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The Transformative Potential of Role-Playing Games—: From Play Skills to Human Skills

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Abstract

Background. Several authors from different fields have already mentioned the educational potential of **role-playing games (RPG)**. As tabletop role-playing games (TRPG) present some similarities with small **adult groups in learning** and personal development situations, what about their transformative potential?

Aim. The purpose of this article is to describe the tabletop **role-playing game's** emerging context, a few of its specificities and functions, to show links with several education, **play and game**, and personal development theories, and to raise awareness about its transformative potential.

Methods. Three complementary approaches were used: a literature review (academics and role-players), action-researches through a **transformative role-playing game** ("**TF-RPG**" – a TRPG plus a debriefing), and data cross-analysis.

Results. Participants are involved in the **TF-RPG** through four levels of reality, namely the character, player, person, and human being, which can be associated with four dimensions of learning: knowing, doing, being, and relating. The unveiling of links between the **TF-RPG** experience and their personal journey offers the participants various ways of learning and paths towards personal development.

Conclusion. **TRPGs** are particularly effective to foster knowledge acquisition, develop **role-play skills**, strengthen **team building**, encourage **collaborative creativity**, and explore one's personal development.

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> "Proponents of fantasy games have argued that such games have considerable educational potential, and, while they are not designed for a didactic purpose, it is easy to see how they might be used in school systems to teach folklore and mythology, or cultural differences." (Fine, 1981, p. 275)

> "Immersing players in a world that provides no interest (too realistic or not realistic enough) and that emphasizes learning objectives can be an obstacle to the recreational experience and thus transform playing into a training exercise. [. . .] Hence the importance of preserving the authenticity of the gaming experience by debriefing players afterwards." (Brougère, 2012, p. 128 – translation by the author)

Due to their complexity and diversity, role-playing games (RPGs) form a separate category in the gaming world. Among these, tabletop role-playing games (TRPGs), the object of this study, have a number of features that could be potentially used for human skills and personal development. A TRPG refers to the progressive creation in a small group of players of a type of collaborative narrative animated by a game master, in which each player takes on a main role. To facilitate an exploration and explanation of the transformative potential of TRPGs, I added a formal debriefing after the playful phase of the game. This debriefing takes the form of a group discussion animated by a facilitator (Rogers, 1969), on the specifics and meaning of the gaming experience. I named this combination the *Transformative role-playing game* (TF-RPG), in reference to the transformative learning approach (Mezirow, 1991). The aim of the TF-RPG is to help participants realize that they can co-create a fictional world and adapt to it, and then to invite them to explore the meaning of their playful experience through their own personal journey.

Importantly, it is already part of the reflective tradition of many role-players to explore the meaning of their practice, whether through an informal feedback or, occasionally, via elaborate considerations about theory and practice. For decades, since Gary Alan Fine mentioned the educational potential of RPGs (Fine, 1981), only a few academics have contributed, whether in research or thinking, to the development of this field. Several authors have argued lately, based on recent research, that RPGs might be used by participants to explore cognitive, affective, and behavioral dimensions of learning and change (Bowman, 2010; Harviainen & Lieberoth, 2012). However, an analysis of the available literature reveals that the potential transformative effect of the TRPG is still poorly documented, be it in terms of context, process, results, or even recommendations for its improvement. It also reveals that RPGs are a fast growing field of research. Indeed, about 75% of the available literature was produced during the last decade (Daniau, 2014).

This article is based on both a doctorate thesis exploring the link between TRPGs and the maturation of adults (Daniau, 2005), and an ongoing action-research on the transformative potential of TRPGs through literature reviews, experiments, case studies, interviews, and less formal activities. The first part of this article is about the context of the transformative role-playing game's emergence and some of its features. The second describes the TRPG's structure and properties. The third part presents the progression of a TRPG, from its origins to its analysis. The last part suggests links between game theory and play skills (Brougère, 2005), and then learning, development, and human skills (Hébrard, 2011). Finally, the transformative potential of the TRPG is discussed in order to provide the player various lines of thought, research, and types of intervention, particularly in the context of adult education.

Context of the Transformative Role-Playing Game

Role-Play (RP)

Ethology attests that young mammals develop or reinforce important social skills through the playing of roles (Fagen, 1995). These unstructured games are often inspired by the social behavior and rituals of adults (Château, 1967). The human being, characterized by a long maturation time and a complex, constantly evolving society model, is likely to learn in a similar fashion. As the individual matures, different role-plays will respond to her evolving needs:

- Children's free play and spontaneous role-playing – help children become better familiarized with the adult social world (Château, 1967; Sutton-Smith, 2001);
- Adults' rituals – instill the continuity of their culture by linking playing and doing (Hamayon, 2012; Huizinga, 1955);
- Relationship games – use different forms of language to explore and enrich interaction, to convince or seduce (Berne, 1996; Winnicott, 1971);
- Theater & drama – confront or make people aware of different prejudices, stereotypes, concepts, or attitudes (Boal, 2000; Brecht, 1987);
- Therapeutic role-plays (psychodrama) – transform or improve social skills and personal mental health (Anzieu, 2004; Moreno, 1966);
- Educational role-plays – train people to develop or enhance specific behaviors and social skills (Crookall, Oxford, & Saunders, 1987; Mauriras-Bousquet, 1984);
- Role-playing games (RPG) – invite players to create fictional worlds, explore identities, solve problems, and build communities (Bowman, 2010; Caïra, 2007);
- Educational role-playing games (Edu-RPG) – bring in predefined educational goals to RPG and invite players to learn and develop themselves through playing (Bowman, 2014; Kot, 2012);

- Transformative role-playing games (TF-RPG) – invite a small group of players to explore the complexity of the RPG, and then make links between the meaning of their playful experience and their own evolution (Daniau, 2005).

These forms of role-play are obviously not exclusive. Countless variations and forms make their analysis and understanding quite complex. Moreover, many role-play activities mix two or more of these approaches. Within this framework, the developmental concern places the transformative role-playing games at the confluence of the gaming, artistic, educational, and therapeutic approaches (Daniau & Bélanger, 2010).

Role-Playing Games (RPG)

Inspired by simulation games and performing arts, RPGs are a shared narrative process, usually semi-structured by a physical or virtual game master, taking place in a fictional world in which the participant plays a main character (Arjoranta, 2011). In the early 1970s, under the guidance of Gary Gygax, a structured tabletop version of this type of gaming was created, named, (Dungeons & Dragons, 1974). Since then, under the influence of various communities (Bowman, 2010) and technological advances, multiple types of RPGs have emerged, each attracting millions of players. Among them I distinguish four RPG categories, each determined by a privileged mode of communication inside the group:

- Tabletop role-playing game (TRPG) – Verbal. Also known as pen-and-paper RPG, it is played in small groups, usually from 2 to 5 players around a table, using mostly verbal discourse – played with or without table, rules, game master, or supports (dice, decor, props, music);
- Live action role-playing game (LARP) – Physical. Derived from historical reenactments, murder mysteries, and improvised theater, it brings together small groups to thousands of players who physically act out their character's actions in a collaborative fictional immersion (Kapp, 2013) – from free play to pervasive RPG;
- Play-by-post role-playing game (PRPG) – Textual. Also known as RPG by-email, by-chat, or by-forum, it is usually linked to a persistent world and played asynchronously by several to millions of players – from alternate reality games (ARGs), to virtual history games and collaborative storytelling;
- Video role-playing game (VRPG) – Visual. Relies on various digital supports to provide an interactive experience through the exploration of mostly virtual worlds – ranges from solo investigations, to group adventures, and to millions of players involved in a massive multiplayer online RPG (MMORPG).

Players can also combine these activities. They could play a TRPG, then decide to enact a specific scene outside (LARP), or to use an online video game (VRPG) to further an aspect of the game, or – particularly if they cannot gather physically again – to interact intermittently from a distance by way of collaborative narration (PRPG).

To add to the confusion, a number of recreational activities – games of exploration, trade or investigation; choose your own adventure books; trading card games – share many similar traits with RPGs in terms of either interaction or context. Moreover, any RPG can be designed to partly include other games, such as a complex puzzle to solve, a real game of poker, or strategy board games. Furthermore, with the RPG now firmly a part of our culture, it has taken on new forms and inspired other activities. For example, D&D is actually played through the four types of RPG and has given birth to many other board games, cards, novels, comics, movies, toys, etc.

Educational Role-Playing Games (Edu-RPG)

Educational role-play has been used in many forms, ranging from a seller–buyer type situation, to a prejudice-reduction workshop (*Blue Eyes-Brown Eyes* by J. Elliott, 1968 – as presented in Byrnes & Kiger, 1992), to a global simulation[1] (*L'immeuble* by F. Debyser & F. Yaiche, 1986), and to intervention theater (*Theater of the Oppressed* by A. Boal, 2000). It aims to strengthen the motivation, the involvement, and the performance of the participants (Crookall et al., 1987). According to O'Brien, Lawless & Schrader's Taxonomy of educational games (2010), which is based on Gagne's Five Categories of Learning Outcomes, Bloom's Taxonomy of Educational Objectives, and Jonassen's Typology of Problem Solving, the RPG seems more likely to support a wide range of educational potential than many other games. Indeed, any RPG may be tailored both in its form and content, and according to predefined objectives, for educational purposes.

Like therapeutic or social intervention role-plays, Edu-RPG also aims to improve the participants' ability to manage the unexpected, to increase communication and leadership skills, to develop assertiveness and a better understanding of their reality (Bowman, 2014). Edu-RPG may also be used as a warm-up activity, to illustrate an event, for a collaborative performance, or as a training exercise. Then, assessing what has been learnt during the game can be based, for example, on the quality of the exercise's realization, adaptation to the prescribed rules, educational achievement, or even group complementarity. Here too, the introduction of a formal and thorough debriefing, which may promote the transfer of acquired role-play skills, has, therefore, a fundamental role (Crookall, 2010; Kaufman & Sauvé, 2010). Furthermore, by allowing the participant to play a character substantially different from his own nature, the risk of acting evasively due to fear of being judged or reacting improperly, or the need to conform to social norms or to the perceived expectations of the instructor, is reduced (Mauriras-Bousquet, 1984). Thus, any kind of RPG may be turned into an Edu-RPG.

Edu-LARP has become widely used and has been better documented in the last decade (Bowman, 2014). Its similarities with other well recognized educational role-plays, like drama and theater, have probably supported its own development, in theory as well in practice. The LARP community is also easier to mobilize than the TRPG community. Indeed, their meetings usually gather dozens to thousands of participants, who are often involved in different games during the year. By contrast, the TRPG

community is mostly divided in small groups, rarely connected, or just temporarily through associations or conventions.

Edu-VRPGs and Edu-PRPGs are a very fast growing and rich field of research, directly connected to the educational computer games theory. Their development is mostly related to the evolution of information and communications technologies, computer simulations, and the video game industry. Despite the physical absence of other players, participants are in constant communication through text or voice chat, e-mail or forum, to manage the group, direct the action, plan strategy, and solve problems. These virtual Edu-RPGs encourage the player to be involved in a collaborative learning process which brings him to develop communication and cognitive skills and acquire new knowledge (O'Brien, Lawless, & Schrader, 2010). Given the high interest in serious games and the rapid expansion of gamification,[2] educational game designers have multiplied the ways of attaining predefined educational objectives, sometimes to the detriment of the game's success in terms of its playability (Genvo, 2011) or the enjoyment in playing it.

Edu-TRPGs are comparatively rarely used or at least documented. Less funded, in research, than Edu-VRPGs or Edu-PRPGs, and lacking the continuity of Edu-LARPs, they nevertheless share many similarities with the RPG family. Indeed, authors from these fields already provide more findings about the educational potential of RGPs than the Edu-TRPG's perspective itself (Daniau, 2014). Yet many role-players are able to report, often very briefly, trials of some sort or another, such as using TRPGs for community building with idle youth, as a tool for active-learning in game design, or to help blind teenagers to enhance their imagination and self-esteem. Thus Edu-TRPG appears promising in terms of learning and personal development, by providing cognitive, affective, and behavioral potential changes (Bowman, 2014; Daniau, 2015).

Transformative Role-Playing Game (TF-RPG)

The TF-RPG is very similar to the Edu-RPG, except its primary emphasis is on the authenticity and the conditions of the play experience rather than on predefined educational goals. In other words, it is more focused on the journey than on the results by exploring what the TRPG by itself might bring to a group of players. Hence the importance of respecting the few TRPG prerequisite conditions for success, such as:

- Small groups (3-6 persons): an optimal size for the quality of interactions and the emergence of a group's imagination;
- Long duration (2-12 hours): a longer playful experiment will consolidate the group's imagination;
- Playing atmosphere: using props, music, candles, costumes, or a specific room setting encourages immersion and enriches the group's imagination;
- Avoid disturbance and assure confidentiality: support the players' involvement and ensure the consistency of the group's imagination.

All these conditions for success are aimed to develop, enrich, consolidate, and support the group's imagination (Anzieu, 2004) and the transformative learning process[3]

(Taylor, 2000). Furthermore, they are also linked to factors that can influence how effectively memory functions, such as attentiveness, motivation, emotional state, and the context.[4] Besides, by encouraging players' curiosity, the TF-RPG places the group of participants at the heart of the learning process. However this situation does not necessarily meet all learners' expectations, or the common learning assessment criteria (Daniau, 2005). Scarcely compatible with the prevailing school system, TF-RPGs are better adapted to more flexible educational systems such as adult education, self-learning groups, popular education, and community-based training.

Properties of the Transformative Role-Playing Game

Emergence and Framing of Transformative Role-Playing Games

The transformative role-playing game approach was developed as a collaborative action-research methodology applied to TRPGs. The term trans-formative has been chosen in reference to the transversal approach (Barbier, 1997) which, as a part of complex thought, is linked to trans-disciplinarity and multi-referentiality (Morin, 2001), and to transformative learning theory (Mezirow, 1991). I have initially built a multi-referential approach, named *ecobiopsychosocial* (Daniau, 2005), on a transversal analysis of characters' characterization in TRPGs. This model was then confirmed through a transversal study of many authors' contributions. These include Edgar Morin's works on human complexity (2001) and Moreno's approach to the human being (1965).[5] Applied to RPG, this approach offers four complementary ways of characterization, namely its context, properties, progress, and functions – which were used here to frame this article. Besides, the transversal approach also refers to the four dimensions of reality experienced by participants, namely the character, the player, the person, and the human being.[6] The trans-disciplinarity aspect points to contributions from other disciplines, like the humanities and psycho-sociology. Finally, the inter-subjectivity refers mainly to the discussion process inside the group. Embedded in a humanistic psychology (Maslow, 1970; Rogers, 1969) and an andragogy perspective (Knowles, 1980), the TF-RPG encourages the participants to be involved in a playful action-learning process and to question the meaning and the ethic of their experience through an inter-subjective reflection.

The TF-RPG aims to accompany individuals in their personal development and learning process, in a collaborative manner, through the evolution of a group of players and their characters, all the while offering them a favorable disposition for learning through the development of their group's imagination (Anzieu, 2004). In other words, whereas the Edu-RPG may be used as a tool for learning, training, or recruiting, the TF-RPG aims also at raising the participants' awareness about their own meaning schemes, such as specific beliefs, attitudes, and emotional reactions (Mezirow, 1991). This approach, more oriented towards human development, is mostly based on a multi-referential exploration of the transformative potential of RPGs, alternative practices in education, and adult development's perspectives.

Tabletop Role-Playing Game (TRPG)

As seen before, a TRPG consists of a group of players gradually developing a type of collaborative narrative, with each player interpreting one of the main roles. A game set usually comes with a description of the world in which the action is set, the governing rules, tips on the general atmosphere, and ready-to-play scenarios –often including pre-written character sheets and supports, either in the form of props or facsimiles. These four aspects form the core of the TRPG.

Most of the time, a game master (GM) acts as a guide to the group's imagination development (Anzieu, 2004). An experienced GM can partly adapt an existing TRPG, or prepare one especially for the occasion, or improvise on the spot for a unique, one-time experience. Indeed, with GMs adapting stories to their needs, inspired by their experience and their culture, countless new variations of RPGs have been created. Whatever the choice, a GM can always enhance his mastering by drawing on past gaming experiences, the game space, the preferences of participants, characteristics of the characters, etc. Throughout the game the GM is also responsible, according to the four dimensions of the TRPG (Daniau, 2005), for the:

- **Context** (world) – describing the world and the atmosphere in which the characters evolve, their actions, mindset, impressions, and situations – *a good story* (**Narrative**);
- **Properties** (rules) – applying the rules of the game, and adjusting them to ensure their playability or enhance creativity (Bergström, 2012), and settling differences with or between players – *a fair challenge* (**Gaming**);
- **Progress** (scenario) – interpreting his characters realistically, and encouraging interactions with and between the player characters – *an inspiring role-play* (**Simulation**);
- **Functions** (group cohesion) – ensuring the players' involvement, the realism of the scenario, the rhythm of the game, and its playfulness – *a shared group's imagination* (**Coherence**).

The first three dimensions are directly linked to the GNS theory of the participant's engagement and interaction in a RPG. These three categories, namely *gamism, narrativism, and simulationism*, have been already widely discussed by role-players (Kim, 2012). The latest approach is more centered on the collaborative process of creation that leads to a shared group's imagination.

At the first meeting, the GM briefly sets the scene by describing elements such as the ecosystem, time period, population, and the situation. Then, she invites the players to create or customize their character sheets which usually include a short biography along with any relevant information, often encrypted, on the character's different traits, like identity, skills, physical appearance and capacities. The GM can also help the player better assume the role through a brief introductory set-up.

The TRPG begins when the players' characters are convened. They start to address each other directly through their played characters. They interact mostly verbally but

also through notes, drawings, diagrams, or sometime more physically to emphasize their role-play. During the game, they have to search for relevant information, solve problems, analyze situations, and take decisions or actions aimed at achieving their individual and collective goals. Thus, they constantly and naturally switch between talking through their character, negotiating the application of game rules, offering narrative descriptions of their actions, and starting more informal discussions within the group (Caïra, 2007). The game usually ends when the players' characters reach their goals.

Transformative Debriefing

According to our ability to remember the details of a game, a debriefing should start as soon as possible after the gaming phase ends. The debriefing exercise should constitute about a third of the playing time. It takes mostly the form of a combination of a semi-directed and non-directed discussion within the group, during which the GM assumes the role of an action-learning facilitator (Rogers, 1969), notably by: caring for group members; trusting, encouraging, and challenging the group; genuine involvement; shared feelings and clarification of meaning; sensitive listening and empathic understanding (Barbier, 1997). The debriefing can be very formal and time structured. Indeed, the GM may find it interesting and relevant to seek inspiration through other small action-learning group activities, like the six steps of a professional co-development group consultation (Payette, 2000), the process of a narrative-autobiographical workshop (Pineau, 2012), or the multiple variants of psychodrama (Moreno, 1966). In contrast, the GM could also consider the debriefing as a continuation of the TRPG. In this case, she has to support the evolution of the group's imagination by facilitating its transition to reality through an inter-subjective approach. Then, she also has to assume a large part of improvisation and spontaneity, to stay coherent within the whole process while building on the discussion with a set of rules, questions, and goals linked to the whole experience.

Furthermore, the use of an inter-subjective approach multiplies the points of view and potentially stimulates participants to become more aware of their behavior during the game and of their own meaning schemes (Mezirow, 1991). Thus, this experiential learning in team (Kolb, Kayes, & Kayes, 2005), which is reinforced by the recall, analysis, characterization, and enhancement of the collective experience (Crookall, 2010), may become a transformative learning. The debriefing is therefore an opportunity for the participant to explore his play and to think about the formative potential of the TF-RPG in terms of the learning and maturational process. These more or less formal discussions might be carried out by individual meetings, phone calls, e-mails, and other informal activities (Bowman, 2014). The data is collected during and after the game through recordings, notes, character sheets, summaries, diagrams, or drawings. It may be also relevant to use video recordings, with the participants' agreement, particularly if the debriefing concerns more behavioral or attitudinal issues.

As seen before, the transformative debriefing is an inter-subjective and transversal approach to the educational and maturational potential of the TRPG. Also,

the debriefing may be expressly designed to match the four dimensions of reality experienced by the participants, namely the character, the player, the person, and the human being, and their specific context:

- The adventure experienced by the player's character;
- The role-playing game played by the group of players;
- The transformative role-playing game as experienced by this group of persons;
- The entire experience through a human being's perspective.

The debriefing also aims to explore different dimensions of the transformative approach, such as the maturation process, small groups' dynamics, characterization of the TRPG, game design, and any other relevant subject, concept, or project for the group (Daniau, 2005).

Progress of a Transformative Role-Playing Game

Experiments

Wishing to offer an easier access to TRPG for adult beginners, I have gradually developed a simplified game system by slowly introducing formal rules and encouraging more interactions and feedback. Since the mid-1990s, I have organized many introductory workshops, with various mixes of men and women, aged from 9 to 75 years old. Over the years, four co-researcher groups (RG) of three to five participants, aged 20-65 years, took part in a TF-RPG. The first one, denoted as RG1, was made up of five experienced GMs, only men, and ran for about 150 hours during a 10-year span. The three other groups consisted of beginners, half men and half women, and are denoted as RG2 (100h in 3 years), RG3 and RG4 (20h in 6 months). Most participants were experienced, or at least interested, in the educational relationship, either as camp counsellors, trainers, teachers, players, or researchers. All the participants knew that the TRPG was part of a research-action, but did not know what exactly my hypothesis was. Furthermore, each of the co-researcher groups had to explore some specificities of the TRPG according to their own interest and experience: RG1 – game mastering; RG2 – education; RG3 – empowerment; and RG4 – training.

The meetings took place, as much as possible, on weekends in out-of-the-way locations (farm, cottage). The game space (planning, layout) and logistics (food, lodging) were designed to enhance conviviality and facilitate communication inside the group. The play phases took the form of game sequences lasting from 3 to 14 hours, quickly followed by the debriefing that took about a third of that time. As a researcher, I assumed the role of GM during the TRPG and acted as a facilitator during the debriefing of RG2, 3 and 4. However, in RG1, I was a player and acted as a co-facilitator during some informal debriefings.

The rules adopted with RG2, 3, and 4 were mostly linked to the player's adherence to his character's human nature, such as his physical limits, knowledge,

personal values, and social skills, and of the fictional world's rules. Then, I gradually introduced additional rules, born notably from our informal assessments of the TRPG process. The traits of each player's characters (PC) were described in short contextualized biographies, including life story, network, skills, concerns, or values. This information was gradually augmented with additional data, only known to the GM, gauging the PC's strengths and weaknesses in percentages in the upcoming scenario. On rare occasions, luck played a part and the die was rolled or a book opened in order to determine the outcome. By contrast, the rules used in RG1 were mostly a mix of the TRPGs named *Call of Cthulhu* (1981) *and Maléfices* (1984), both well known by the participants. The focus throughout these TRPGs was mostly on the coherence of the whole game and the cohesion of the group's imagination.

The atmosphere and the proposed scenarios were mostly inspired by the fictional world of the American fantasy writer H.P. Lovecraft: the game world was set in the western world of the 1920-30s, a context favorable to visualizing common stereotypes and enhance the group's imagination (Daniau, 2005). The first three co-research groups played the same homemade campaign, to serve as a reference, whereas RG4 played an entirely improvised scenario built on the interactive process of the PCs' creation and the participants' context.

As noted before, data was collected before and after the game was played, in the form of recordings, notes, individual reports, informal discussion, and e-mails. The debriefing was first used to explore collaboratively what happened during the game: How did it play out? Best scenes, good moves, plot, and ending? What about players' feelings and concerns? Next moves for the players' character group? Then, the discussion was directed at the TRPG progress and focused primarily on: the manner characters were acted out and how to deal better with TRPG's specificities; creating a scenario or improving the rules' playability; analyzing the role of each player in the group, such as the leader, speaker, or analyst, and their complementarity. Accordingly, participants pointed at the different dimensions of their playful action-learning process, or at several ways TF-RPG could be designed and used for education, training, and personal development. Finally, the focus slowly switched to the contextualization and analysis of the entire process and the meaning of the gaming experience through an inter-subjective and personal journey perspective.

Results

My first hypothesis was that a tabletop role-playing game specifically designed to include many existential events, may contribute to raise personal awareness and have an effect on the player's personal development. However, the data analysis has determined that it is rather the existential ongoing changes in the participants that tend to be reflected in the evolution of their game play (Daniau, 2005). Furthermore, participants were most interested in exploring various concepts such as personal and group development, distancing and empathizing abilities, shared feelings and the group's imagination, or synchronicity and serendipity. Following these experiments, the research groups estimated that TF-RPG may help players to reveal themselves, to develop new

interests, and to enhance their various abilities (Bélanger & Daniau, 2009). They suggest using TF-RPG for:

- Historical and cultural knowledge – 1920s, technologies, ideologies;
- Basic skills – writing and speaking, problem solving;
- Small-group dynamics – roles, attitudes, communication;
- Reinforcing or stimulating the desire to discover – self-learning, group creativity.

The experiments validated the fact that despite the existence of a common thread, each group develops its own distinct imagination to arrive at radically different results. Furthermore, in appropriating the rules of the game, players are progressively more confident in their ability to influence the story's evolution through their play. They also improve their play skills through their improvisation and interactions with the fictional world. The group comes into being, as much in the game as in reality (Caïra, 2007). This aspect makes the transformative role-playing game particularly suitable for team building.

Analysis

Data analysis and suggestions put forward by the various co-research groups led to the establishment of a framework based on the specificities of the RPG and on the different levels of reality experienced by participants, namely: the character, the player, the person, and the human (Daniau, 2015). These four dimensions of reality were then deliberately linked to the four dimensions of learning according to UNESCO,[7] and as mentioned by René Barbier (2000): *Learning to know* – Knowledge content; *Learning to do* – Know-how; *Learning to be* – Personal attributes; *Learning to live together* – Know how to relate. Each of these dimensions is presented below along with the main category of skills used or developed in a TF-RPG:

- **Character**[8]**/Knowledge content and general culture**: learning themes related both to *the RPG's fiction*, such as story, atmosphere, and shared experience; and to the proposed universe, like its ecosystems, geography, history, population, and cultures;
- **Player/Know-how and essential**[9] **or basic skills**: intrinsic or experiential learning related to *the RPG's properties*, including communication skills – such as reading, writing, and speaking; analysis skills – like making plans, diagrams, and calculations; and a player's attitude and participation in the group's decision making;
- **Person/Personal attributes and transversal**[10] **or soft skills**: induced or existential learning related to *the RPG's experiment*, such as small-group dynamics, role taking, desire to discover, critical thinking, collaborative creation, distancing, and empathizing;

- **Human being/Self-actualization (Maslow, 1970) and human skills**[11]: emerging or transformative learning related to the contextualization of the TF-RPG, such as the evolution of meaning schemes, and the maturation process through awareness, emancipation, empowerment, and linkedness (Daniau, 2005).

Transformative Potential of RPGs and Levels of Reality.

	Character	Player	Person	Human being
Dimensions of learning	Knowing	Doing	Being	Relating
Learning domain	General culture	Basic skills	Soft skills	Human skills
Debriefing context	RPG's fiction	RPG's properties	RPG's experiment	RPG's contextualization
Rules	Fictional world	Game	Engagement	Group's imagination
Learning process	Thematic (Disciplinary)	Intrinsic (Experiential)	Inductive (Existential)	Emerging (Transformative)
Examples	History, Ideologies	Game design, Communication	Critical thinking, Ethics	Maturation process, Meaning schemes

Linkedness is a translation of the French term, *reliance*. It adds to the notion of *connection*, meaning, purpose, and insertion in a system (Barbier, 1997). During a transformative role-playing game, players are using a wide range of abilities. Depending of the time spent playing, they may also explore different dimensions of the learning and the maturation process. Thus, while a single experiment would mainly explore the knowledge content, at the same time it may provide a raising awareness of these other dimensions. Nevertheless, only investment in a long-term approach will allow a more active exploration of both the educational and the transformative potential of the TF-RPGs.

Functions of a Transformative Role-Playing Game

Gaming and Play Skills

Game playing, particularly among children, has been widely used in therapy (games used to reveal personality traits, mood changes, and traumas, or to develop abilities such as speech, behavior, and problem solving), art (games as performance), and education (games as learning tools). The supposed natural link between children's free play and their development, or rhetoric of play as progress (Sutton-Smith, 2001), ideas partly inherited from the 18th century romantics, has also given rise to countless typologies which try to classify games according to their supposed educational potential. If this underlying rhetoric assumes a clear link between playing and learning, the reality seems much more complex and ambiguous (Sutton-Smith, 2001). Moreover, as Brougère (2005) argues, the transfer of play skills acquired during the game into real life still remains to be seen. Gaming is essentially a way to gain new play skills *by way,*

of, and for the game. However, like other forms of situational activity involving active participation in the decision process, games are also an activity that could potentially help informal learning (Brougère, 1999; Lave & Wenger, 1991). In this way, part of the play skills developed or enhanced through a game are likely to be transferable, at least temporarily, to reality. Accordingly, adding a debriefing to the game may promote the transfer of these assets (Crookall, 2010).

Playing, as learning (Bélanger, 2015), means a personal, even intimate commitment. Player's involvement depends mostly on her own experience, interests, attitudes, goals, abilities, and her current mood. In addition, as players partly reveal themselves through their play, the authenticity of their engagement is essential to allow them to explore their personal journey through an inter-subjective perspective. Thus, any game may induce different effects in each of the players. In his five play-scale levels of development,[12] Brian Sutton-Smith describes what might be a more complex level of transfer as "Playful forms of play":

> "These are the games of those who have a creative capacity for playing. Typically this is demonstrated by the variety and complexity of playful transformations of which the players are capable, and by their ability to convert their own playful characteristics into play scenarios for others. Because flexibility is the major characteristic of such play, play at this level has the greatest potential for transfer. The rhetoric of play as progress may apply most strongly to these relatively rare players, who are flexible enough to perceive the possibility of transfers." (Sutton-Smith, 2001, p. 45)

In other words, an experienced role-player and GM could, through a transformative approach, learn from her play and explore actively a wide range of significant learning possibilities (Fink, 2003). By doing so, she might be able to better transfer new play skills into human skills and thus influence her own personal development. On the other hand, these skills, developed and revealed through the player's experience, would remain confined to the recreational gaming if the debriefing is not acted upon or exploited.

Numerous attempts have been made to classify or characterize the multiple dimensions of play and game. Incidentally, each of them (Caillois, 2001; Huizinga, 1955; etc.), either completed or contested to a certain extent by the one that followed, reflects the culture of belonging, the field of study, or the personal concern of their author (Sutton-Smith, 2001). Among them, for example, Gilles Brougère (2005) characterizes recreational activity with the following five criteria, while noting later that the first two are in fact sufficient to identify the activity: the second level – pretending; the decision – personal engagement; the existence of decision-making procedures – rules; uncertainty about the game's outcome – uncertainty; downplaying the consequences – frivolity. From an ecobiopsychosocial perspective, the frivolity and pretending criteria have complementary functions and are linked together. Through these four criteria we could identify four generic play skills which could be linked to any kind of game, and in particular to RPGs. In this sense, a good role-player would try to follow these principles:

- Uncertainty – accepting an element of chance, adapting her play to different situations, and just playing for fun;
- Rules – respecting the rules of the game and improving them in concert with the other players, in order to enhance both playability and creativity;
- Personal engagement – being genuinely involved in the game, encouraging others to do the same, and playing seriously but not overdoing it;
- Frivolity and pretending – improving the realism of her play, developing a distancing and empathizing capacity all the while playing seriously;

Nonetheless, each player may develop only some of these play skills. We could also use in the same way many other characterizations of games, like the four defining traits of all games proposed by McGonigal (2011, p. 21): "a goal, rules, a feedback system, and voluntary participation". Then, these different characterizations would allow us to create slightly different variants of generic play skills, which might better define a good player. However, these generic play skills correspond quite well to several human skills that might be useful in everyday life.

Transformative Role-Playing Games and Human Skills

Any game system, from strategy games to role-playing games, necessitates the development of more or less specific abilities in order to improve the player's gameplay. For example: memory and logic in chess, bluff and intuition in poker, etc. For their part, role-players especially exercise creativity, spontaneity, active engagement, and imagination (Bowman, 2014; Daniau, 2014). Moreover, as seen before, the RGP's functions encourage the player to solve problems, co-create a fictional world, build a community, and explore identity (Bowman, 2010). Accordingly, this experiential learning approach allows the players to better "integrate their knowledge by addressing problems, exploring alternatives, and seeking creative and novel solutions" (Bowman, 2014, p. 122). Throughout a TF-RPG, role-players are also using, developing, and reinforcing their abilities to play a role (as per Moreno, 1966), gather information, draw on their background knowledge, be intuitive, proceed by trial and error, collaborate in the decision-making process, assume the consequences of their choices, improvise accordingly to a situation, communicate pertinently, experiment with the small group dynamics (Daniau, 2005), and participate in a collaborative fictional immersion (Balzer, 2011; Kapp, 2013). Depending on the game design, a role-player may also use, reveal, or develop several soft skills, including strategies for conflict resolution, diplomacy, teamwork, leadership, relationships, debating/speaking skills, and spontaneous problem-solving.

Furthermore, from a more personal development perspective, an Edu-RPG may "improve feelings of self-efficacy and perceived competence through goal setting and achieving, allowing individuals to contribute their personal talents to the success of the group, which may increase the student's sense of agency and empowerment" (Bowman, 2014, p. 118). Through their game-play, players are also stimulated to develop a sense of well-being and build confidence in their creative potential

(Henriksen, 2006). In other words, RPGs encourage participants to explore several dimensions of the maturational process (Daniau, 2005). Finally, a debriefing is likely to increase self-awareness and foster the development of "deeper levels of comprehension, critical thinking, long-term retention, and shared understanding" (Bowman, 2014, p. 122).

In addition to these specific skills, the GM also uses several skills linked to her role in the TRPG as she is applying the rules (gaming), encourages the role taking (simulation), describes the contexts, situations, and actions (narrative), and supports the group's imagination (coherence). Indeed, all these specific play skills, such as capturing the attention, improvising a speech, manipulating rules, and leading a collaborative creation, correspond quite well to many human skills that are useful in everyday life. Furthermore, during the development of a RPG, the GM has to adjust its complexity constantly so as to give the participants challenge that measure up to their collective ability. By doing so, she can avoid the risk of both anxiety and boredom, ensuring more fun around the table. Throughout the RPG progress, the group may at times experience some sort of collective enjoyment quite similar to the flow described by Csikszentmihalyi (1996) and later discussed by Cowley, Charles, Black, and Hickey (2008). This kind of *group game flow* is especially linked to the ephemeral feeling of a truly shared group imagination.

Human skills, such as the ability to listen sensitively, think critically, empathize, or distance oneself, develop through our relationships with those around us. They are the foundations of our humanity (Hébrard, 2011) and reflect our maturation process at work. Whereas the transfer of these skills in real terms is still difficult to assess, the transformative potential of RPGs in terms of the desire to discover, assertiveness, and the development of creativity seems quite evident (Henriksen, 2006; Meriläinen, 2012; White, 2008). Moreover, by completing an RPG, players also develop a sense of self-efficacy (Bandura, 1997) which may encourage their desire to learn, both in the game and in real life (White, 2008). Further, the more the players play, the more they gain confidence in their playing partners and in their ability to improvise (Daniau, 2015). Therefore, when the game experience is played out over a prolonged period, participants can tap into the evolution of their play for a fresh look at their personal journey (Daniau, 2005). Then, the inter-subjective and contextualized analysis of that experience raises their awareness about the specific skills they had used during the TRPG. The debriefing also helps to reveal not only the players' spirit and various human skills but also their meaning schemes, including values, belief systems, and attitudes that condition their participation (Bowman, 2014).

As seen before, the functions of RPGs are to help the participants to create a community, solve problems, develop creativity, and explore identity. Consequently, from an educational or maturational perspective, these four functions may lead participants to respectively strengthen the group's imagination, enhance their understanding of the game complexity, create fictional worlds, and experiment different points of view. In other words, the TF-RPG could be used as a tool for team building, game design, collaborative creation, and personal development.

Conclusion

During a role-playing game (RPG), players interact with their environment by adapting their play to suit the characters and situations encountered. As in reality, although without the risks, they must deal with the rules of society, adapt to environmental changes, manage priorities, and assume the consequences of their actions. Whereas educational RPGs are designed to respond to different educational constraints, goals, or criteria, transformative role-playing games (TF-RPG) are built first and foremost on the RPG's specificities:

The conditions for success of TRPGs, such as small groups, long playing duration, playful atmosphere and confidentiality, bring participants to develop, enrich, consolidate, and support both the group's imagination and their learning process;

The properties of a RPG, which include the game world, rules, scenario, and the atmosphere, bring the participant, as a character, player, person, and human being, to explore her identity through various forms of interaction;

The progress of a RPG shows how players deal with uncertainty, rules, personal engagement, and pretending. By playing, they use, explore, improve, and reveal their play skills. The TF-RPG aims to facilitate their transfer into knowledge, basic, or soft skills;

The functions of RPGs bring participants to create a community, solve problems, develop creativity, and explore identity (Bowman, 2010). Accordingly TF-RPGs could be used for team building, game design, collaborative creation, and personal development.

In order to facilitate the transformative learning, participants are asked to create links between RPG's specificities, their personal journey, their own meaning schemes, and four dimensions of learning – knowing, doing, being, and relating. The debriefing brings them to co-explore through a search for coherence approach these various aspects which include awareness, emancipation, empowerment, and linkedness (Daniau, 2005). Not only does the TF-RPG carry a real transformative potential, but it also fosters a desire to discover, encourages self-confidence in spontaneity and improvisation, supports empathy and distancing abilities, helps to build upon new interests and to reevaluate our relationship to the learning process (reappropriation of content and form). I am confident that those who are studying the educational potential of RPGs will soon emerge with more finding**s**, thus supporting Paul Bélanger's assertion that the "RPG is one of the new frontiers in the field of education".

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Notes

1. "A global simulation is a script or a scenario framework which allows a group of learners, up to a whole class of about 30 students, to create a universe of reference – an apartment block, a village, an island, a circus, a hotel, to animate it with characters interacting with each other and to simulate language functions which are needed within this framework, which is at the same time a thematic place and a universe of communication." (Fischer, 2006, p. 12)

2. Serious games refer to video games with educational goals. Gamification refers to the use of game mechanics to make an area more attractive (marketing), focusing on the human predisposition to play.

3. Findings of Edward J. Taylor's critical review about transformative learning in adult education "point to the importance of fostering group ownership and individual agency, providing intense shared experiential activities, capitalizing on the interrelationship of critical reflection and affective learning, developing an awareness of personal and social contextual influences, promoting value-laden course content, and the need for time." (Taylor, 2000, p. 1). The TF-RPG presents very similar conditions for success.

4. For a broader view, see *The brain - From top to bottom*, McGill University (CA) - http://thebrain.mcgill.ca/flash/a/a_07/a_07_p/a_07_p_tra/a_07_p_tra.html

5. For a more thorough examination of this approach, details of the experiments, debriefing, quotes or results, maturational process, and dimensions of reality, see Daniau (2005).

6. This categorization is based on the triad individual-society-species of human identity, as proposed by Edgar Morin (2001). It also refers to a proposal by Waskul and Lust (2004) which distinguishes between the person, the player, and the character.

7. About the Four Pillars of Lifelong Learning, see *Revisiting Learning: the Treasure Within*, 2013 - http://unesdoc.unesco.org/images/0022/002200/220050E.pdf

8. For more details about the character's dimensions, we can refer to the four interrelated aspects of a role-play simulation as presented by Crookall, Oxford, and Saunders (1987): the individual, the represented person, the role-profile, and the participant.

9. The 9 essential skills (Canada): Reading, Writing, Document & Computer use, Numeracy, Thinking, Communication, Working with others, Continuous Learning – http://www.esdc.gc.ca/eng/jobs/les/definitions/index.shtml

10. The 9 transversal competencies (Québec): Intellectual (Uses information, Solves problems; Exercises critical judgment; Uses creativity); Methodological (Adopts work methods; Uses TIC); Personal and Social (Achieves her potential; Cooperates with others); Communicates appropriately http://www1.mels.gouv.qc.ca/sections/programmeFormation/secondaire1/pdf/chapter3.pdf

11. For example, see the seven facets of essential knowledge to develop in the future for human kind (Morin, 2001): Detecting error & illusion; Pertinent knowledge; Human condition; Earth identity; Confronting uncertainties; Understanding each other; Ethic for human genre.
12. The four first levels are, in a growing order of complexity: Inability to play; Play as pathology; Play as a form of security; Play as stereotypic.

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