In migrants' shoes. A game to raise awareness and support long-lasting learning

Nei panni dei migranti. Un gioco per acquisire consapevolezza e supportare l'apprendimento a lungo termine

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SOMMARIO Questo contributo guarda al gioco come tecnologia per la comunicazione e l'apprendimento, analizzandolo in particolare come volto all'integrazione di migranti, tramite l'analisi del gioco urbano persuasivo *A Hostile World* e dei risultati di ricerca conseguiti in occasione della sua applicazione su due gruppi di adolescenti individuati per i loro comportamenti ostili nei confronti degli immigrati. Lo scopo del gioco è far immergere i partecipanti in situazioni inconsuete, per problematizzare e modificare attitudini mentali e preconcetti esistenti, promuovendo acquisizioni di saperi capaci di modificare comportamenti e aumentare l'empatia. Lo studio è una ricerca-azione condotta tramite questionari qualitativi somministrati pre- e post-esperienza, brevi interviste e focus group. L'analisi dei risultati rivela che i giocatori sono stati coinvolti in toccanti, scomodi processi di identificazione che hanno ridotto pregiudizi esistenti, incrementando la comprensione delle fatiche e fragilità altrui, con risultati rilevanti in termini di apprendimento trasformativo, che ancora persiste.

PAROLE CHIAVE Educazione inclusiva, Ricerca-azione, Analisi dell'esperienza di gioco, Cambiamento sociale, Immedesimazione.

ABSTRACT This contribution looks at games as a technology for communicating, sharing and learning, focusing specifically on play activity as a means to address cultural integration. The paper presents analysis and research outcomes gleaned through investigation of the persuasive urban game *A Hostile World* and its application to two groups of adolescents who manifested hostile feelings towards foreigners. The game immerses players in awkward situations so as to problematise and possibly modify their former mindset, prejudices and biases towards migrants, effectively generating learning outcomes capable of increasing empathy and affecting behaviours. The enquiry is an action research initiative conducted via pre- and post-experience qualitative questionnaires, short interviews and focus groups. The analysis reveals that players were involved in challenging and moving processes of identification that lessened existing prejudices, increasing the comprehension of the conditions and fragility of immigrants, with relevant outcomes in terms of persisting transformative learning.

KEYWORDS Inclusive education, Action research, Play experience analysis, Social change, Identification.

1. INTRODUCTION

1.1. Playing in Game Studies

Playing games is an activity that involves human beings of all ages through the evolution of our species (Huizinga, 1938). Over the last decades the activity of playing has become the subject of study for researchers in different disciplines such as anthropology, sociology, psychology and the science of education, but also computer science, mathematics, history, physics, medicine and design. Research on games and play has resulted in a sort of accumulation point for scientific enquiries, leading to the birth of the discipline called Game Studies (Mäyrä, 2008; Bertolo & Mariani, 2014a). This addresses the study of games and play as constructs and existing activities, as well as the ideation and design of games with specific purposes, becoming an area researching *into* and *through* the game-play. The link between games and technology often implies that games are developed through new, usually digital, technologies. In our perspective this is an excessively narrow reading of the concept of technology itself. Technology research is a field made up of a number of disciplines, aiming at goals such as solving practical problems, optimizing procedures, and identifying problem-solving strategies. For this purpose, technology researchers use concrete and methodological tools based on theoretical knowledge from different fields. Game designers do just that when they design games to sensitize players on specific topics, encouraging them towards a change of some sort. With this approach, games can thus be considered a real technology themselves. In fact, one area of research in Game Studies is the conception, design and implementation of new games that, as described below, are aimed at communicating social messages, rather than having the sole purpose of being sources of fun (Bogost, 2007; Flanagan, 2009; 2010; Flanagan & Nissenbaum, 2007; 2014). Game Design studies games as systems (Salen & Zimmerman, 2004), or as artefacts operating under certain circumstances and interacting with users (players) for soliciting play experiences with diverse/specific features. Irrespective of the digital, analogical or hybrid technology used to create the single game artefact, such games are the result of research in technology.

1.2. Playing in the field of education

The possibility of including play activities in school as part of the educational curriculum is situated in a broad tradition that promotes the use of active and experiential methods in educational settings (Squire, 2005; Salen, 2008; Salen, Torres, Wolozin, Rufo-Tepper, & Shapiro, 2011; Gray, 2013; Antonacci, 2012a; 2012b). Education can be considered as an accumulation of knowledge, or as a construction of personal identity by means of acquired experience. Accordingly, «Where the former model predominates, games may be seen as something of a distraction. If education is seen as being about the formation of identity however, play-like approaches, and the rule-based play of game settings, will be highly relevant» (Koubek & Macleod, 2004, p. 17). Alongside traditional teaching, schools enrich their study plans with experiential and immersive activities, possibly supported by local educational services, with the aim of activating meaningful changes in students' education as tomorrow's citizens. The learner plays an active role in building and organizing knowledge, including experiential learning. Acknowledging the existing research on the importance that comprehension, interpretation and dialogue have in our communities (Giusti, 2012a; 2012b), this paper presents a game intended to have social impact by sensitising and raising awareness on migration issues, and on sustaining the coexistence of different cultures in the same territorial context. The game, A Hostile World (AHW, henceforth) (Ierardi, Bertolo, & Mariani, 2013), does not cater to specific categories of migrant, but tries to embrace the broader perspective of those who experience first-hand an individual or familial transformative journey towards socio-economic improvement. AHW was designed to address the indigenous population, seeking to raise awareness among those who are entrenched in their usual context

and cultural background, especially among those who are not used – or willing – to identify/empathise with foreigners, or encounter linguistic and integration difficulties. As a consequence, our research question is: *Can AHW change indigenous students' position on the migration issue by raising awareness about it?* Concurring with Brown (2001), we view learning as being related to the framework or environment that stimulates the learning activity itself, rather than being a plain result of teaching. Also Squire (2006, p. 22) attests that we can look at games as spaces where learning manifests as (1) a problem-solving activity triggered by an interaction in the social and material world, and as (2) a social practice, since learners participate in distributed social organizations where knowledge is gained through communitarian processes. Over the years, numerous games that draw on these constructs have been conceived and designed. One example is Tiltfactor's *Massively Multiplayer Urban Games: Soba, MuShu*, and 晚餐 [*wǎncān*] (Flanagan & Looui, 2008). These are team-based, non-digital urban games that wisely use culture, food and language to encourage social interactions with the surrounding community and the urban space itself. A further example is the public K6-12 school *Quest to Learn* (q21.org) in New York, an entire innovative school based on the pedagogical concept that learning is participatory and experiential (Salen, 2011).

AHW was conceived in line with the aforementioned perspective to support and facilitate the learning process by engaging players in a challenging space of immersive, situated experimentations. In designing and analysing this game and its experience, an *intercultural* perspective has been applied. In contrast with a *multicultural* perspective, which presumes the presence of one or more stereotyped, firmly codified cultures that are deterministically embodied in individuals, the intercultural perspective assumes that individuals are influenced by networks of cultures, expressing as well as including a plurality of perspectives and memberships (Zoletto, 2002).

Playing games makes us live the experience of being transported to elaborately simulated places where we undergo what Murray (1997, p. 98) defined *immersion*. Entering these regulated spaces that differ from the ordinary, we *feel* surrounded by another reality upon which we can also project our feelings; here we can become involved in situations that elicit our emotions, and we can acquire knowledge more safely. The game establishes a special space and time which, to a certain extent, are separated from the ordinary: a *magic circle* that circumscribes, delineates and protects the game activity (Huizinga, 1938; Salen & Zimmerman, 2004; Montola, Stenros & Waern, 2009). In this sense, the game can encourage an effective educational experience: within the confines of the magic circle, players can have experiences that they are precluded from in their ordinary life. They are allowed to play other roles and be in others' shoes. Hence, quoting Zoletto (2010, p. 68), *«While a multiculturalist approach to the game assumes that cultures come first and games derive from them, an intercultural approach looks at games and play as a wild field where culture re-shapes itself according to who plays, and where, when and why.»*

2. SITUATED EXPERIENCES FOR CHANGING SOCIAL ATTITUDES

This study is exploratory research that covers a situated *Game for Social Change* (G4SC henceforth). G4SC is a branch of the larger, inclusive category that Bogost has called *Persuasive Games* (2007, p. 54). Similarly to *Serious Games* (Abt, 1970; Anolli & Mantovani, 2011), G4SCs are intended to persuade players through an experiential understanding of real world issues that is gained through playing. Their expressive nature allows them to explore the range of human experiences, including those related to particularly difficult topics. With more or less declared social and civic transformative aims, they mount arguments and interact with players, building up systems of simulation (Frasca, 2003) designed to effectively persuade players and change their mindset. They provide an opportunity to interact with systems that address, mirror and reduce issues of a cultural, ethical and political nature, inviting players to form judgments and make

critical reflections (Sicart, 2011). As such, wisely and conscientiously designed G4SCs can act as remarkable means of communication (Flanagan & Nissenbaum, 2014; Mariani, 2016). Over the years, several G4SCs have addressed intercultural and migrant-related issues. Well-known examples on the latter topic are the digital games Spent (McKinney, Urban Ministries of Durham, 2011) and Papers, Please (Lucas Pope, 2013). These challenge the player's own conscience to deal with (1) real-life decisions about money, resources and health issues, and (2) migrants' requests for humanitarian aid. We refer to the investigations of Ruggiero (2014) and Lopez (2015), which assess how these games increased affective learning by putting players in someone else's shoes. Both these examinations confirmed that the games created first-person experiences that activated emotional responses and meaningful interpretations. In parallel, several authors have designed urban games to address the same issue through a concrete first-person experience. Examples are the aforementioned Massively Multiplayer Urban Games: Soba (Flanagan & Looui, 2008), and Andmaybetheywontkillyou (Thompson, 2014). By inviting players to encounter new cultures through their food habits, the former challenges existing prejudices on cultural coexistence, embodying values such as tolerance and diversity. The latter is a Live Action Role Playing (LARP) game in which players act as poor, black Americans who navigate a heavily-policed area, dealing with critical situations of impotence and facing micro-aggressions from outsiders and law enforcement officers.

These examples support our premises on adopting situated G4SCs activities to achieve important educational outcomes in terms of experiential and empathic comprehension. These activities can create *meaning-ful experiences* that extend from the player and the meanings embedded in the game to their broader, real, contextualised meaning (Bertolo & Mariani, 2013).

3. PLAYING IN A HOSTILE WORLD

This contribution presents the results of a G4SC designed by our research group in response to the recent EU migration crisis and the increased presence of refugees. AHW is a persuasive, non-digital urban game designed to tackle the main prejudices towards foreigners, who are often perceived as *different* and hence treated in a (more or less consciously) hostile way. The game is deliberately structured to induce and leverage a perception of alien-ness, which is often generated not so much by rejection in principle but by a lack of knowledge of migrants' culture of origin, of the reasons why they move country, and of their everyday living conditions. The game's mechanics were crafted to communicate and stress that state of isolation, and the general hostility perceived by migrants, regardless of their origin or status.

The player steps into the shoes of a foreign student who has just arrived in a country whose native language she does not master. To heighten experience of communication difficulties, the game is made up of a set of missions based on everyday-life activities. These are actions the players *know* they can accomplish but that prove problematic due to the linguistic barrier.

4. GAMEPLAY AND DESIGN NOTES

Game sessions are run in urban spaces players know and are familiar with. The game can last from about 30 to 90 minutes, according to the number of missions run. The game begins at the *Reception*, where players are provided with a map of the game area and are set missions designed to simulate simple, everyday tasks. They have to find a location shown on the map, interact with Actors presiding over these locations and return to the *Reception* with the mission solution. For instance, the mission "Buy an apple and a sandwich" requires them to find the game location *Restaurant* and get from the Actor *Waiter* an apple and a sandwich, in the form of sheets with symbols. So the player sets out with the perception of being able to carry out the mission easily.



Figure 1. Game material: a mission to accomplish, a map with game locations, and an actress.

However, as she leaves the *Reception*, the game mechanism comes into operation. Except for the mission starters, all communication in the game is carried out in Esperanto, the only language used and understood by the Actors (Figure 1.). Esperanto was chosen as the AHW language because its sounds and words come from, or occasionally recall, European languages known to players. Hence vague feelings of familiarity characterise the players' interaction with this artificial language, which however is actually incomprehensible to those who do not have a good command of it. So the environment itself becomes intimidating and hence hostile.

AHW¹ thus explores the transferal of meanings through games from a specific point of view, putting "ordinary people" in the shoes of someone else, namely a foreigner in a foreign country. We focus on how this urban G4SC serves to introduce players to *other* perspectives, leading them through contextualised experiences of identification that are meaningful and able to affect existent positions by modifying rooted attitudes. Unlike existing digital games, such as *Spent* and *Papers, Please*, AHW is based on the creation of situated, embodied experiences (Mariani, 2016), which have special affordances for producing first-person awareness and long-lasting learning. Relying on the methodology described below, we

¹ Supervised by Bertolo and Mariani, AHW was developed in 2013 as the outcome of the MSc thesis of Lavinia lerardi in Communication Design (School of Design, Politecnico di Milano). The full text of the thesis is available at http:// hdl.handle.net/10589/76801. A further description of the game, its structure and mechanics is presented by Bertolo & Mariani (2014b). Extended studies on the research methods used to observe the game and gather data are available in Mariani & Gandolfi (2016).

observed and analysed players' pre- and post-game attitudes, in-game behaviours, their reaction to the game and the meaning conveyed.

At this point we need to stress the fact that operating in the social field often means facing issues derived from dealing with subjects with multiple fragilities. In addition to the communication directed towards these subjects, it is also necessary to design for those who can contribute to modification of the existing (sub-optimal) situation. Therefore, rather than designing a game that directly addresses the foreigner, we deemed it necessary to produce one that effectively targets indigenous citizens, sensitizing them to migration issues in order to help the community improve immigrant reception. It recreates some conditions of hostility that characterise those who live (and live in) situations of migration and experience a condition of *cultural shock* (Sirna Terranova, 1997) deriving from a lack of relational, cultural and social connections. The migrant is not just *different* but is often made to feel *unwelcome*, especially when moving from an economically weaker country to a richer one. To this extent, the new destination can be *hostile* because it often fails to recognise the new arrival as a subject bringing wealth, culture, rights or workforce; rather, the migrant is often perceived as a subject who deprives and impoverishes the new territory (Sirna Terranova, 1997).

5. ACTION RESEARCH AND QUALITATIVE METHODS

To understand how effective AHW is in raising players' awareness, conveying the expected understanding and impacting on their attitudes towards migrants, the play experience has been thoroughly observed, investigated and assessed. The game has been performed four times², involving about 200 players, of whom 141 were studied. Given the special focus on raising awareness on migration in our communities and schools (Giusti, 2012a; 2012b), the population considered in this study consists of a group of 15 high-school students (Years 7 through 9) who manifested feelings towards foreigners ranging from suspicion to hostility. Accompanied by educators, these subjects played AHW as an extracurricular proposal in a peer to peer, educational action research project named GIS (Gruppo Itis Speciale) (Lewin, 1947; Zuber-Skerritt, 1992). The project was proposed by RadiCI,³ a social service provider in the city of Saronno, north-west Italy, which deals with juvenile distress prevention and promotion of activities responding to adolescents' relational and existential needs.

Relying on Creswell's design frameworks (Creswell, 2008), the methodology of this research through design follows a mixed methods approach, and is based on the pedagogical assumptions of social constructivism. As shown in fig. 2, it develops through AHW as a case study, and includes participant observation, interpretative ethnography and discourse analysis.

³ For further information:

² AHW was staged twice in Politecnico di Milano (June 2013 and June 2014), in central Modena (March 2014), in Milano-Bicocca University (March 2014).

http://www.comune.saronno.va.it/servizi/Menu/dinamica.aspx?idSezione=616&idArea=16364&id-Cat=20131&ID=22089&TipoElemento=pagina)

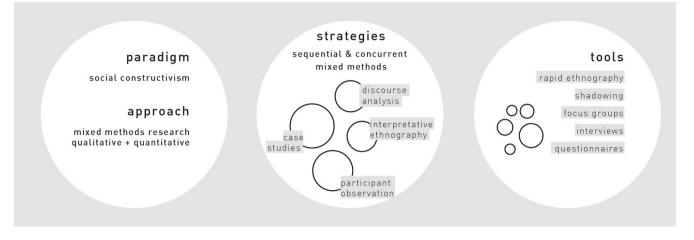


Figure 2. The research methodology, its pedagogical assumption, strategies and tools.

Acknowledging that limits are comprised in each methodology (Denzin & Lincoln, 1994), we employed strategies from the sociological, educational and design fields in a triangulation of research methods. The enquiry was hence conducted using a mixed strategy with a combination of qualitative and quantitative research tools⁴. As shown in figure 3 below, each game session was:

- 1) preceded by a pre-experience questionnaire to profile players (Mariani & Gandolfi, 2016);
- 2) observed via shadowing and qualitative rapid ethnographies (Millen, 2000, p. 280);
- 3) followed by post-experience questionnaires;
- 4) concluded with semi-structured interviews and focus groups;
- 5) further monitored at school via focus groups and using observational diaries to report participants' attitudes and behaviours.

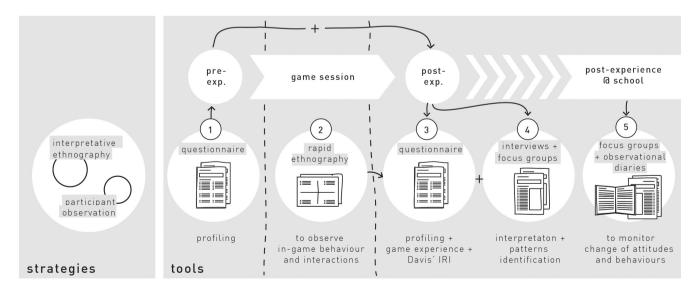


Figure 3. The action research conducted, its strategies and tools.

⁴ The motivations for the design framework, its approach, strategy and tools are extensively explained in Mariani (2016).

The questionnaire employed was specifically designed by Mariani and Gandolfi (2016) to measure possible differences between the player's position on specific aspects before and after the play activity. In particular, players were asked to compile a two-step (pre- and post-experience) questionnaire containing:

- sociological forced-choice questions to clarify the position of the participants in relation to the topics
 of interculturalism and immigration, encouraging them to take a clear stand between two alternative/
 opposing possibilities;
- and Davis' Interpersonal Reactivity Index (IRI) (Davis, 1983) to measure whether empathic variation
 occurred after the play experience.

The play activity was analysed via rapid ethnography (Millen, 2000, p. 258), with observation focusing on specific aspects such as the reaction to broken patterns (Goffman, 1974; Alexander, 1979; Kelly, 1955). Semi-structured interviews and focus groups were conducted to explore individuals' understanding of the AHW experience in terms of perceived feelings, communicated values, acquired meanings and learning outcome. Moreover, after the game session, RadiCi educators also made follow-up observations of AHW players, conducting focus groups and compiling observational diaries. Transcripts of the interviews and focus groups, together with observation diaries, were analysed employing the discourse analysis method on a textual, contextual and interpretative level.

6. RESULTS

This study concerns two groups of 15 adolescents between the age of 16 and 19 who took part in two 90-minute sessions of AHW performed in June 2013 (7 players) and 2014 (6 players). The reported results derive from data gathered thorough (a) researchers' monitoring of players' attitudes, self-perceptions and experience of migration, which was conducted before, during and immediately after the game session; (b) RadiCi educators observing players' attitudes during gameplay and in also school, in the months after the game experience (focus groups and observation diaries).

The pre-experience questionnaires revealed that motivation to play was fuelled by the desire to have fun by partaking in a novel pastime, which is not an unexpected combination (Koster, 2005). By contrast, few of the players stated that they play games to meet people and socialise, learn something, or improve their capacities/ abilities. However, even though players were not expected to be drawn to the game by the desire to "acquire knowledge", this is exactly what happened, with significant outcomes in terms of empathy.

Recalling the aforementioned concept of meaningful experience, and the tenet that embodiment is a powerful, solid foundation of cognition, the game mechanics encouraged players to experience fictional but contextualised situations that used identification and interactions with in-game agents (Actors) to activate reflections and make extant sense out of the game activity. We observed that when approaching the game locations embedding the different in-game situations, the players used gestures and body language in an effort to be understood. In the post-experience focus groups, they stated they were aware that some of the actions they performed were meant to fail. Regardless of their (vain) attempts, they said they kept having the experience of not understanding how to behave, or not being understood. Even though they went through moments of solitude, and in several situations felt rage, incomprehension, frustration or helplessness, the perception persisted of having experienced something entertaining and exciting that generated learning. In most cases players felt tested doing something difficult to solve (Juul, 2013); it is not a coincidence that no one complained of boredom. The post-experience semi-structured interviews and focus groups confirmed in particular that players actually perceived the game as a reduction (Goffman, 1974) of the issue covered, rather than a fabrication or a faked interpretation. Its amplifications and distortions were also correctly interpreted as sort of means to an end. Acknowledging Sicart's reasoning (2011), our post-experience enquiry supported the idea that game me-

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chanics and procedural rhetoric (Bogost, 2007) can be critically employed to lead players to comprehend biases on the grounds of certain attitudes and behaviour, reconsidering their own preconceptions and prejudices. Using Davis's IRI empathic measurement (the corresponding item number is given in brackets), a variance between the pre- and post-experience results was revealed. Our sample appeared soft-hearted, with increased empathy levels displayed through sympathy and compassion (D18 and D22). Examining empathic concern more closely, we noticed an increased inclination to experience feelings of sympathy and compassion for someone encountering problems (D4), as well as to perceive someone else's misfortunes as disturbing (D14). Increased empathic involvement ensues with those who find themselves in difficult situations, along with awareness of being sensitive to someone else's issues. The observations of participating educators confirmed that the reflections triggered by players' first-hand, situated experiences of being in the foreigners' shoes persisted beyond monitoring, rather than vanishing after the game. Participants' reported levels of perceived distress and discomfort in response to others' distress fell, both in terms of feeling helpless when facing emotional situations (D10) and in considering themselves effective in dealing with emergencies (D19). Analysis of the interviews and focus groups indicates that this result may be related to participants' increased awareness of being unable to tackle certain situations when lacking the necessary means. For instance, the absence of a common language caused the incapacity to communicate properly with the Actors, causing misunderstandings that generated a loop of uncomfortable and (significantly) empty interactions.

The sample showed an increase in the everyday-life predisposition to adopt the psychological perspective of others (D25), which corroborates the game's capacity to support the transfer of knowledge and to activate attitudinal change. Especially in the post-game analysis, players stated that the experience induced them to re-frame some previous, existing patterns, establishing new, experience-based ones. Similarly, it is not a coincidence that the AHW experience led to an increased tendency to consider diverse perspectives before taking a stand (D8). Via the interviews and focus groups, our sample remarked on having understood the importance of being in someone else's shoes before making judgments. In particular, they reconsidered the importance of being part of a group and of cooperating to find creative ways to solve tricky problems, making up for their feelings of bewilderment and disorientation. The educators observed that this attitude persisted at school after the game's ability to *«create the worst case that a foreigner can face, that is, to be in an environment where society does not help but rather tries to hinder those who are not natives*». The entire group testified that the game had led to positive experiences of success and victory, as well as negative ones such as difficulties, deadlocks and a sense of powerlessness. *«It was worse than going to war»* was one of the recorded comments.

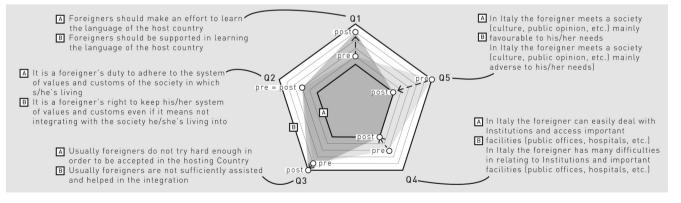


Figure 4. Comparison of pre- and post- experience forced-choice questions. A and B represent two counterposed positions about a specific topic. In forced choice players are asked to choose the one for which they have more propensity.

Comparison of the pre- and post-experience- questionnaire results (fig. 4 above) suggests a shift in player's mindset with regard to the difficulties migrants face (Q4), the reception they receive (Q5) and the (linguistic) effort they need to apply (Q1). Beyond the modification of attitudes revealed by the questionnaires, interviews, focus groups and observational diaries, indication arose from the RadiCi educators' observations of participants during and after the game that some behavioural change had also taken place. After the game a 16-years-old boy compared the game with war, to stress how it was difficult to achieve the in-game goals; the same observation was then shared with the classmates once back at school. Then, a 20-years-old male declared that the game exemplifies situations in which the society obstructs foreigners in spite of landing a helping land.

7. DISCUSSION AND CONCLUSIONS

We consider it significant to stress that, once back at school, the adolescents who had been chosen to play AHW because they showed limited sensitive and empathetic attitudes towards foreigners, and "others" in general, displayed meaningful changes both in their judgement systems and in actual behaviour. Participation in such an immersive experience appears to have created stronger identification with others, generating greater empathy which, in the end, triggered some actual behavioural change. This outcome reveals the game to be a source of *transformative* activity (Mezirow, 1996, p. 167). Paving the way for effective change, AHW succeeded in involving such problematic adolescents and activating an empathic identification that took the shape of reflective learning (Mitgutsch & Weise, 2011) that creates long-lasting awareness and positively impacts on deep-rooted prejudices. In particular, we recognise the central role played by such *meaningful negative experiences* (Mariani, 2016) in modifying attitudes and behaviour. As a matter of fact, because "games promise us a fair chance of redeeming ourselves" (Juul, 2013, p. 7), in the protected and structured context of AHW, players become more willing to tolerate frustration, failure and defeat, if these are functional to learning new.

Players discovered what it means to be subjected to repeated (and humiliating) failure as they were forced to cope without a means they take for granted: mastery of language. Taking part in a situated, non-digital game increased players' feeling of being involved, giving them a sense of acting as active agents within the experience, rather than as passive observers (Mariani, 2016). In so doing, identification with the migrant's condition serves as an activator of a safe, first-hand understanding of the sensitive issues addressed. This condition relies on pressuring players' expectations so that they question and break existing frames (Goffman, 1974; Mariani & Gandolfi, 2016) and consequently challenge their individual beliefs. It is thus also meaningful that players described the experience as intense, deep and often characterised by elements of great unpleasantness, but almost paradoxically, it was always perceived as positive and satisfying.

Sharing the migrant's experience gives players a fruitful opportunity for realizing that migrants' lives are in many ways similar to our own in terms of emotions, perceptions, and margins of suffering. At the same time, it reveals that indifference and hostility heavily affect the emotional sphere of those who arrive to start a new life in our country. In addition, the game allows players to go beyond a situation of identification, as when participating in an educational/therapeutic role-playing game, and to enter a *liminal zone* (Turner, 1982). This is a transitional boundary between cultures, intended not as static structures in which individual subjects are positioned, but as spaces of transition and passage between culturally-grasped and subjective behaviour. In the game's fictional space, players experience a reduction of the act of going through the *limen* and coming back after a transformative activity. Standing on the threshold means staying in the game *and* being between cultures, in a significant, therefore transformative *limen*. It is a space where cultures can even be contaminated. The game is indeed especially effective when situated in an intercultural perspective

that is not based on a mechanical identification between the subject and the culture they belong to, but instead requires "playing" between these two poles, in an interstitial space where it is possible to test those different possibilities that are normally precluded (Zoletto, 2010).

Considering the importance and urgency of working on inclusion and intercultural issues at an educational level, these results encourage us to repeat AHW in different contexts, both with adolescents and adults, and to further invest in this line of research through an interdisciplinary perspective.

This contribution is the result of a collective work. For academic purposes we inform that Antonacci has authored *Playing in the Education field* and *Discussion and conclusions*; Bertolo has authored *Playing in game studies* and *Gameplay and design notes*; Mariani has authored *Situated experiences for changing social attitudes*, *Action research and qualitative methods* and *Results*.

8. REFERENCES

Abt, C. C. (1970). Serious Games. New York, NY: Viking Press.

Alexander, C. (1979). The Timeless Way of Building. New York, NY: Oxford University Press.

Anolli, L. (2011). La sfida della mente multiculturale. Milano, Italy: Cortina.

Anolli, L. & Mantovani, F. (2011). *Come funziona la nostra mente. Apprendimento, simulazione e Serious Games.* Bologna, Italy: Il Mulino.

Antonacci, F. (2012a). *Puer Ludens. Antimanuale per poeti, funamboli e guerrieri*. Milano, Italy: FrancoAngeli.

Antonacci F. (2012b). *Corpi radiosi, segnati, sottili. Ultimatum a una pedagogia dal "culo di pietra"*. Milano, Italy: FrancoAngeli.

Bertolo, M. & Mariani, I. (2013). Meaningful Play: Learning, Best Practices, Reflections through Games. In K. Mitgutsch, S. Huber, J. Rosenstingl, M. Wagner, J. Wimmer (Eds.), *Context Matters! Exploring and Reframing Games in Context. Proceedings of the 7th Vienna Games Conference FROG13* (pp.222-234). Vienna, Austria: New Academic Press.

Bertolo, M., & Mariani, I. (2014a). *Game Design. Gioco e giocare tra teoria e progetto*. Milano, Italy: Pearson.

Bertolo, M., & Mariani, I. (2014b). A Hostile World: A Pervasive Urban Game to Sensitise and Foster a Cross-Cultural Reflection. In D. Ruggiero (Ed.), *Cases on the Societal Effects of Persuasive Games* (pp.232-253). Hershey, PA: IGI Global.

Brown, J. S. (2001). Learning in the Digital Age. In *The Internet and the University: Forum* (pp. 71-72). Washington, DC: Educause.

Bogost, I. (2007). Persuasive Games. The Expressive Power of Videogames. Cambridge, MA: MIT Press.

Creswell, J. W. (2008). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Beverly Hills, CA: SAGE.

Davis, M. H. (1983). Measuring Individual Differences in Empathy: Evidence for a Multidimensional Approach. *Journal of Personality and Social Psychology*, 44(1), 113.

Denzin, N. K., & Lincoln, Y. S. (1994). Handbook of Qualitative Research. Thousand Oaks, CA: Sage.

Flanagan, M. (2009). Critical Play: Radical Game Design. Cambridge, MA: MIT Press.

Flanagan, M. (2010). Creating Critical Play. In R. Catlow, M. Garrett, & C. Morgana (Eds.), *Artists Re:Thinking Games*, (pp.49-53). Liverpool, UK: Liverpool University Press.

Flanagan, M., & Looui, S. (2008). Massively Multiplayer Urban Games: Soba. Hanover, NH: Tiltfactor. Retrieved from http://www.tiltfactor.org/game/massively-multiplayer-urban-games/

Flanagan, M., & Nissenbaum, H. (2007). A Game Design Methodology to Incorporate Social Activist themes. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, (pp.181-190). Retrieved from http://www.tiltfactor.org/wp-content/uploads2/A-Game-Design-Methodology.pdf

Flanagan, M., & Nissenbaum, H. (2014). Values at Play in Digital Games. Cambridge, MA: MIT Press.

Frasca, G. (2003). Simulation Versus Narrative. In M. J. Wolf & B. Perron, *The Video Game Theory Reader*, (pp.221-235). London, UK: Routledge.

Giusti, M. (2012a). L'educazione interculturale nella scuola. Milano, Italy: Rizzoli.

Giusti, M. (2012b). Formazione e spazi pubblici. Competenze e metodologie interculturali dagli spazi di vita. Milano, Italy: Franco Angeli.

Goffman, E. (1974). *Frame Analysis: An Essay on the Organization of Experience*. Cambridge, MA: Harvard University.

Gray, P. (2013). Free to Learn: Why Unleashing the Instinct to Play Will Make Our Children Happier, More Self-Reliant, and Better Students for Life. New York, NY: Basic Book.

Huizinga, J. (1938). *Homo Ludens. A Study of the Play Element In Culture* (R. F. C. Hull, Trans.). London, UK: Routledge & Kegan Paul.

Juul, J. (2013). *The Art of Failure. An Essay on the Pain of Playing Video Games*. Cambridge; MA: MIT Press.

Kelly, G. (1955). Principles of Personal Construct Psychology. New York, NY: Norton.

Koster, R. (2005). A Theory of Fun in Game Design. Scottsdale. Phoenix, AZ: Paraglyph Press.

Ierardi, L. (2013). Un mondo ostile. Design e paradigmi ludici come facilitatori per la comunicazione *interculturale*. (MSc thesis, Politecnico di Milano). Retrieved from http://hdl.handle.net/10589/76801.

Ierardi, L., Bertolo, M, & Mariani, I. (2013). *A Hostile World* [game/performance]. Milan, Italy: Politecnico di Milano, School of Design.

Lewin, K. (1947). Group Decision and Social Change. Readings in Social Psychology, 3, 197-211.

Lopez, A. R. (2015). *Emotions at Play: Assessing Emotional Responses of Teenagers after they play* "*Papers, Please*". [Doctoral dissertation, University of Washington]. Retrieved from: http://hdl.handle. net/1773/33416.

Mariani, I. (2016). Meaningful Negative Experiences within Games for Social Change. (Doctoral dissertation, Politecnico di Milano). Retrieved from http://hdl.handle.net/10589/117855.

Mariani, I., & Gandolfi, E. (2016). Negative Experiences as Learning Trigger: A Play Experience Empirical Research on a Game for Social Change Case Study. *International Journal of Game-Based Learning (IJGBL)*, *6*(3), 50-73.

Mäyrä, F. (2008). An Introduction to Game Studies. London, UK: SAGE.

McKinney, Urban Ministries of Durham (2011). Spent [digital game]. Durham, NC: McKinney.

Mezirow, J. (1996). Contemporary Paradigms of Learning. Adult Education Quarterly, 46(3), 158-172.

Millen, D. R. (2000). Rapid Ethnography: Time Deepening Strategies for HCI Field Research. Proceedings of the 3rd Conference on Designing Interactive Systems: Processes, Practices, Methods, and Techniques, 280-286.

Mitgutsch, K., & Weise, M. (2011). Subversive Game Design for Recursive Learning. *DiGRA Conference Proceedings 2011*. Retrieved from http://hdl.handle.net/1721.1/100273.

Montola, M., Stenros, J., & Waern, A. (2009). *Pervasive Games: Theory and Design*. Burlington, MA: Morgan Kaufmann.

Murray, J. H. (1997). *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. Cambridge, MA: MIT Press.

Koubek, A. & Macleod, H. (2004). Game-Based Learning. In M. Pivec, A. Koubek, & C. Dondi (Eds.), *Guidelines for Game-Based Learning* (pp.14-19). Lengerich, Germany: Pabst Science Publishers.

Pope, L. (2013). Papers, Please [videogame]. Japan: Pope, L.

Ruggiero, D. N. (2014). Spent: Changing Students' Affective Learning Toward Homelessness Through Persuasive Video Game Play. In *Proceedings of the 32nd Annual ACM Conference on Human Factors in Computing Systems* (pp. 3423-3432). doi:10.1145/2556288.2557390

Salen, K., & Zimmerman, E. (2004). *Rules of Play: Game Design Fundamentals*. Cambridge, MA: MIT Press.

Salen, K. (2008) (Ed.). *The Ecology of Games: Connecting Youth, Games, and Learning*. Cambridge, MA: MIT Press.

Salen, K. (2011). Quest to Learn: Developing the School for Digital Kids. Cambridge, MA: MIT Press.

Salen, K., Torres, R., Wolozin, L., Rufo-Tepper, R., & Shapiro, A. (2011). *Quest to Learn: Developing the School for Digital Kids*. Cambridge, MA: MIT Press.

Sicart, M. (2011). Against Procedurality. *Game Studies*, 11(3). Retrieved from: http://gamestudies. org/1103/articles/sicart_ap

Sirna Terranova, C. (1997). *Pedagogia interculturale. Concetti, problemi, proposte.* Milano, Italy: Guerini.

Squire, K. (2005). Changing the Game: What Happens When Video Games Enter the Classroom? *Innovate: Journal of Online Education, 1*(6). Retrieved from https://www.learntechlib.org/p/107270

Squire, K. (2006). From Content to Context: Videogames as Designed Experience. *Educational Researcher*, *35*(8), 19-29.

Thompson, A. (2014). Andmaybetheywontkillyou [game/performance]. Seattle, WA: Rainbros.

Turner, V. (1982). *From Ritual to Theatre. The Human Seriousness of Play.* New York, NY: Performing Arts Journal Publications.

Zoletto, D. (2002). Gli equivoci del multiculturalismo. Aut aut, 312, 6-18.

Zoletto, D. (2010). *Il gioco duro dell'integrazione. L'intercultura sui campi da gioco*. Milano, Italy: Cortina.

Zuber-Skerritt, O. (1992). *Action Research in Higher Education: Examples and Reflections*. London, UK: Kogan Page Limited.