# INTERACTIVE INSTALLATION AND PORTUGUESE FEMINISTS

## INSTALAÇÃO INTERATIVA E FEMINISTAS PORTUGUESAS

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**RESUMO**

A instalação Jogo de Damas pretendeu ser um espaço de reflexão sobre questões que incidiam na violação dos direitos humanos, nomeadamente na violação dos direitos das mulheres. Para o desenvolvimento do projeto, foi delimitada a realidade a contemplar e, nesse sentido, foi elaborada uma ilustração do enquadramento do feminismo no contexto português do final do século XIX e no século XX. A interface da instalação, que fundiu o mundo real com o mundo virtual, uma vez que a componente tangível da plataforma de instalação é constituída por um cubo e quatro peças de jogo e é combinada com uma componente digital, que consiste em duas projecções associadas ao elemento sonoro que prevalece durante a performance. Esta instalação interactiva pressupõe a participação de dois participantes que interagem entre si e com um sistema informático, que controla os movimentos dos participantes activando um conjunto de escolhas e acções e/ou imagens correspondentes a uma sequência narrativa previamente estabelecida. Esta componente sensorial é conseguida através de um sistema de visão por computador. As aplicações informáticas implementadas utilizam a linguagem Processing em conjunto com as bibliotecas OPENCV, Serial e ESS. Este estudo empírico recorreu a uma estrutura multimetodológica designada por Metodologia de Desenvolvimento. A metodologia adoptada consistiu na realização de quatro sessões de interação, seguidas do preenchimento de um questionário de avaliação da interação.

**Palavras-chave:** Feminismo. Instalação Interativa. Jogo de Damas

**ABSTRACT**

The *Checkers Game* installation wanted to create a space for reflection on issues that focused on the violation of human rights, particularly the violation of women's rights. For the development of the project, the reality to be contemplated was delimited and, in this sense, an illustration of the framework of feminism in the Portuguese context of the late 19th and 20th centuries was drawn up. The installation interface, which merged the real world with the virtual world, since the tangible component of the installation platform consists of a cube and four game pieces and it is combined with a digital component, that consists of two projections associated with the sound element that prevail during the performance. This interactive installation assumes the participation of two participants who interact with each other and a computer system, that truck the participants movements activating a set of choices and actions and/or images corresponding to a previously established narrative sequence. This sensory component is achieved using a computer vision system. The computer applications implemented use the Processing language together with the OPENCV, Serial and ESS libraries. This empirical study employed a multimethodological framework known as the Development Methodology. The adopted methodology consisted of carrying out four interaction sessions, followed by the completion of an interaction assessment questionnaire.

**Keywords:** Feminism. Interactive Installation. Checkers

# 1 INTRODUÇÃO

Art and its impact on emotional and behavioral development can manifest in various ways, with interventions spanning across a wide range of areas. Emotional development is lived and experienced, but it is also perceived, understood, and worked throughout life (Durlak, 2015; Fancourt & Finn, 2019; Sroufe,1997). Art as well as being a subjective process, where the participants live their experiences in the first person, it can also be a shared and even constitute a collaborative trajectory, accepting that human activities can also take place on a multifaceted scenario. The project that we presented here is an example of an interactive art installation that combines elements of the visual arts with elements of digital art and digital culture (Paul, 2023). Thus, from the first territory we have the visualization of the drawing and in the digital component we have the dimensions of interaction and projection. This exploratory project aims to enrich personal and collective experiences in terms of learning about the lives of four women who have left their mark in different domains of knowledge. This interactive installation is based on visual storytelling and its development combines elements of the visual arts, particularly in terms of the preparation of the artifact, with the possibilities obtained using technology, which is used to acquire images and to signal the output of images and sound and interactivity aspect during participant's action. In this sense, the interactive installation can foster emotions in the participants, stimulating them through music, images, or the game itself, which reveals the drawings of different characters, namely Ana de Castro Osório, Guilhermina Suggia, Maria de Lourdes Pintasilgo and Amália Rodrigues. In this way, a collaborative experience took place and gave participants the opportunity to explore a creative universe and engage with a sense of discovery, through the dimensions of gamification (Deterding et al., 2011). The installation is based on gender issues, but also human rights, and aims to highlight the career of a group of women who have stood out in Portuguese society in different areas of knowledge (Pinto, 2010). In this environment, players explore images that refer to the lives of the characters. The installation element involves game dynamics and constitutes a collaborative space for exploration and learning, where both digital and analogic dimensions are connected. Bringing public closer to aesthetic objects provides new ways of exploring themes that have previously been dealt with (Bishop, 2006). We have revisited the theme of feminism, a subject that has only recently arrived in the context of artistic activity, considering, of course, that it has existed since the dawn of humanity. Participation, engagement, and experimentation opens digital artistic production and contribute to the development of distinct forms of contact with creative objects (Bishop, 2023; Paul, 2023). The interaction between participants and the artifact allows for a conception that supports the human-computer relationship promoting awareness to themes presented, either through the relationship that is developed in exhibition environment or through

the construction that will take place afterwards. This empirical study employed a multimethodological framework known as the Development Methodology, as outlined by Van der Maren (1996) and Richey and Klein (2014), to investigate the research question.

## 2. OBJECTIVES

As an artistic proposal, this interactive installation aims to stimulate participants to perform the rule of players. In that sense this artifact encourages the public/participants to get closer to feminism concerns as well as human rights questions. In this sense, it involves curious gender issues, i.e. issues that refer to the universe of women, with the aim of presenting a new possibility for exploring the theme. The installation also includes a multi-sensory vision, in which touch, sound and image are key elements that support what is intended, such as the construction of the identity of a new approach to art and cultural issues. The fact that it is a playable installation is intended to help us understand its impact encouragement of collaborative practices among participants by having a diversity of goals and evaluating their experience in a playful and collective way.

## 3. THEORICAL FRAMEWORK

The present framework would be assumed according to the choices that were made during the creative process of assembling an interactive artifact. So, in this trajectory we start by looking some feminist phases and we began by reflecting about Ana Castro Osório's book entitled *Às mulheres Portuguesas* (1905). Considered as the first Portuguese feminist book, this essay from the beginning of the 20th century is exceptionally curious by many aspects, but certainly because of the way that the author looks to issues related to the women of her time and that configures the main topic, by this we appointed the fact of being addressed to all Portuguese women. Through literature review it is perceived that women literary production has been minimal for centuries, thus expose a pertinent aspect of women's education and set access to education as one of the most important feminist demands. Regarding the movement's temporal origins, Álvarez (2002) remind us that feminism itself always existed, in different senses. In the broadest sense of the term, whenever women, individually or collectively, complained about their unjust and bitter fate under patriarchy and demanded a different situation, such better ways of life (Álvarez, 2005). In this sense, of trying to understand the calls for attention to the condition of women, we may go back to the Renaissance context, to Christine de Pizan's

(2005) book The City of Ladies presented as a reference in terms of the treatment of women's inferiority. This focus, distant in time, highlights the facet of a type of discriminatory treatment, and Álvarez (2002) focuses it as an exceptional work. According to Silva (1983) the movement's has elitist background, in the case of the Portuguese context and about the class of women it brings together, stressing the significance of all the actions taken by this movement. According to the author, it was influenced and strengthened by a dynamic associated with the activities of an international current, whose manifestations were expressions of great vitality in different countries, specifically in Europe and North America (Silva, 1983). According to Kaplan (2012) there were three waves in the feminist movement: first wave occurred in the mid-19th century, a second wave directly related to the subsequent movements in the aftermath of the Second World War and a third wave, also known as *post-feminism*. The demonstrations included in the term first wave, in which feminists didn't set out to reverse the roles (Cova, 2004), saw the activities they were looking for, in other words, a place distinct from that of men and not their imitation, nor even the alteration or reversal of roles. Their desire was to counteract what seemed to be established, that is, a broad consensus shared by various groups about married life, domestic work, and motherhood as the 'natural' stages of women's lives. In the background of feminist activities were the congregations where educated women met to debate texts they had written, which is why it was women writers who brought the feminist question into the public debate and were part of the boards of the first associations. With second wave feminism, the concept of gender was born, which was the theoretical equivalent of putting the issue of the differences between the sexes on the agenda of social research. It will be in this context that many questions and points of view were put in perspective, Simone Beauvoir (2014) and her perceptions bring to the social and political agenda. With The Second Sex Beauvoir (2014) supported a profound impact on feminist´s movement. Its freshness provided an analytical and intellectual framework central to create the bases to understand gender inequality and inspire generations of feminists. In this sense her contribute encouraged women and society for social and political change and to establish new lines of action and participation of citizens as a collective. Those lines stimulated a global conscience in turn of changes that were and are necessary to respond, facing challenges and breaking walls. For many years, in terms of art works were presented and perceived in the form of drawings, paintings, or sculptures. The concept of installation has emerged in the context of Contemporary Art as the term that generically replaces the concept of work and in its essence contemplates the significance of the set of objects that make it up, as well as interventions created in a specific relationship with the exhibition space or the environment (Loveless, 2019). Bishop (2005) points out that the term installation refers to a type of art which involves the spectator entering the physical space of the work and which is therefore associated

with descriptions such as theatrical, immersive, and experimental. According to the author, the associations made also correspond to an extensive universe of forms, content, and appearances which, due to the freedom of use of the term, compromise its meaning. The author also mentions that the art installation, as an experience, has different interpretations, stemming from the philosophical thinking of different authors. The precursors of this type of project were linked to the artistic activity of the avant-garde, particularly the *Dada* movement (Bishop, 2006). In the 1960s there was a new impetus for projects of this nature and the 1990s proved to be a boom. Considered a form of art without limits, art installations are a complex and contested term (Stallabrass, 2020). Its wide-ranging nature, in terms of the panoply of constituent elements, makes it an ideal platform for conceiving projects in the field of digital artistic creation. In its configuration, we can observe the incorporation of sculptural elements, elements that mark their presence in the physical domain of three-dimensional space, associated with a dimension of their own, capable of combining real and virtual elements. Thus, in the territory of Art & Technology, installation projects flourish. The organic nature of their constitution translates into multifaceted spatial appropriations, in which video, sound, drawing and sculpture can be assimilated and transfigured, giving rise to new forms of presentation and, consequently, new readings of the subject addressed in the dimension of the project presented. In the 1990s, the world of Digital Art saw the emergence of countless creations, with technology taking over in some projects as the means of production and in others as an integral part of them. Embraced by a spirit of producing new forms of aesthetic enjoyment, the Installations conceived in this medium contemplate the paradigm of interactivity in many of their productions and keep alive the model of the open work, inaugurated by Umberto Eco (2016). The viewer is proposed to contemplate the work in a set of actions that invite real and effective involvement in the context of the installation's implementation. The conclusion results from the reading constructed by the experience provided. Games have accompanied human evolution from ancient times to the present day and have taken different forms on different supports. Their development has included supports such as wall surfaces, blackboards, and even tangible surfaces. This playful element has a strong socializing aspect, in that it enables actions in a group context, made possible by new technological supports, particularly multi-touch surfaces. He looks at digital creation tools and highlights the role of interactivity in stories, as well as the range of new opportunities that could arise in the context of new media. Mallon (2005) points out that academic research into computer games has, from the outset, paid particular attention to narrative theories, drawing on their models. According to the author, adventure games have privileged a new type of fiction, called interactive fiction, considered to be an evolutionary step in the context of narratives. The target scenario was an evolutionary milestone. This included raising questions about the

applicability and relevance of standards for analyzing narratives when applied to games. This scenario also includes a series of investigations and debates in which theorists promote and defend different positions on the role and place of narratives in the context of games. Thus, in this field, researchers are asking about the nature of narratives and Dickey (2006) reports on the research of different authors who point to the genre of fictional narrative as the most common genre in the games considered. Others assume a narrative genre that includes realism as an intrinsic characteristic and generally start from a conceptual basis aimed at providing a sequence of real events in a realistic story line, without neglecting the inherence of fantasy in this genre of narratives. In terms of feminist art installations, we analyzed *The Dinner Party* (1974-79) from Judy Chicago, *Femme Couteau* (2002) from Louise Bourgeois and *A Idade da Inocência III* from Raquel Gomes (2008). From the study of these art installations, we observed the possibility of combining different materials, such textile and porcelains.

## 4. DEVELOPMENT

The project's development process, which began with the recreation of the game of *Checkers*, is associated with a concern for any form of human rights abuse. This, in turn, takes a particular look at the female universe and explores the aspect of Storytelling as a dimension of organizing events during the game presented. Thus, the parallelism between checkers, game pieces, and checkers, female figures, is constituted. In developing a recreation of the game of *Checkers*, the rules and regulations of the traditional game were observed, and particular attention was paid to its presentation in terms of form. We then carried out a whole process of designing a new platform, with a view to creating the interface for the new game.

### 4.1 INSTALLATION DESIGN

In addition to the game platform, the installation includes an initial projection that refers to the introduction to the installation and randomly presents a sequence of phrases that generally characterize the basic concept of the project's narrative. The ensemble is characterized by the continuous play of sensory instigation and its imagery derives from the combination of visual, tactile, and sonorous stimuli. The installation is based on two projections located sideways to the players' positions and simultaneously on the sound element. The latter seeks to explore the plasticity of the elements and establish links with the narrative that underpins this work. Thus, the configuration of a game is made up of a construction that combines elements from different universes which represent calls for participation and experimentation

on the part of the observers. In this universe, the character of the observer becomes a central element in the scenario presented and, as such, is responsible for grasping the whole and completing the course of the work in the role of author. In this context, he takes on the role of a player and, as such, becomes a constituent element of the installation itself, where he establishes a multitude of relationships in a process of permanent construction that make his individual experience, as an event shared with the collective of observers present in the environment of the same installation. Alongside the concern for the physical constitution of the installation's environment, a similar process arose regarding the project's concept. As part of the development process, research was carried out into the identity of female figures who, in some way, marked the Portuguese panorama in the context of the time in which they were inserted. This procedure sought to gather information with a view to the process of developing and designing the characters in the narrative. The installation *per si* contemplates the existence of two projections located to the side of the game. The study design for the implementation is illustrated in Figure 1.

**Figure 1 – Study design for the interaction**
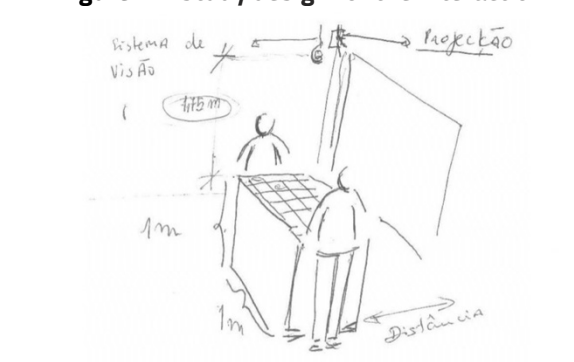


**SOURCE: Authors (2010)**

The proposed *Game of Checkers* serves as a platform for exploring the concept patented in the installation project and takes place on a playable interface that suggests the bridge between the real world and the virtual world. Thus, it is considered that the intarction on the board corresponds to projections that contain the winnings for each moment of the interaction with the installation. Access to these pictorial elements, present in the projections, constitutes the visual construction of the visual narrative and it is only possible through the evolution of the interaction dictated by the white pieces. These correspond to the representation of the feminists in the resistance bloc and take the player into the lives of four female personalities from the Portuguese context. The pink pieces represent the characters who aim to sabotage feminist achievements. Thus, each moment of the interaction that corresponds to them, translates a visual noise on the reading of the image corresponding to the previous move, that is, a

movement of a white piece. It is played by two players placed on opposite sides of a board and is similar to the traditional game of Checkers because it takes the form of an 8 x 8 board. The playing surface is black squares. This installation features 4 white pieces and 4 pink pieces called checkers. The player with the white pieces starts the game. The pieces are moved diagonally, one square at a time. Whenever an opposing piece is crossed in the move, it is removed from the game and captured by the opponent. The pieces can only move on the black squares that are empty. The piece holding the move must always remove the opponent's piece that is in its path. The game ends when one of the players loses all of their pieces or when one of the players manages to conquer the territory by making "DAMA", i.e. the piece becomes winning and powerful. The game presented here was designed on the basis of the traditional game of *Checkers*: two players, checkers and a board, however, its nature was altered from the outset both by the presence of visual elements that appear drawn at each moment of the game and by the presence of the sound element whose main role is to generate tension. A game that here has a theme superimposed on it: feminism. But can human issues be presented in the form of a game? According to Huizinga (1992), the primary characteristic of games is non-seriousness, in other words, games are elements that allude us to the dimensions of competition, play and pastime. However, this author, as well as Caillois (1990), consider the importance of play in relation to the cultural formation of any society and in this context the question posed admits a possibility of exploration in this territory. Thus, in this space of fusion, we sought to investigate the question of the core of the narrative, inserted in the configuration of a game that enjoys a strategic essence. Likewise, players are expected to empathize (Zillmann, 1995) with the character they are playing.

## 4.2 CHARACTERS'S DESIGN

The development of the characters is the result of the information from the narrative and was intended to constitute an image collection that will be shown in the set of visualizations to be presented during the game of *Checkers* (figure 2). Associated with the creation of images is also one of the development principles of this project, which is to highlight and emphasize, in the field of Digital Art, the contribution of women who have significantly marked the panorama of their time as personalities, in the Portuguese context. Once the narrative had been constructed, biographical data was collected on twelve women. This number is related to the number of pieces that, by analogy with a traditional game of checkers, each of the opposing sides has. The selection presented resulted from the identification of women who, in their time, made a significant mark on the universes in which they moved. In order to make this analysis possible, a period of time was set aside for the research in question. This corresponds

to the period from the end of the 19th century to the end of the 20th century. Another principle regarding this exhibition was to consider female figures who were not currently active on the Portuguese scene. We also tried to consider women who occupied different areas of activity. The following women were therefore examined, based on the criteria considered: Maria Alda Nogueira; Carolina Beatriz Ângelo; Maria de Lourdes Pintasilgo; Ana Castro Osório; Virgínia Quaresma; Amália Rodrigues; Emília dos Santos Braga; Carolina Michaellis; Guilhermina Suggia; Virgínia de Castro Almeida; Alice Pestana and Sophia deMello Breyner Andersen. The result of this selection is the conception of a product that reflects, through a subjective vision, a particular look at aspects that, for the current generation, seem to reflect obvious realities. According to the biographical records of these women, many boundaries have been broken with regard to the role of women in society. This change has been seen in the political, social and economic spheres. Here we briefly outline the selection process for the figures. This was done randomly, so there is no common thread in terms of a specific space-time location, other than the one mentioned above. The investigation began by studying the figure of Maria Alda Nogueira. Her image corresponds to a woman who had a degree in Physical Chemistry. In 1942, she was an effective member of a political party, lived underground and was a political prisoner under the fascist government. In fact, it was precisely her political activity that led her to the Constituent Assembly and the Assembly of the Republic after April 25, and she was part of the Central Committee's Commission for Women's Problems and Struggles. Her life is also linked to the cause of women's emancipation and the ideals of freedom, democracy and socialism which, in her voice, saw intense activity and debate, worthy of note (Pessoa, 2016). The following is an observation of the contribution made by Carolina Beatriz Ângelo (Esteves, 2001). Carolina's expression relates to medicine, suffragette struggles and Feminist Propaganda actions. Her mark is largely associated with the pioneering nature of her conduct. As an image of this design comes the act that gave her notorious recognition, for the revolution in concepts that she provoked, when she exercised her right to vote in 1911, during the First Republic. Universal suffrage was not yet recognized in Portugal at that time. This was only achieved on April 25, 1974. Carolina was associated with the founding of the first organizations in Portugal that gave shape to women's demands for their civil and political rights. Her work was first linked to the practice of medicine. Her activities included demands for equal rights and duties for both sexes, the consolidation of feminist ideals, republican ideals and the defense of women's suffrage. Maria de Lourdes Pintasilgo present in the memory of many Portuguese for her timeliness, this woman certainly marked contemporary Portuguese history. Her activity included higher education, where she completed a degree in Chemical-Industrial Engineering. In her professional career, she worked as a researcher at the National Nuclear Energy Board. In 1979, General Ramalho Eanes, President of the

Portuguese Republic, appointed her to head the 5th Constitutional Government. In this way, Maria de Lourdes Pintasilgo became the first Portuguese woman Head of Government as Prime Minister (Joaquim, 2010). Then, we studied Ana Castro Osório, the contribution of her activist manifesto marked the first wave of the feminist movement in Portugal. Her dynamism led to her participation in the activities of the Portuguese Republican Party. She was responsible for the publication of the first Portuguese feminist manifesto, entitled "Às mulheres Portuguesas", in 1905. In this field, she founded the Portuguese Group of Feminist Studies, later the Republican League of Portuguese Women and the Feminist Propaganda Association (Esteves, 2001). This research includes Virgínia Quaresma the first woman that worked as a journalist in Portugal. She worked on the editorial boards of the newspapers "O Século" and "A Capital". Her journalistic work was distinct by its political and social content (Ventura, 2014; Esteves, 2022). Then Virgínia de Castro Almeida, who takes us back to the world of cinematographic creation. Her career also saw her stand out as a writer, translator, and filmmaker. Her pioneering spirit was also extended to the production of children's literature. The figure of Emília dos Santos Braga is part of the picture that looks at the female figures who made their contribution to history. A history which, during Emília's time, saw few female names registered, particularly in the area in which she excelled, i.e. painting. Her presence in the arts provided moments of discomfort for those who found it difficult to acknowledge the presence of a female figure in their midst. The artist continued her work and succeeded in projecting her work internationally, after being represented at the Universal Exhibition in Paris (Esquível, 2010). With Carolina Michaellis (DaSilva: 2001), the context of Portuguese universities became aware, for the first time, of the presence of a female adult in their teaching praxis. She became known for her remarkable work as a philologist of the Portuguese language. In this explanation, follows Guilhermina Suggia that revolutionized the music scene with her particular way of playing the cello. Her career received great recognition in the UK, in particular (Cascudo, 2011). The inescapable figure of Sophia de Mello Breyner Andersen (Rocha, 2006) was also placed as a destination in the route taken. Her work goes beyond poetry to fiction, short stories for children, essays, theater and translation. Alice Pestana, under the male pseudonym Caiel, began her journalistic career in 1877. As well as journalism, she dedicated herself to literary production, including books, short stories, novels and plays. Motivated by women's education and instruction, she analyzed the educational conditions that existed abroad. In 1899 she founded the Portuguese Peace League, of which she was president (Soares, 2010). With Amália Rodrigues we learned about the universal nature of fado, culture and the Portuguese language. Throughout her life, she performed multiple activities, which included, in addition to her memorial testimony in the voice of a fado singer, a career as a theater and film actress. Her career in fado has allowed her to go international (Domingos, 2020). After

explaining some of the aspects considered relevant with regard to the twelve female figures mentioned above, a new selection was made in order to carry out the installation exercise. It is also important to point out that the above-mentioned selections were made according to subjective criteria, which sought to create a diverse range of shows with reference to personalities who were different in the spheres in which they moved. Considering the thirth wave in the 1990s, significant progress was made in addressing violence against women in Portugal, including the approval of a protective law in 1991 and the implementation of public policies to combat the issue. The early 21st century saw a major feminist victory with the decriminalization of voluntary termination of pregnancy in a 2007 referendum (Marôpo et al., 2017). This milestone bolstered the third wave of feminism with focus on diversity and the rights of lesbian, immigrant, and black women, together with the growth of feminist organizations and the internationalization of the movement (Tong, 2018). In the context of the present project, the interactive art installation, four personalities were thus selected with a view to compiling the images to be taken as part of the application to be developed: Ana Castro Osório, Guilhermina Suggia, Maria de Lourdes Pintasilgo and Amália Rodrigues.

**Figure 2 – One of the character's presented**



**SOURCE: Authors (2010)**

## 5. METHODOLOGY

To implement this empirical study, we followed a multimethodological approach entitled Development Methodology (van der Maren, 1996; Richey & Klein, 2014). This methodological proposal serves as the pathway for the development of our work, as it converges aspects such as the constructivist approach, emerging scenarios, and the recognition of the role of sociocultural perspectives in the context of communication and engagement with artworks. Our conceptual basis comes from the confluence of different theoretical frameworks, necessitating a methodology whose flexibility is a reality, rather than a closed investigative model. The adopted methodology consisted of carrying out four game sessions, followed by the completion of an interaction assessment questionnaire. We tried to get the participants to play the game to later identify its constituent elements. The profile of the participants sought to encompass individuals from different universes, in terms of involvement with gaming activities and interaction with the facilities. The methodology adopted for the collection and data analysis from the evaluation of the interaction installation was the observation of the interaction of the subjects participating in the game session and questionnaires. The aim of each game session, followed by a questionnaire to evaluate interaction in the Checkers setup, was to understand whether the game remains stuck to the traditional game dimension or whether it encompasses another dimension. The objectives of the questionnaire were: to collect data based on the subjects' interaction during the game session; Identify the elements with immediate comprehension; to identify the type of motivation for playing the game. The questionnaire ultimately made it possible to analyze and quantify motivation. The methodology adopted consisted of four game sessions, followed by an interaction evaluation questionnaire. The aim was for the participants to play the game and then identify its constituent elements. The profile of the subjects requested to include individuals from different backgrounds in terms of their involvement with gaming activities and interaction with the facilities. The test was carried out in the *EngageLab* laboratory (figure 3), at the interface of the *Game Checkers* a tangible installation. Support materials were produced for this test, namely, a script introducing the test game session, an observation grid, a questionnaire to characterize participants and a questionnaire to evaluate the interaction. Regarding the experience in the game universe, it was found that the subjects' motivation is linked to the competition component of the game. As their main motivation, the participants indicated that, in addition to the game platform's apparatus, they were motivated to play by the sound component of the installation. The sound proved to be in keeping with the game's setting. In response to the artistic proposal put forward in this research project, it was found that the subjects adhered to the installation as an artistic product and, in formal terms, gave a positive assessment of the installation. Regarding the game essence despite recognizing

new elements in the game, the subjects felt motivated mainly by the possibility of being able to beat their opponent. The interaction factor aroused in the participants the desire to uncover the effects associated with each of their actions and the possibility of being able to identify the characters. If, on the one hand, it can be concluded that the characteristics of the traditional game of checkers conditioned the conduct of the game in order to arouse the pleasure of the contest, on the other hand, it can be concluded that the possibility of creating scenarios that unveil themselves at every moment of the game opens up the possibility of exploration in the field of digital art creation. Regarding the experience in the game universe, it was found that the subjects' motivation was linked to the competition component of the game. As their main motivation, the participants indicated that, in addition to the installation platform's apparatus, they were motivated to play by the sound component of the installation. The sound proved to be in keeping with the installation's setting. In response to the artistic proposal put forward in this research project, it was found that the subjects adhered to the installation as an artistic product and, in formal terms, gave a positive assessment of the installation. Regarding the essence of the installation despite recognizing new elements, such sound and images, the subjects felt motivated mainly by the possibility of being able to beat their opponent. The interaction factor aroused in the participants the desire to uncover the effects associated with each of their actions and the possibility of being able to identify the characters. If, on the one hand, it can be concluded that the characteristics of the traditional game of checkers conditioned the conduct of the interaction in order to arouse the pleasure of the contest, on the other hand, it can be concluded that the possibility of creating scenarios that unveil themselves at every moment of the game opens up the possibility of exploration in the field of digital art creation. In the field of technology, the challenge of exploring the possibility of a projection screen on the installation platform will constitute a new dimension in the presentation and reading of the game. Overall, it can be concluded that in the field of digital art, the hypotheses created around a concept can harmoniously involve elements from different universes that converge on a common point, i.e. a moment of aesthetic enjoyment with sharing of discoveries in a collaborative learning environment.

**Figure 3 – Interactive experience**



**SOURCE: Authors (2010)**

## FINAL CONCLUSIONS

Reflections carried out on gender issues revealed the numerous challenges faced by feminist activists. Such contact was essential for developing effective platforms that support new experiential approaches and innovative communication models, especially in areas where gender issues intersect with art and communication. It was educational to see the entrepreneurship of women who stood out in the fields of education, social action, culture, politics and see their investment in the desire to change the structure of a society, in the sense of recognizing women as autonomous beings, capable of carrying out roles and functions different from those which, until then, were commonly confined to them. It should be remembered here that the vision presented is subjective and, in this sense, constitutes a possible illustration in the exploration of the theme in question. This analysis refers to multiple aspects that are considered fundamental to the perception and understanding of society, which suffered considerable structural changes at the beginning of the 20th century. The suffrage demanded at the time revealed a deep awareness of the reality of women's role in civil society. The changes that were made to the legal framework, as well as those calling for equal access to education, would become moments of unquestionable value in the evolution of the situation of women. As far as the whole installation is concerned, it should be noted that, in the field of aesthetics, there are elements that coexist harmoniously, as shown in figure 4.

**Figure 3 – Interactive Installation**



**SOURCE: Authors (2010)**

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