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# Prosocial videogames, as a transitional space for peace: the case of *Reconstrucción*

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## Abstract

[ES] El estudio y aplicación del videojuego, como producto audiovisual con fines más allá del ocio, da lugar a la aparición de diversas corrientes de desarrollo de productos videolúdicos caracterizados en la unión de entretenimiento y formación, que aprovechan el poder de persuasión de este medio interactivo. En este contexto nacen los *serious games* y, dentro de estos, el videojuego prosocial como herramienta educativa para la formación en valores. Estos artefactos culturales han de ser capaces de promover el diálogo, y servir como instrumento de mediación de conflictos y fomento de la paz. Con el objetivo de crear un marco de estudio del videojuego prosocial, procedemos a revisar la bibliografía existente y las producciones audiovisuales de ocio para pantalla que proponen inducir conductas prosociales en el jugador. Identificamos un auge de este tipo de productos interactivos durante la última década, y en concreto sobre el conflicto colombiano, promovidos por diferentes instituciones, así como por el mismo gobierno de Colombia. En este sentido se lleva a cabo un estudio de caso del videojuego *Reconstrucción* (Pathos Audiovisual, ViveLab, Giz, 2017), aplicando dos modelos de análisis. Exponemos los resultados obtenidos del primer modelo de análisis, que aborda la narrativa de los videojuegos, además de los obtenidos gracias al segundo modelo, que parte de la identificación de los componentes del diseño del videojuego según el marco MDA. Concluimos el presente estudio apuntando las características principales que posibilitan un diseño efectivo de videojuego prosocial, en el que resulta fundamental la generación de dinámicas de juego que promuevan la toma de decisiones, vinculadas a ofrecer algún tipo de ayuda.

[EN] The study and application of the video game, as an audiovisual product with aims beyond leisure, gives rise to the emergence of different trends of videoludic product development characterized in the merge of entertainment and education, which make the most out of the persuasion power of this interactive medium. In this context, serious games are born and, among these, the prosocial video game as an educational tool for education in values. These cultural devices must be able to promote dialogue and serve as an instrument for mediating conflicts and fostering peace. With the aim of creating a framework for the study of the prosocial videogame, we proceed to review the existing literature as well as the audiovisual leisure productions for the screen that encourage the induction of prosocial behaviours in the player. We identified a boom of this type of interactive products during the last decade, and specifically about the Colombian conflict, promoted by different institutions as well as by the Colombian government. In this sense, a case study of the video game *Reconstrucción* (Pathos Audiovisual, ViveLab, GIZ, 2017) is carried out, applying two models of analysis. We present the results obtained by the first model of analysis, which studies the narrative of video games, besides contents thanks to the second model, based on the identification of the design components of the video game in compliance to the MDA framework. We conclude this study by pointing out the main characteristics that enable an effective design of the prosocial video game, in which the generation of game dynamics that promote decision-making, linked to offering some sort of help, is rather essential.

### Keywords

[ES] Conducta prosocial; conflicto; educación; narrativa audiovisual; paz; videojuego.

[EN] Audiovisual narrative; conflict; education; peace; prosocial behaviour; video game.

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## 1. Introduction

The use of the videogame as communicational tool with different purposes widens the scientific field of videoludic products, considering there exist an enormous number of usage proposals and

applications for different aims: informational (*newsgames*), educational (*edugames*), advertising (*advergames*), targeted to healthcare (*healthcare games* or *exergames*), about and for art (*artgames*), etc. This is an initial classification of what is defined as *serious games*. According to Salvador Gómez in his book, *¿Pueden los videojuegos cambiar el mundo?* [Can video games change the world?] (2014): “a *serious game* is usually the result of the elaboration of a design that aims for both, to entertain and to educate” (2014: 32). This same author classifies them depending on their persuasive or educational orientation, not being excluding in any case, since both orientations coexist in most productions.

From this perspective, the persuasive factor of the videoludic product is what turns it into a communicational tool, able of conditioning or driving the user towards specific behaviours. These can be oriented towards consumption, recruitment by the armed forces of some countries or, towards generating a framework for the dialogue, through the narrative strategies of the video game. In this last case, its main objective would be the resolution of conflicts or, at least, the construction of a territory, a “transitional ludic space” (Revuelta Domínguez; Sánchez Gómez and Esnaola Horacek, 2006), able to mediate for peace and convey human values, resulting in what we understand as a prosocial video game.

### 1.1. The video game as a persuasive tool

The impact of video games in the behaviour of their users has been object of study of different areas, from the increase of their penetration as a media for everyday leisure, directly competing with the cinematographic industry and television, among some of them. The video game, as audiovisual discourse, has nourished from human conflicts as material for the construction of their stories, just like fiction in any of its forms and media, either analogical or digital, representing a huge impact from its origins among the youth public. This is the starting point for many researches when it comes to affirm that “a considerable part of the behaviour that children and youth deem appropriate in their ordinary lives, is derived from the lessons learnt on the screens” (de Miguel Pascual, 2006: 2).

Back in the nineties, the video game started to be used as something more than a recreational activity. According to Carlos Germán Sandoval Forero and Álvaro Triana Sánchez in their text *El videojuego, como herramienta prosocial: implicaciones y aplicaciones para la reconstrucción en Colombia* [The video game as a prosocial tool: implications and applications for the reconstruction in Colombia] (2017):

The concept of video game had changed, back by the end of the nineties, and integrated niches of adults and organizations that took advantage of an unprecedented potential of simulation, artificial intelligence and strategic management, combined with 3D graphics, multiplayer and multi-platform setting. Likewise, the global pedagogy, the sensory and cognitive stimulation for learning, made way over the ocean of studies about addiction and violent impulses associated to video games (2017: 39).

### 1.2. Violent video games vs. prosocial video games

There are many studies that analyse this medium from a negative perspective, understood from the framework of study and analysis of violent video games, first forms for using conflict as a primary text of the corpus of the interactive audiovisual discourse. In these cases, the user is positioned as a soldier, *guerrilla* or terrorist in genres such as FPS, from which it was concluded that these cultural products

generated negative effects such as “increase of aggressiveness, school failure and withdrawal” (Griffiths and Hunt, 1998, cited in Miguel Pascual, 2006:3). The lack of rigour of the analyses of these effects produced by the “ludic screens” (de Miguel Pascual, 2006: 4), makes impossible to stablish the direct relationship of the practice of violent video games with aggressive behaviours. Therefore, it is stablished that the difficulty to identify the nexuses between the use of prosocial video games and the improvement of the behaviour of their users towards their peers. However, the most recent studies about these subjects, specifically the study of Jerabeck and Ferguson (2013), emphasize the problems that the video game produces on families, identifying anxiety and loss of empathy of users towards the rest of their kind. On the other hand, there are studies from the cognitivist perspective that handle about the positive impact of the video game among players and, that advocate the educational effect in terms of cognitive abilities linked to problem solving or spatial vision (Uttal et al. 2013), as well as the management of visual information and critical thinking (Vélez and Ewoldsen, 2013). In this same line, there is the work of Friederike Mengel, that concludes stating the positive potential and the development of the prosocial behaviour through video games:

Our study does allow us to conclude, however, that extensive playing of computer games is not always associated with more antisocial behaviour. It also suggests that out of a number of variables describing computer usage, time spent playing computer games might be the most important in understanding the relationship between pro-sociality and computer usage (2014: 4).

Under the same umbrella, advocating the positive aspect of playing video games, there is the study of Granic, Lobel, Rutger and Engels, titled *The Benefits of Playing Video Games* (2014) published in *American Psychologist*. This research, focused on the treatment of mental disorders using video games as a therapeutic tool, concludes that the video game involves alluring power over children and teenagers that can be exploited to introduce new formulas and approaches for the intervention and treatments related to mental disease (Granic et. al, 2014: 76).

Can the video game shape the behaviour of the user? is it capable of modifying and re-educating the player? These questions, in vogue since the middle of the last century, were analysed from the different paradigms of psychology. From the perspective of cognitivism, the power of mass media was relativized when it came to persuading audience, identifying in the individual, critical mechanisms to defend himself against any manipulative intention. According to the behavioural approach, “the violent contents must be understood as an environmental factor which intervention profiles and controls the individual’s behaviour in an automatic and permanent manner” (de Miguel Pascual, 2006: 6), these effects being produced in an involuntary manner on the individual. At the same time, the *Theory of social learning* (Bandura, 1987) suggests the development of the long-term conditioned behaviour, and states that the audience learns from the social environment where it takes place based on the observation of models. From this perspective, we understand the videoludic productions as educational tools through which there is emphasis on the relevance of instrumental imitation. For this mimesis we talk about, where the immersion processes in the virtual contexts of the videoludic product, and specifically, the level of identification and empathy of the user with the controlled avatar, represent essential factors (Huesman and Col., 1978; Singer and Singer, 1980; Turner and Fenn, 1978, cited in de Miguel Pascual, 2006:7).

The efforts by the end of the 20th century aimed to assess the effect of mass media, of video games among others, and their relationship with violent behaviours of the audience. Currently, the research in this field also aims to apply and confirm the effect of video games to build socially desired behaviours on individuals. At least from a pedagogical perspective, as instruments for the education

of values or to reconstruct the behaviours of users that are not accepted socially, into behaviours that have a room in the contemporary society and, that at the same time ground on empathy, a key factor of the power of influence of a video game over the player.

The video game represents a great impact at cultural level and, within the leisure and technological industries its hegemony is reinforced versus other media and their audiovisual contents, besides being used as a pedagogical tool. This has turned into a “phenomenon increasingly linked to the consolidation of public policies and the promotion of prosocial initiatives” (Sandoval Forero and Triana Sánchez, 2017: 39). However, these issues should be handled with care, since it is difficult to demonstrate the influence of the videoludic product over consumers’ behaviour in a definitive manner. Nevertheless, within the context of game studies and, specifically serious games, besides the rhetoric of processes (Bogost, 2008), the academic approaches towards this phenomenon of the video game as entertainment and education for the user, make their communicational power clear through their narrative structures: “[...] the reflection on informational and persuasive possibilities of this medium that became tangible in the area of study defined by serious games” (Gómez García, 2014b: 125). One of the possible routes to delve into these issues is the analysis of contents and its merge with interdisciplinary techniques and research methods.

### 1.3. The effectiveness of *serious games*

Far from the *mainstream* video games and, from violent video games (most common in the interaction audiovisual market), *serious games* appear based on the merge between entertainment and learning. The origin of the game as educational tool, basis of the *serious games*, lies in the studies of Clark Abt (1968). His proposal deals with the exploitation of the game appeal for the individual and its driving power, together with the construction of ludic simulations that can include any sort of content. The use of *serious games* in the educational context serves as baseline for the prosocial video game. To include fun with educational, didactic or communicational purposes (Álvarez & Djaouti, 2010: 17, cited in Gómez García, 2014b: 127), that in this case are focused on a clear objective in the construction of ethical and moral values, as well as patterns of civil behaviour or the teaching of laws and regulations to repair conflicts, using the video game as a mediation tool. In the case of video games managed here, as an instrument for peace and reconciliation in a context of violence. Its effectiveness resides in its alluring power over the audience, the possibility to interact offered to the user, virtual simulation and the empathy processes that take place through the fictional reproduction and narrative strategies. In short, in the learning based on “procedures and practices useful for our cognitive construction of reality” (Gómez García, 2014a: 117).

### 1.4. The prosocial behaviour

In the field of prosocial behaviour, it is relevant to establish the definition of the behaviours these cultural devices aim for. In this sense, we have reviewed the study of Agustín Moñivas, regarding prosocial behaviour. According to the article *La conducta prosocial* [Prosocial behavior] (Moñivas, 1996), these behaviours may entail a first positive orientation, pointing out to the relevance of cognitive processes and of mental representation in the generation of behaviours in the individual. Moñivas establishes the following term definition:

[...] the prosocial behaviour, one of the forms of moral behaviour, has been associated, across the different studies, to the behaviours of consolation, give, aid, altruism, trust, share, assistance, cooperation..., being the last one, the behaviour of solidarity. This profusion of behaviours that



compose the prosocial behaviour hinders achieving an agreement about its definition (1996: 127).

However, a greater connection is identified between the prosocial behaviour and altruism than with solidarity, understanding altruism as a high level moral behaviour in the development of the individual, related to the idea of justice. From this last aspect, there is a split in the definitions that distinguish between prosocial and altruistic behaviour and those that do not. In the context of video game, altruistic behaviour will be defined within the field of simulation of the interactive product, therefore they could be considered as virtual altruistic behaviours, because the user does not need to pay any real cost about the action of help towards the other. There is a virtual cost though, what the user needs weight when it comes to make the decision about helping or not. Therefore, this pondering is not conditioned within the real context, but instead around the configuration of the ideological-cultural thinking of the user about the social reality of the video game. According to González Portal (1995, cited in Moñivas, 1996), prosocial behaviour is understood as “every positive social behaviour with/ without altruistic motivation”, from which it is inferred that “every altruistic behaviour then, is prosocial, even though not all prosocial behaviour is altruistic” (Moñivas, 1996). This profusion of terms to treat prosocial behaviour, will be attempted to be clarified through the identification of the elements that participate in its configuration, like those orientations that promote this kind of behaviours. Schneider (1988) among others, distinguishes: “social norms, cost-benefits, decision making processes, learning, emotion (empathy), the consistency between attitudes and behaviour and reactance (motivational state aimed to recover the lost freedom)” (Moñivas, 1996). Regarding the prosocial video game, we could define the prosocial behaviour, which is the behaviour that this videoludic genre aims to foster and instil in users, like those positive social behaviours, solidary with/ without altruistic motivation, inspired by the achievement of justice and equality within a community.

### **1.5. The prosocial video game: serious games as agents of social transformation**

The contemporary digital revolution has promoted the institutionalization of the use of the prosocial video game as an educational tool. The latest case is observed in the increase of the interactive audiovisual productions with prosocial purposes by the Government of Colombia. The number of entities using the video game as media is increasing, in order to visibilize a problem, to manage it in the public scope and to create consciousness though the mechanisms of engagement of the user within the videoludic discourse. The popularity of the product of interactive leisure, together with the diversification of distribution channels and of devices by means of which the audience can be reached, grants them a viral effectiveness in terms of their dissemination:

To adopt this sort of discourses under the aesthetics of the video game in terms of form, background and distribution channel (online or through social networks) reinforced the intention of viral dissemination. Partly, due to the novelty of the proposal, but also thanks to the dissemination that came from its insertion within a specific social network [...] (Gómez García, 2014b: 130).

The beginnings of the prosocial video game were complicated, because from the perspective of the general audience, the video game has been an object focused solely on entertainment and, therefore, when there started to be explored as a media and a means for social consciousness, it was strongly criticised. After its use by certain non-governmental entities (NGOs) and later, by public institutions of different governments, video games were handled with the seriousness they professed in their own discourses.

## 1.6. Videogames about the Colombian conflict

The Colombian conflict has served as theme for an enormous number of video games. These productions, immersed within the industry and with purely commercial ends, are focused on those issues related to violence for the creation of their game mechanics and dynamics. According to the study of Iepri, of *Universidad Nacional de Colombia*, the origins of the relationship between the videoludic production and the Colombian armed conflict, date back to 1999, with the launching of the video game *Power Tank* (FX-interactive) (Sandoval Forero, 2006). This first interactive product focused on the war between the *guerrillas* and paramilitary forces. In 2001, *Soldier of Fortune II* (Raven) was released, a video game that opts for a plot where there is intertwining between drug trafficking and FARC (Sandoval Forero, 2006).

The turn takes place in 2002, when *Las Autodefensas Unidas de Colombia* create a video game as an ideological weapon and a recruitment tool called *Mata bandoleros* (2002). In addition to this product, there were also launched online video games such as *Feria* (2002). In the former, the goal is to literally kill *guerrilleros*, while in the latter, there was a target practice game about shooting members belonging to the FARC Secretary as they appeared on the screen (Kapkin, 2016).

However, it is not only until 2006, with the launching of the video game *Terrorist Takedown: War in Colombia* (City Interactive), that the Colombian society became aware of the use of the armed conflict in Colombia by the video games industry, starting to resonate as a relevant theme across media and the public opinion of the country. Like Carlos Germán Sandoval Forero and Álvaro Triana Sánchez indicate:

In our opinion, with the level of technical evolution, the types of contents and massification presented by these video games, they undoubtedly impact deeply on the collective imagery and the representations of the world scenario and of regional conflicts, which makes necessary a critical review of their themes and the search for alternatives that make the most of their enormous learning and simulation potential (2017: 50).

The concern about the impact of these productions, that solely position on the surface of the conflicts they represent, had made room to the creation of special commissions, both governmental and civilian, in those countries that provide the landscapes of these violent videoludic productions. Their aim is “[...] to orientate contents and add elements that allow to get closer to the conflict beyond the mere action and the fighting without context” (Sandoval Forero, 2006).

## 1.7. Brief review of the international production of prosocial videogames

The video game with educational purposes and oriented to promote the prosocial behaviour, is positioned in an initial state of experimentation and development, since it emerges by the earlier 21st century, developing different proposals at international level. One of its first representatives is *Escape from Woomera* (EFW Collective, 2003). It is about a *Half-Life mod* (Valve 2002) developed to communicate and provide visibility to the situation of immigrants detained in the refugees centres of Australia, whereas the government restricted the access of media to the detention centre of Woomera (Gómez García, 2014a: 132). Later, *Darfur is Dying* (Take Action Games, 2006) is released, to immerse the user into the experience of a refugee in the camps of Sudan. It offers a view about the Darfur genocide. At the same time, the United Nations developed *Food Force* (Depend & Playthree, 2005), to increase consciousness about how international assistance is distributed and managed in

humanitarian crises, positioning the spectator in the middle of a natural disaster where the population faces hunger and lack of health conditions. Other titles include *Against all odds* (United Nations Refugee Agency, 2005), that positions the player again in the role of a refugee; *Ayiti: the cost of the life* (Global Kids & Gamelab, 2006) that handles the humanitarian crisis in Haiti; where there followed *Global Conflict: Palestine* (SGI, 2007) and; *Global Conflict: Latin America* (SGI 2008), focused on communicating and reporting the Human Rights situation in Mexico, Bolivia and Guatemala.

The Israeli-Palestinian conflict has promoted other titles: *Under Ash* (Dar al-Fikr, 2001), *Under Siege* (Dar al-Fikr, 2005) and *PeaceMaker* (Impact Games, 2007). In addition to these, in 2013 there emerges the initiative *Games for Peace* (Uri Mishol, 2013), a proposal to eradicate hate and racism between Israeli and Palestinian, through the creation of a village as a shared space between both communities in the video game *Minecraft* (Mojang AB, 2011) on its educational version. This project has been transferred to schools where the construction of new spaces is promoted, and the sense of community is fostered. Another example can be found in *Stop Disaster* (Play-three, 2008), promoted by ISDR (International Strategy for Disaster Reduction), which aim is to educate in the management of resources and decision making before natural disasters. In all those, the decision making is one of the main elements of the *gameplay*, through these dynamics there is promoted the sending of messages and the user's education in a more effective manner in terms of what it is aimed to inspire on the player, since it encourages user engagement. Additionally, in the Latin American context, there was a boom in the production of prosocial video games, promoted by the Colombian government and different institutions, that handle about educating and also mediating over the armed conflict in Colombia.

Some of these titles were developed with the funding of the Ministry of CIT and the Ministry of Culture of Colombia, under the shelter of the public contest *Crea Digital 2014*. Furthermore the convocation *Cambio de Juego* promoted the creation of educational video games with peace themes. According to María Carolina Hoyos Turbay, Vice-Minister for CIT of the Colombian government in 2014:

We want to keep contributing on consumption habits related to video games, that involve efficient pedagogical processes for children and that promote the learning of different aspects of the national culture, the geography of regions and even the construction of a more equal and pacific society (*Ministerio de Tecnologías de la Información y las Comunicaciones, Gobierno de Colombia*, 2014).

In terms of the educational themes, there were titles like *Sabiduría ancestral indígena* (Colombia Games) and *Aliaterra* (Universidad Nacional de Colombia). On the other hand, in the same line of video games for peace there is *Vitimalz* (Anglus, 2014), promoted by the convocation *Vive Gobierno Móvil* of 2013 and, developed with the support of *Universidad Nacional de Colombia, Unidad de Atención y Reparación Integral a las Víctimas* and the CIT Ministry in Colombia. It is an application for mobile phones that, based on the gamification principles, exposes and trains players on the duties and rights of the victims of the conflict with the Colombian State, namely, the Law 1448 of 2011. *Paz a la voz* (Unidad para las Víctimas, 2016) is another one of the titles that have emerged as a tool for mediation and repair, which main goal is to make known the "participation protocol" to children and teenagers victims of the conflict. Finally, in December 2016 there appears the first version for mobile devices of *Reconstrucción* (2017) and in 2017 the downloadable version on its website is launched (<http://www.reconstruccion.co>).

The boom of the prosocial video game in Colombia is rather interesting, therefore we focus on this context and to analyse one of the last creations of this genre was decided. The prosocial video game is



still under a stage of early development and, here lies the interest of its research. This study aims to introduce a review of *Reconstrucción* (Pathos Audiovisual, ViveLab, GIZ, 2017), one of the latest and most advanced interactive video games with the vocation to educate about matters like social behaviour and situations of conflict. To analyse its design and consumption, besides assessing its impact and transcendence. To delve deeper into the field of the new videoludic creations, with specific aims and goals that sum to entertainment, using it as a link to send the desired message to the user. Moreover, to assess its functioning and its effectiveness, offering a view to the potential of these cultural products of interactive digital simulation, as precursors of learning, social recognition in adverse environments and the definition of cultural identity through virtual contexts, that reconstruct fictional experiences based on reality.

## 2. Methodology

This research is based on the bibliographic review about the persuasive power of videoludic productions, as well as of studies that demonstrate their capacity to create prosocial abilities in players and to build behaviours through their characteristics merging entertainment and education. At the same time, a review of the titles produced within the framework of the prosocial video game until the present was conducted as well as of the interactive audiovisual productions that analyse the conflict from the perspective of violent videogames, establishing the state of the art of these issues and positioning the focus of this study on the armed conflict of Colombia, to finally analyse one of the latest prosocial video games that handle this issue. Therefore, a case study methodology is suggested.

We analyse *Reconstrucción* (Pathos Audiovisual, ViveLab, Giz, 2017), from different perspectives and using two differentiated models of analysis. When performing our analysis from the field of communication, we focus on the game, analysing its playability, design, to extract the meanings targeted towards a specific goal. “The design of the game: studies focused on structures, aesthetics and techniques of playability and representation of the game world” (Salen and Zimmerman, 2004, cited in Sandoval Forero and Triana Sánchez, 2017:44). On the one hand, we will analyse its narrative, because through it we can establish the connections and strategies used to generate reflection on the minds of players:

The design of the empirical work (analysis of the narrative of video games available on Internet) have provided the possibility to interpret the communicational characteristics deployed by children, early users of electronic technologies, in order to link them to the configuration of thought around the ideological-cultural axes that organize the discourse about the social reality (Revuelta Domínguez, Sánchez Gómez and Esnaola Horacek, 2014).

According to this model (Revuelta Domínguez et. al, 2014), the categories of analysis of the video game narratives to be managed include: construction of identity; identification archetypes; video games narratives, and imaginary registration of the social reality.

On the other hand, we will analyse the video game by using the MDA model (Hunicke; LeBlanc and Zubek, 2004), where the mechanics, dynamics and aesthetics are separated to be studied in an independent manner, in order to grant us a view of how they work and interrelate to create the game experience in the user. Said model is defined as follows:

MDA is a formal approach to understanding games - one which attempts to bridge the gap between game design and development, game criticism, and technical game research. We believe

this methodology will clarify and strengthen the iterative processes of developers, scholars and researchers alike, making it easier for all parties to decompose, study and design a broad class of game designs and game artifacts (Hunicke; LeBlanc y Zubek, 2004).

To apply this model and to identify the mechanics, dynamics and aesthetics, we have added an additional element to the MDA framework: the actions performed by the user through the objectual and cultural interfaces of the video game (Manovich, 2001). To do so, we have created the following tools:

1. Model table to identify the mechanics based on the actions the user can perform by means of the objectual and cultural interfaces.
2. Model table to identify the dynamics and their connection with the aesthetics generated, understood in this context as the educational phenomena generated during the user's practice.

### 3. Results

Using the words of its creators, *Reconstrucción* (2014) was designed in order to use the transmedia narrative and its *hype*, in the current moment, within the production and consumption of audiovisual discourses, to generate a production able to advocate the understanding of all parties, which was what happened in the Colombian conflict (Sandoval Forero and Triana Sánchez, 2017:53). The analysis of the study object starts by its definition as a transmedia product, composed of a web platform, a video game, a comic and a series of interviews on video format that support the veracity of the proposed discourse. All these differentiated products are accessible separately, but in the video game they are all intertwined, generating through the *gameplay*, a discourse that moves from interaction to the display, making the most of the cinematics fragments (created based on the animation of the comic) by collating fragments of the videos of the interviews conducted to the affected victims of the conflict. This proposal of using real stories, gathered on audiovisual documents, namely, to perform a research about the conflict to build the stories of the game based on the reality of the actors of the conflict, which grants the piece a greater immersion power for the user.

#### 3.1. Analysis of *Reconstrucción* through the qualitative research model about narrative of video games

The video game is a graphic adventure that positions us on fictional places but that are references of the conflict, like villages and towns occupied and extorted by the *guerrilla*, sieged town places and schools, military camps in the middle of the jungle, with rather rough graphics and, a visual finish closer to the expressionist illustration than the three-dimensional hyperrealism of triple A productions. This expressionism of textures of the three-dimensional environment confer a visual appeal able to generate a mental fictional space in the player, transversally connecting the formal outlook of the video game with that of the comic of this transmedia production and, granting the complete production of a same graphic identity. The interaction on touch screen mobile devices is performed by leading the main character as we drag our fingerprint across the screen and, in the three-dimensional scenarios there are a series of circles that indicate we can click to access a complementary information. These elements establish the milestones we must go through in order to complete the objectives suggested by the game. On the upper section of the screen there are instructions about what we need to do.

In the first stage of the application of this model, we refer to the construction of the identity by the user through the characters introduced by the video game. In this sense, the main protagonist is Victoria, a woman who returns to her birth town after years of exile in the city, displaced by the violence of paramilitary that sieged *Pueblo Escondido* (a fictional location located in the Antioquian Urabá). By means of the dialogues with the different characters we meet and the possibility to choose between different responses in some of these, the player is offered advanced levels of engagement with the avatar used, in order to generate a more vivid connection between the user and the interactive fiction. This way, the levels of immersion are increased and, hence, the assimilation of the message aimed to be delivered, through the events of the audiovisual discourse.

The construction of identity is a paramount element when it comes to generating empathy with the user and, through it, to achieve a greater level of immersion of the player in the suggested experience, which makes room to an effective educational or learning process. The option for a female character is grounded on the origin of the project, which the producer of this piece, Álvaro Triana, refers to in an interview conducted by the online medium *El Espectador* in 2016. There, the author argues the birth of *Reconstrucción* the moment he is exposed to the chronicles about the Colombian conflict of the audiovisual producer Patricia Ayala Ruiz. In the first version of her documentary *Un asunto de tierras* (Ayala Ruiz, 2015), the protagonist is a peasant girl, called Victoria, who witnesses the death of her grandfather by the paramilitary, an action that is represented in the video game, but without showing any violent image, because it is aimed to serve as a pedagogical tool. Therefore, the decision to propose a female leading character is based on a story narrated in Ayala's work, driving the creation of the interactive piece object of study. It is not a decision based on any other criterion. Even so, the leading character is able to place us in the skin of victims of this conflict, as we make decisions during *gameplay*.

On the second stage of this analysis, we analyse the identification archetypes. In *Reconstrucción*, these archetypes can be identified with the characters that inhabit the interactive audiovisual text. From the grandfather, who generates a connection with the spectator from the principle of empathy, going through Don Juan, Doris, Ramírez, and so forth with each and every one of the archetypes they represent, including the lady that resists in her village or the soldier that finds himself immersed in a war he does not completely believes in and where he is forced to be part of. "The archetypes create myths to explain the basic distresses that humanity suffers before hunger, war, illness, old age and death" (Revuelta Domínguez et. al, 2014). This way, we could point out a construction of key archetypes to generate a fictional representation of the stakeholders that intervene in the Colombian conflict in a credible manner, with rigour and without altering nor transforming into other purposes beyond those aimed by this video game. Likewise, these representations are established as an instrument to encourage dialogue, without looking for guilty parties nor establish judgements nor being judged. The symbolic values of every archetype created in this discourse are capable to establish effective references to the stakeholders interpreted in the real context.

The narrative discourse is able to construct a value system around the events narrated; therefore, it has the power of sending a message. During the development of the game, the narrative structure offers different ramifications of the story depending on the decisions made by the player, which can make a social leader out of Victoria, a victim of the armed conflict or forced to be part of a paramilitary group, thus potentiating the mediation power of this interactive audiovisual piece. Thanks to the fact that it offers the perspective of each and every one of the stakeholders of the conflict, without assuming a position or swinging the balance towards any of them, but instead showing war as a fatal event for all its participants.

The narrative structure, composed of three chapters, that activate as we complete the previous ones, uses the finite-state machine model where, depending on the decisions we make under different circumstances introduced by the game, we will access new situations conditioned by these previous decisions in some of the nodes, not all of them and, leading us to one end or another. The first chapter establishes a main node the moment Victoria abandons her town and wanders into the jungle, where she finds the *guerrilla* group and, specifically with Leonor, and after talking to her, the user must decide whether to go back to the town to become a victim of the forced displacement of the inhabitants of these lands (beginning of the third chapter), or on the contrary, decide to join the *guerrilla* (beginning of the second chapter). By means of the first decision, the player connects with the victims' archetype and, will provide a view from their perspective, however, if we join the *guerrilla*, the option to talk with the *guerrilleros* will be offered and thus, also understand the circumstances of this other side, within the complexity of any armed conflict. Therefore, in this video game there is observed, the presence and voice of all the stakeholders involved, which makes room to a coherent review of actual events represented in fiction.

Both, whether we decide to go back to the town or join the *guerrilla*, Victoria will face situations that involve making decisions from the perspective of prosocial behaviour, which will be studied in the analysis of dynamics. In addition to the circumstances, which change depending on the decision made, the end of every ramification is different. In any case, the figure of the grandfather accompanies the player throughout the whole experience, becoming the reference model of the prosocial behaviour across the video game. The use of a guiding figure is observed, during the complete interactive journey, making sure that the educational goals are not overlooked during the game.

From the perspective of the imaginary registry of the social reality handled by *Reconstrucción* (2014), it is confirmed that it meets its main objective, when it comes to construct the complete social topology of events, without serving as a sort of reconstruction of actual facts, but that undoubtedly lead to the generation of meanings around the mediation before a conflict, and the empowerment of the application of prosocial behaviours by the people playing a role in them.

### **3.2. Analysis of *Reconstrucción* through the MDA model**

In first place, the mechanics are the rules imposed by the game to participate, in addition and as a video game, we also include all those elements and processes that allow playability, methods designed so that the player, character and elements of the game summon them in order to generate interaction with the playable virtual environment. In the case of *Reconstrucción* (2014), we talk about simple mechanics, of dragging or leading the main avatar with the mouse, clicking on the circles that indicate there is a milestone or an element to be reviewed, or that we should talk to any other character. From the interface of the video game, we are informed about those actions we must perform, for instance: "Look for the batteries for the radio" and, we are shown a series of circles that mark the places to which we should head to and click to find the batteries. All the mechanics detected in the video game have been classified, using the first tool of analysis, as shown on table 1.

<b>Action that the user can perform through the objectual and cultural interfaces of the video game.</b>	<b>Mechanics of the game activated based on the actions on interfaces.</b>
Drag the finger on the screen, using the mouse over the environment.	Move around the virtual environment
Click on a position indicated through a circle ( <i>milestone</i> element of the game).	Move towards the place marked with the circle.
Click on a circle once we are positioned.	Check an object or place to access complementary information or find an object we are looking for.
Click on a circle positioned in a character.	Stablish conversation (dialogue) with the character.
Click on one of the possible answers offered (nodes of the finite-state machine).	Choose the answer we provide to our interlocutor in the game and that conditions the continuation of the narrative discourse.
Click on a provided default statement during a dialogue scene.	Continue to progress in the dialogue with the interlocutor character.
Click and drag elements on the screen.	Complete a puzzle of an image.
	Time. Countdown to solve the puzzles of the images.
	Objectives to be completed shown on the screen through textual messages.

Table 1. Tool to identify the mechanics and their connection with all the interaction methods of the user with the interfaces of the video game.

When it comes to analyse the dynamics, situations generating from the mechanics and the participation of the user and, that result into aesthetics, understood as the feelings and emotions evoked in the player when interacting with the game, we try to stablish the connection between them. The MDA model establishes eight kinds of aesthetics, of which we identify the most relevant and connect them to the dynamics that generate them during the gameplay. In *Reconstrucción* (2014) we observe the absence of conventional dynamics of mainstream video games like competition, fantasy or expression, because there are no fantastic elements introduced or the player is offered the option, for instance, of customizing the outlook or the type of abilities of the main character. The dynamics present are related to prosocial behaviour, as shown on table 2.



Aesthetics identified	Dynamics (situations)
Narrative	Achievement. To progress in the narrative structure of the video game, completing the objectives and goals established.
Social	Dialogue. To communicate with the rest of stakeholders of the prosocial video game, in a sort of scripted dialogues. Leadership. Decision making that entail consequences for the group. Altruism. Situations where we must decide our performance during the gameplay.
Discovery.	Challenges for searching objects. Delving deeper in the knowledge of events introduced by the video game, through the objects found such as photographs, telegrams or newspapers, where we are offered real data about the conflict or fictional information that contribute to a greater knowledge about the narrative plot.
Sensation	Escape situations though stealth. Altruism. Situations of helping the other.
Hobby	Pieces of countdown puzzle solving.

Table 2. Tool to identify the dynamics and their connection with aesthetics produced during the gameplay of the video game.

The characteristic dynamics of the commercial video game are not detected either, such as status, since there is no best players ranking, nor reward nor punishment. These last ones are not present because the video game does not aim for the presence of winners and losers, nor offers the feeling of winning, regardless of the decisions we make, the results will always be the same.

In the use of the dialogue we find the resource used to create the intended prosocial dynamics. In these situations where the main character interacts through the oral language (at the same time, written on the screen according to contents accessibility standards) is where there those aesthetics of sensation are produced, where the player is involved in the situation of helping his interlocutor or not, even pondering the need to hide or prejudice his community to improve the situation of the other. We find two of these key dynamics in the last two chapters. The first one of them in chapter three, when we must decide whether we help the wounded soldier or not, the soldier who helped us escape previously. If we decide to help him, by selecting the answer while talking to him, we must look for the few medicines that the community misgivingly stores in the church and take them to him for his recovery, even lying to our own neighbours. Later, Doris will find us with the soldier, since she noticed that our character planned something, producing one of the representative dialogues of the values that the video game aims to promote in the individual. Please read the following statements collected from this moment, as a sample:

*Doña Doris:* Aren't you ashamed Victoria? You are betraying your people.  
*Victoria:* I had to help him; he was dying.  
*Paramilitary Ramírez:* It is not her fault, I convinced her to help me.

*Doña Doris:* Where are your people? Will they come back to finish us?

Paramilitary Ramírez: Believe me, I am no longer with them. They almost kill me for helping her escape.

*Doña Doris:* Is that true Victoria?

Victoria: ...

*Doña Doris:* Anyways, you are helping an enemy of your people.

Victoria: In church, we are always told that we need to forgive our enemies ...

*Doña Doris:* Well... that is true... but it is not that easy.

Victoria: If it weren't for him, I wouldn't have saved.

*Doña Doris:* That is also true...

*Doña Doris:* Then, what do we do now?

Three possible answers are offered to us, the following option is marked per default:

Victoria: Let's take him to the town with us.

*Doña Doris:* We cannot, the people from the town will not forgive him.

Victoria: How about us? Can we forgive?

*Doña Doris:* We don't even know whether he regrets. I haven't heard him say he is sorry.

Victoria: The heart hurts less when one forgives.

*Doña Doris:* You are right Victoria. It is better to forgive, but we should not forget.

Victoria: Not ever. We will always have this story in our memories.

*Doña Doris:* Let's go before others look for us.

And they go to introduce the outcome of this chapter. With this example we confirm how the message aimed to be conveyed, within the dynamic generated between the dialogue and the characters, besides the decisions made, is about forgiveness and the preservation of the historic memory as pillars of the process of peace after the conflict.

The second one of these dynamics occurs in the end of chapter two, when we need to decide whether we let the hostage watched together with Leonor escape, in the moment they are bombed by the army. If we decide to free him, the outcome for our character and the plot is the same that if we decide not to, and thus avoid putting ourselves at risk, but if we opt for this second option, the prisoner dies.

#### **4. Discussion and conclusions**

The fact that video games have a persuasion power over their players, which facilitates conveying the messages or the education on different matters and abilities, is a contrastable fact. Therefore, the design and creation of contents of these videoludic products must be looked after with special care, besides establishing and respecting its application over the segments of the audience for which they have been created.

The impact of the video game configures it as a suitable medium for the social transformation, as an educational instrument for the mediation of conflicts and reconciliation, for the reflection and the development of the critical thinking, or for the vindication and denounce in situations of injustice and inequality. However, it is also a weapon used with different purposes like ideological indoctrination or recruitment, manipulation modalities by which it is complex to establish the limits of its creation according to the final intentions pursued.

The video game, as a medium to promote prosocial behaviour presents a greater efficacy compared to other mass media. Even though these effects have been demonstrated to last only in the short term. Still, its potential cannot be confirmed in players after long periods without exposure, or at least it is complicated to establish the connection of certain behaviours, possibly induced after its influence, once the individual stopped consuming them within a considerable time lapse.

We can affirm that *Reconstrucción* (2017) is the paradigm of the prosocial video game and makes the most of the most suitable resources within the possibilities granted by technology today, as well as contemporary devices, to generate dynamics for the education on prosocial behaviour, involving the user in situations in which the main feature always consists of the dichotomy between helping or not so to, based on this behavioural bipolarity, generate reflection on the player in order to foster empathy and the good practices.

The production object of study introduces a very balanced game experience, resulting from the moderation in the combination of all its components. The actions of interaction with the interfaces of the video game are very simple, matching the accessibility standards for all ranges of the audience. These actions trigger a series of processes, rather simple game mechanics, but that at the same time contribute to the amount of entertainment required to keep the interest of the user to journey through the videoludic transitional space for peace configured as a whole.

The veracity factor that these kinds of productions need, to treat the themes in an accurate manner in terms of the events they narrate, is essential for building an efficacious discourse in its prosocial aims. Therefore, within the phases of production of a prosocial video game, it is of vital relevance to plan an initial stage of research and documentation about matters to be handled. In this sense, *Reconstrucción* (2014) meets the requirements to achieve its objectives, because it introduces a previous study, through which there were gathered the testimonies of stakeholders involved and there was generated audiovisual content (documentaries with interviews to affected parties) that completes the construction of the message introduced.

The communication strategy suggested by the object of study is rather appropriate, since it combines the dynamics of the video game along with its cinematics, with the dialogue as the main axis of the creation of aesthetics and, at the same time, there is the concatenation of fragments from the documentary's footage and animations coming from the comic's illustrations, hence completing the audiovisual discourse from a transmedia perspective.

The narrative structure, that offers approximately one hour and a half of game and that it is composed of three chapters, reconstructs the perspectives of all the involved parties in the conflict managed and introduces a reflection on the value system promoted in the user. We can conclude by stating that the construction of the archetypes and identities, a result of the good documentation task on the prior research stage, as well as the combination of different narrative universes through different media, generating a unique discourse, are able of creating an imaginary registry of the social reality to manage the conflict the game is about. It also educates players in terms of the armed conflict in Colombia and generates prosocial behaviours, through the game dynamics, able to contribute to the process of post-conflict, reinsertion and reconciliation between victims and perpetrators. We understand the video game as a territory for peace, a discursive tool able to encourage reflection and understanding, that is still at an early stage of its application for these objectives. Therefore, experimentation and investigation of this interactive medium with purposes beyond the mere leisure is necessary.

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