concept sees the interface as a means of communication between systems, not limited to single objects, so we explore the concept of body as interface in the installation 'FeelOpo'. In this way we are able to potentiate hybrid forms of communication between the physical and the digital realms. The use of the body as interface, which controls the environment/surroundings is nothing new (actions such as open doors automatically or turn on the light with sensors use this kind of interaction), requiring only that the body is located or move in specific spaces covered by a field of sensors. But we go beyond this so we use the body as interface in an immersive way, providing for the transmission of ideas and sensations. In this context, recently, a number of artists have been exploring themes relating to body as interface, where the body interacts with Visual stimuli from devices that deepen the unfolding of the visual component of the art installations, e.g., Camille Utterback in 'Text rain' [1], explores the interaction of the body with lyrics from a poem, recalling – as its name implies – a "rain of letters"; Mehmet Akten in 'Body paint' [2] explored the kinetic dimension of human body in an interactive mode, in which the movements produced were encoded and converted to images and colours (encouraging people to interact).

Communication between the physical and the digital, between body and digital sensors seek permanent dialogue involving gestures, movements and visual elements, promoting artistic intrusions that dilate the boundaries between the real and the virtual, as is demonstrated by the Japanese company 'Enra' [3], in which the performances develop multidimensional and diversified narratives that arise from the interplay of human bodies and digital graphics.

### 2 CONCEPT

Taking as a starting point the city of Oporto (Portugal), we put forward a reflection on its main characteristics in terms of textures and audio-visual appropriations. To this end, we identify various tangible and intangible elements that determine an urban and cultural specificity, for instance, materials colours, monuments, pronunciations, and locations, to be able to experience narratives of city spaces. Over the course of the work a specific cultural identity will be considered, namely, related to the "other"; in the sense that we relate to others in unique ways and identify

ourselves differently or similarly within a culture – as Woodward [4] in the book *Gender, Class, and Nation*:

«(...) although as individuals we have to take up identities actively, those identities are necessarily the product of the society in which we live and our relationship with others. Identity provides a link between individuals and the world in which they live. Identity combines how I see myself and others see me. Identity involves the internal and the subjective, and the external. It is a socially recognized position, recognized by others, not just by me.(...)»

From the generic notion of "cultural identity", we explore several approaches: i) traditions and customs (collective and subjective); II) the characteristics that identify groups and reveal levels of belonging to city spaces; Finally, iii) communities; stimulating the narration of experiences, ways of being and living. In brief, we explore how these three areas reflect a designated "cultural heritage".

Noting that the effects of globalization are now consolidated, the reflections of McLuhan [5] remain valid – when he described the "global village" – and the notion of "Glocalization" (operated by Robertson [6]), in which he inserts the local connection in the global stance, interlocking globalization and local identity. At the same time, the development of cultural tourism, whose product is the diversity of ways of living, demanding renewed intrinsic dynamics in the realm of globalisation (King [7]). Hall [8] emphasises the role of culture as a criticism of action and social intervention, and considers that the notion of social identity implies a collective dimension, in permanent construction, through cultural practices in constant (re)creation. Based on this framework, 'FeelOpo' addresses aspects of cultural identity based on contrasting images, sounds, voices, and memories. The artistic intervention is reflected in a technical installation where technology takes on the role of mediator, in a multidimensional trial of "cultural identity" of the city of Oporto, associated with images and relevant contextual references. According to Paulino [9]:

*«(...) If on the one hand the intangible heritage appears dependent on a material space – a territory – which gives it sense, or a landscape that evokes it, the immaterial heritage always shows a relationship subject/space, even though both are just implied. (...) To face the immaterial heritage as a unique element itself will result in a lack of contextualisation and, consequently, a loss of significance. (...)»*

In the realm of human and accelerated socio-spatial changes, how do we fit in this process (marked by uncertainty and vagueness) the urban-cultural identity of Oporto, and how can technology contribute to the specificity, affirmation and dissemination of its culture and life? The installation 'FeelOpo' will seek to contribute to solve this problem. To this end, more than the drawing of interfaces, we want to configure new possibilities of experience, adaptable to the subjective expectations of every user's interaction, promoting the involvement/interaction between subjects, spaces (real and digital) and cultural heritage (memories,

traditions, customs, sayings), resulting in the amplification of individual and/or collective experiences, and fostering the sharing of emotions and stimulation of sensory feedback. Through the movement of each participant the (re)discovery of accepted indicators becomes part of the "cultural identity" of the city. According to Gaver [10]: «(...)Each space has different attributes as do the people who are interacting with it(...)». Taking advantage of the intersection between the represented heritage and the interaction built on site, the technology deployed (creating a digital environment) will immerse the visitors in an environment permeated by a rich heritage and a marked cultural identity. The result will be the consequence of a performance based on multiple visual storytelling segments (about Oporto).

### 3 DESCRIPTION

The image of the city of Oporto initially projected presents a slightly out of focus landscape and is activated by the presence of one or more visitors in the exhibition space.



**Fig. 1** – Visualisation of the 'FeelOpo' installation.

In 'FeelOpo' [Fig. 1](#) the bodies interact with the space and the screen at set "distances" and "hallways", uncovering stories, memories, expressions, sounds, colours, textures, and architectural forms through videos that narrate life fragments of the city and its people. The pace and speed of interaction of each visitor will condition the dynamics of the triggered narratives. The presence in the room of one or more visitors may activate several videos that also interact with each other, thus generating a crossover of visual presentations.

The interaction space is divided into 4 areas to be explored by visitors:

- Public space: allows for the exploration of several streets;
- Water fronts: shows the river margin and the seaside;
- Entertainment: Day & Night (parks, gardens, squares and nightlife);
- Trade: markets and fairs.

Interactivity is set to relate to the distance at which people are watching the image initially designed as "Opo", while the Kinect system reads the body area and movement that will allow to "discover" more visual experiences. The body interface acts like a magnifying glass, as it approaches the initial static image it can

extend certain "pixels", allowing to show more and more detailed information about the city. The space of interaction is "divided" in 12 different areas of operation Fig. 2. Visitors will change the visual presentation according to the distance to the screen:

- at 4 m from the projection screen the image that was initially out of focus becomes sharper;
- at 3 m from the projection screen several photos and audio are activated;
- at 2 m from the projection screen videos relating to the cultural specificity of the city are shown.



Fig. 2 – The different interaction spaces of 'FeelOpo'.

## 4 TECHNICAL SPECIFICATIONS

The technical specifications for the artistic installation 'FeelOpo' will include a large interactive room with low light (where one of the walls should be free to project an image of about 6 x 2 m (length x height), video-projector, 2 speakers and Kinect camera connected to laptop computer. It will be necessary to have 3 electricity outlets.

With the projection of different video and audio streams, this installation will require certain isolation from sources of noise, so that the audio component may be properly enjoyed by visitors.

## 4 FINAL NOTES

The 'FeelOpo' installation explores knowledge in a new way and proposes a multidimensional experiment, allowing the user to (re)discover narratives and audio/visual expressions which mark the city of Oporto, with its unique heritage and cultural identity. This artistic installation develops a wide range of sensory and emotional interactions in individual and/or collective mode, encompassing real and digital communication flows that ensure a rich exchange of information, based in the consolidation of diverse reference imagery on the cultural identity of the city and its people.

## REFERENCES

- [1] Camille Utterback. 1999. Text rain. (1999). Acedido a April 2, 2017 em <http://camilleutterback.com/projects/text-rain/>
- [2] Mehmet Akten. 2009. Body paint. (March 2009). Acedido a March 28, 2017 em <http://www.memo.tv/bodypaint/>
- [3] Enra. Nobuaki Kaneko. 2016. Firebird. (1999). Acedido a April 2, 2017 em <http://enra.jp/works>
- [4] Kath Woodward. 2000. Gender, Class, Nation. Routledge: London. pp.7
- [5] Marshall McLuhan. 1969. Os meios de comunicação como extensões do

homem. São Paulo: Cultrix.

- [6] Roland Robertson. 1995. Globalization: Time-Space and Homogeneity-Heterogeneity. Mike Featherstone, Scott Lash, and Roland Robertson (eds) Global Modernities. London: Sage.
- [7] Anthony King. 1991. Culture, Globalization and the World-System, Contemporary Conditions for the Representation of Identity. New York: State University of New York.
- [8] Stuart Hall. 1992. A identidade cultural na pós-modernidade. Rio de Janeiro: DP&A editora.
- [9] Fernando Paulino. 2010. Recuperação do imaginário colectivo da Serra d'Arga: pela projecção turística dos lugares simbólicos. Edições ISMAI. ISBN: 978-972-9048-47-0. Acedido a March 20, 2017 de <https://repositorio.ismai.pt/handle/10400.24/127>. [08 de abril de 2017]. Pp. 571
- [10] William Gaver. 1991. Technology Affordance. In Proceedings of the SIGCHI conference on Human factors in computing systems Reaching through technology - CHI 1991. ACM Press: New York. Pp 79 – 84. DOI:10.1145/108844.108856

