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De-Roling from Experiences and Identities in Virtual Worlds

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Abstract

Within dramatherapy and psychodrama, the term ‘de-roling’ indicates a set of activities that assist the subjects of therapy in ‘disrobing’ themselves from their fictional characters. Starting from the psychological needs and the therapeutic goals that ‘de-roling’ techniques address in dramatherapy and psychodrama, this text provides a broader understanding of procedures and exercises that define and ease transitional experiences across cultural practices such as religious rituals and spatial design. After this introductory section, we propose a tentative answer as to why game studies and virtual world research largely ignored processes of ‘roling’ and ‘de-roling’ that separate the lived experience of role-play from our everyday sense of the self. The concluding sections argue that de-roling techniques are likely to become more relevant, both academically and in terms of their practical applications, with the growing diffusion of virtual technologies in social practices. The relationships we can establish with ourselves and with our surroundings in digital virtual worlds are, we argue, only partially comparable with similar occurrences in pre-digital practices of subjectification. We propose a perspective according to which the accessibility and immersive phenomenological richness of virtual reality technologies are likely to exacerbate the potentially dissociative effects of virtual reality applications. This text constitutes an initial step towards framing specific socio-technical concerns and starting a timely conversation that binds together dramatherapy, psychodrama, game studies, and the design of digital virtual worlds.

1. Introduction

Psychodrama and dramatherapy diverge in significant ways as methods of psychotherapy “in which clients are encouraged to continue and complete their actions through dramatization, role-playing and dramatic self-representation” (Kellerman, 1992, p. 20). According to the original intentions of its inventor Jacob L. Moreno, psychodrama relies on specific and repeatable procedures to guide and develop precise therapeutic ‘journeys’ (1972), while dramatherapy tends to be less structured, and spontaneously draws from the full range of dramatic activity as a therapeutic source (Jennings et al., 1994, pp. 129-131).

Functional and therapeutic differences notwithstanding, dramatherapy and psychodrama have several obvious commonalities that are particularly evident in the techniques that both practices share. In relation to the specific objectives of this text, it is relevant to point out that both methods embrace end-session activities such as ‘cooling down’, ‘de-roling’, and post-session processing.

In the context of psychodrama and dramatherapy, the term ‘de-roling’ indicates a set of techniques meant to assist an actor in ‘disrobing’ oneself from a character after a therapeutic session. For example, in her overview of necessary procedures for good role-playing induction, Kryisia M. Yardley-Matwiejczuk (1997) discusses the psychological importance of techniques for structuring and guiding the transition of role-players back to their everyday existences. David Read Johnson and Renée Emunah similarly emphasize the importance of de-roling as a way of dealing with the paradoxical “‘continuity of the me and not-me’ within drama” (Johnson & Emunah, 2009, p. 76). The aim of de-roling, they argue, is to structure the “‘shift from one reality, that of imagination, to another one, that of the everyday, for the purpose of reflection” (Johnson & Emunah, 2009, p. 76).

In this text, we propose to understand de-roling in the specific context of the interactive experience of digital virtual¹ worlds. Most existing academic approaches to the same context focus on the experience of immersion (Murray, 1997; Ryan, 2001; McMahan, 2003), on notions of embodiment (Taylor, 2002; Grodal, 2003; Hansen, 2006; Klevjer, 2006; 2012; Gee, 2008; Bayliss, 2007a; 2007b; Martin, 2012), and incorporation (Calleja 2011, p. 169). Previous efforts in the direction of understanding identity and agency in virtual worlds have also examined ludic subjectivity (Vella, 2015) in relation to digital avatars (avatars that can be explicitly or implicitly present to the actors/players) as well as ways to assess the effects and durability of experiences ensuing in relation to virtual worlds. However, the transitional moments of ‘entering’ a virtual world, assuming a virtual identity therein, and later abandoning both, remained critically undertheorized.

Our work constitutes an initial attempt to explore this academic ‘blind spot’, a lack that we found particularly surprising in the light of the recognition that digital technologies and the interactive worlds they disclose play an increasingly central role, in

¹ The adjective ‘virtual’ was originally coined in modern Latin to encapsulate the idea of ‘potentiality’. *Virtualis* is a late-medieval neologism the existence of which became necessary when Aristotle’s concept of *δύναμις* (*dynamis*: potentiality, power) had to be translated into Latin (van Binsbergen, 1997, p. 9). The concept of ‘potentiality’ at the etymological foundation of the adjective ‘virtual’ provides the background for understanding why, at least in one of its interpretations, it is used to indicate the latency of certain possibilities inherent in a specific artifact, combination of artifacts, or state of things (Gualeni, 2015, pp. 54-55). A more common connotation of the adjective ‘virtual’ was presented by Pierre Lévy, not in opposition to ‘actual’ in the sense discussed above, but to ‘actual’ in the specific sense of something that is pertinent to the world humans are native to. (Lévy, 1998, p. 14) In the context of this text, we will use ‘virtual world’ to indicate the interactive experiential horizon disclosed by digital media. For a more complete elucidation of what is meant exactly by the term ‘world’, please refer to box 2.

the deconstruction and reconstruction of personal and cultural identity, in late and post-modern societies (Glass, 1993). Virtual reality technologies, in particular, allow for frequent, immersive, and persistent shifting between multiple and concomitant versions of ourselves. As such, we consider it urgent to examine how de-roling practices could play a part in structuring these transitions and harnessing the cognitive and psychological effects emerging from them. According to the perspective that we are proposing in this text, the experiential relationships we can establish with ourselves and with our surroundings in digital virtual worlds are comparable with those disclosed by pre-digital activities. We also believe that their accessibility and immersive phenomenological richness are likely to exacerbate the potentially dissociative effects of virtual experiences. On those hypothetical premises, this text argues that de-roling techniques are likely to become more relevant - both academically and in terms of their practical applications - with the growing diffusion of virtual reality technologies in social practices.

2. De-Roling

Within dramatherapy and psychodrama, the term ‘de-roling’ indicates a set of activities that assist the subjects of therapy in ‘disrobing’ themselves from their characters. The activities that are part of de-roling often take repetitive and symbolic forms that have several analogies with the formal structures that occur in practices, such as religious rituals and games (Cattanach in Jennings et al., 1994, p. 38). Some of the techniques involved in punctuating and segmenting these transitional moments could be exemplified in the formalization of the activity, such as by removing masks and scenic costumes or by abandoning the space where the therapeutic enactment had been staged (Jennings et al., 1994, pp. 129-131). Other procedures involve dialogue, and are meant to encourage and facilitate self-reflection and the verbalization of thoughts and feelings by the subjects of therapy.

While de-roling techniques are considered to be constitutive for therapeutic methods like dramatherapy and psychodrama, its techniques and procedures are not common or commonly used in professional acting, and rarely appear in theatre studies literature. Theatre scholar Sally Bailey reports having known many actors – and having read about others – who had been bothered by playing particularly intense roles (Tinkler, 2014). According to Bailey, those roles led to alterations in their personality, sometimes leading to depression and heavy drinking, precisely because they did not adequately de-role at the end of the acting sessions. Bailey further observes that “they spend many, many years learning how to get into role but they’re never taught techniques about getting out of it” (Tinkler, 2014).

Several of the activities and techniques that are involved in de-roling processes are not exclusive to dramatherapy, psychodrama, or to acting in general. They have operative as well as conceptual commonalities with several cultural practices that involve more or less dramatic and more or less playful forms of subjectification - mechanisms by which a particular subjectivity is constructed for an individual to inhabit in relation to a given situation. This text initially provides an overview of the approaches and techniques that regulate and ritualize transitional moments in a number of socio-cultural contexts.

As already outlined in the introductory section, in dramatherapy and psychodrama - or more widely in the context of expressive therapy - activities and techniques involved in de-roling pursue the following psychological effects:

- They promote, in the subjects of therapy, the development of a psychological and critical distance from the non-actual scenarios (or worlds) in which they were acting, thus stimulating self-reflection and consideration for new possibilities of being, both of which are central to the therapeutic process (Landy, 1996, pp. 16-27; Johnson & Emunah, 2009, pp. 75-78).

- They encourage and facilitate the verbalization and the sharing of thoughts and feelings (Robbins, 1988, pp. 208-217; Jennings et al., 1994).
- They mitigate the potentially traumatic effects of cognitive dissonance that might ensue from having assumed a new identity, having adopted uncommon ways of perceiving, and having adapted to unfamiliar scenarios (Cattanach in Jennings et al., 1994, p. 39; Chesner in Jennings et al., 1994, pp. 71-73). This is especially the case in situations where the actors or the subjects of therapy are asked to immerse themselves in particularly delicate or emotionally intensive roles (ibid.). The need for de-roling in terms of the emphasis on there being a “protective barrier to be crossed between two kinds of reality” (Grainger in Jennings, 1992, pp. 175) is particularly pressing in cases when the actors or the subjects of dramatherapy are affected by thought-disorders characterized by dissociative conditions such as schizophrenia or multiple-personality disorders (for a more detailed account see section 5).

With the objective of framing de-roling in the active, experiential context of digital, virtual worlds, we will specifically focus on the last set of intended psychological outcomes. Although certainly worth academic interest, this initial effort of ours will not directly address the first two psychological effects of our list. In other words, we will not directly discuss or problematize the therapeutic possibilities of pursuing psychodrama and dramatherapy through the mediation of virtual worlds. As will be clarified in the concluding section of this text, we consider it to be a timely and fascinating research topic, but one that exceeds the scopes and objectives of this foundational work focused on de-roling.

Our exploration of the possibilities and the psychological implications of ‘de-roling’ from virtual identities and virtual experiences begins by articulating a broader understanding of de-roling as a set of procedures and activities aimed at ensuring a less abrupt, more mindful, and more therapeutically efficient transition back from a temporary, extra-ordinary state of being. Here, we use the adjective ‘extra-ordinary’ in a sense that corresponds to its etymological origin and indicates something that transcends the ordinary, experiences that go beyond one’s everyday identity and one’s exclusive relationship with the actual world² (the world we are native to and share as biological creatures).

² In the philosophical tradition of phenomenology, the term ‘world’ generally indicates a set composed of beings that are understood together with all their (detectable) properties and mutual relationships. More specifically, a world describes that set as experienced by one of the beings involved in it. To be identified as a world, that set needs to be experienced in ways that are persistently perceivable and behaviourally consistent, as those qualities are necessary to make it emerge as an intelligible world for a being within a certain spatial-temporal context (Gualeni, 2015). In somewhat simpler words, a world indicates a way in which reality is disclosed to a being (Verbeek, 2005, p. 108), which also implies that ‘world’ as an existential situation is inseparable from the being to whom this existential situation is given. Accordingly, for a subject in relation to a certain experiential context, a context can only be recognized as a world when it discloses experiences that are to a degree persistent in their being perceivable, intelligible, and mechanically consistent (Gualeni, 2015, p. 6). This essential understanding of what experientially defines a world consists precisely in the possibility to address the active experiences of drama and the explorations of interactive digital worlds as similar phenomena on the basis of their responsiveness, their (relative) phenomenological stability and intelligibility, and their possibility for repeated accesses.

Drama is an extra-ordinary activity by definition: in drama, subjects consciously act as if they were someone else or even something else. The dramatic action frames our perception and understanding of events by marking off a 'stage world' and corresponding 'stage identities' that are conceptually separated from the actual world. The implicit assumption at the basis of the specific, therapeutic use of drama is that the most basic perceptions and feelings (in which our sense of self are grounded) are experienced through our bodily presence within - and belonging to - the actual world. On those premises, dramatherapy provides valuable insights and healing experiences precisely when the subjects of therapy immerse themselves "in the experience of being alive 'in' the body, and [when] meaning is something lived rather than examined" (Grainger in Jennings, 1992, p. 169). These observations, together with the proposed definition of what constitutes a world, form the basis on which we will articulate the concept of de-roling within the interactive virtual worlds disclosed by video games, digital simulations, and virtual reality applications.

At this point in our exposition, we consider it important to clarify that the understandings of de-roling embraced in the paragraphs above take the evident, and evidently questionable, ideological standpoint that there is in fact something that we can recognize as an 'everyday' existence, an 'ordinary' state of being. In other words, our argument assumes that there is a relatively consistent, and thus identifiable, combination of sensations and emotions that qualify our everyday existence and upholds our individual sense of the 'self'.

Erving Goffman's (1956) academic work on the presentation of the self would perhaps render this idea problematic. His work argues that, in our everyday life, we adopt different roles within social situations, whether to project a desired sense of self or even just to maintain face. It might be paradoxical to argue in favour of de-roling in social practices in light of Goffman's theories: for him the boundaries between the various roles we can adopt are blurred and porous. While we acknowledge that Goffman's perspective could invalidate our use of the adjective 'ordinary' in relation to the concepts of 'state of being' and 'personal identity', we will still use it in the context of de-roling for two reasons:

- The implicit assumption that there is an ordinary state of being and an ordinary identity is also embraced by psychodrama and dramatherapy. Both disciplines aim to solve the issues of an actual person (or of group of people) by isolating and re-framing these issues within a clearly delineated and safe dramatic 'space'. That being the case, questioning whether addressing specific issues help actual selves or performed selves seems pointless.
- The distinction between an extra-ordinary state of being (with its attendant role identity) and the assumed persistence of self-and-world in one's 'ordinary' state of being and role becomes particularly important in negotiating the significance of virtual experiences in the digital environments of video games, simulations, and virtual reality applications.

Taken in this wider and inevitably ideologically-laden connotation, de-roling techniques can be identified as complementing a number of socio-cultural practices outside of theatre and drama-therapy. Despite being ascribable to different social practices, all the de-roling techniques listed in the section below involve a temporary and extra-ordinary state of being from which the participants can transition back.

2.1. De-Roling Techniques in Religious Rituals and Post-Liminal Rites

According to Imber-Black et al. (1988), "[r]ituals are coevolved symbolic acts that include not only the ceremonial aspects of the actual presentation of the ritual, but the process of preparing for it as well" (p. 8). Rituals traditionally mark events and transitions that are largely transversal in human

cultures, such as mourning the dead, becoming part of a new social group, or changing social status (e.g. coming of age, marrying, and being recognized as a religious figure or a special individual).

The field of cultural anthropology characterizes ritual activities as subdivided in phases. The final phase at the end of most rituals functions as a moment of transition: it is in that concluding moment that the subject involved in the ritual is re-integrated into society through symbolic actions and passages (Turner, 1969, p. 155, p. 156; van Gennep, 1977, p. 21). The activities that take place in this transitional phase are customarily labelled 'post-liminal'. Post-liminal activities serve the purpose of 're-incorporating' the ritual subjects, that is, to mitigate the disorientation and possible cognitive dissonance ensuing from the 'dissolution' of the subjects' identity during their ceremonial transformations.

Religious ceremonies and post-liminal rites help re-establish one's sense of 'self' and rationalize the new possibilities and perspectives that the liminal experience disclosed (Robbins, 1988, pp. 208-209). In analogy with the post-liminal phases of rituals, expressive therapy offers techniques and activities that can assist the subjects of therapy in structuring their transitional experiences and come to terms with personal transformations (*ibid.*).

For theatre scholar Ann Cattanach, the activities that are part of de-roling are analogous with the formal structures and effects of rituals in terms of their symbolic meaning and their repeated use (Cattanach in Jennings et al., 1994, p. 38). From her perspective, the de-roling techniques employed in psychodrama and dramatherapy could be understood as the ritualization of procedures that facilitate and accompany subjects in their therapeutic process. As already explained, those transitions consist in shifting from an active, dramatic state of being to another one, rooted in the subjects' everyday lives. Once established, these de-roling rituals are repeated each time a therapy group meets, and they tend to not to change. They can involve, among other procedures, the formal removal of masks and scenic costumes, or can be focused on emphasising the abandoning of the space where the dramatic action had been staged (Chester in Jennings et al., 1994, pp. 129-131).

2.2. De-Roling Techniques in Spatial Design

In various cultural contexts and historical periods, architects and architecture theoreticians have approached the built environment as a medium (Goodman, 1992; Whyte, 2006). Those perspectives advance the claim that rooms, buildings, complexes, and landscapes can be studied in their capability to convey meaning to the people traversing and inhabiting them - to communicate information and to elicit feelings and emotions that go beyond the mere functionality of artificial spaces. Accordingly, the production of specific experiences with space, light, materials, movement, and the relationships of build environment with historical and cultural contexts have been analysed in terms of their transformative effects both on individual behaviour as well as various modes of subjectification (Lynch, 1984; Foucault, 1984).

The physical arrangements and subdivisions of space, their symbolic potential, the specific activities that take place within structured spaces, and the processes involved in transitioning from one space to another are some of the key psychological tools that architects and dramatherapists share in their respective practices of subjectification. As such, the history of architecture and practices connected to architectural design offer several spatial strategies for role-taking and role-abandoning that are relevant to our quest of exploring a wider and more encompassing horizon for the practice of de-roling.

Architecture theorist Christopher Alexander, for example, identifies several recurrent spatial patterns in sacred and ritual spaces that are significant for the purposes of this essay. In particular, Alexander highlights the fact that both our relationship with the divine and the officiating of rites have traditionally been associated with specific architectural features. Among those features are

symmetry, decoration, the symbolic use of height that qualify sacred buildings, and the existence of gated, transitional pathways from common, everyday spaces to the private, sacred ones where rites and ceremonies are carried out (Alexander et al., 1977; Alexander, 1979).

The progressive and symbolic segmentation of such pathways and the deliberate use of height (height of buildings, ceiling heights, the elevation of a spatial element above other elements, as well as the act of climbing involved in reaching spaces that are extra-ordinary) serve as architectural strategies to define and ritualize transitional experiences. These architectural tools also serve the purpose of structuring the process of abandoning (or re-appropriating) one's sense of self. It is typical for these spatial functions to work in the direction of segmenting the path of the devout (or the religious figures presiding the rites) into a number of recognizable stages between a public sphere and a more private one, between a space that is shared and a space that is intimate, between a common state of being and an extra-ordinary one.

2.3. De-Roling and De-Briefing from Role-Playing and Training Simulations

In line with what was observed in the previous two practices (post-liminal rites and the psychological effects of certain architectural elements and patterns), the integration and use of role-play in education and training processes also emphasize the psychological and formative need for assisting trainees in their transition back to their everyday identities. In relation to this point, we would like to clarify that the literature concerned with the formative and educational uses of role-play tends not to make any functional distinctions between role-playing situations in actual environments versus digital ones.

In the context of education and training, and in analogy with the practices discussed above, de-rolling techniques offer a structured space for critical reflection and for facilitating the re-appropriation of the trainees' everyday bodies and identities. Pilots training with flight simulators, for example, experience a degree of disconnection between how their bodies respond to actual situations and how they react to virtual simulations. It takes them several hours to fully 're-incorporate',¹ and this is the reason why several airlines do not allow their pilots to fly within a specified period after they have been training in a digital simulator.

When trainee medical doctors use computer simulations, they are invited to take a role that treats the suffering and the medical conditions of a simulated patient as if they were those of an actual human being. On those premises, Faith Stafford reports anecdotal evidence of trainees being actually psychologically affected by the death of a virtual patient (Stafford, 2005). In addition to the use of humour, which Stafford considers to be an oft-neglected psychodynamic strategy for distancing oneself from a potentially traumatic event or situation, the author emphasizes the paramount importance of the moment of debriefing that takes place after a training session. The educational as well as psychological benefits of de-rolling through debriefing ensue from the fact that this is the moment in which "the meaning of the enactment is clarified and the lessons to be learnt are underlined" (ibid.).

2.4. Moving Out of Character in Tabletop and Live-Action Role-Playing

Perhaps surprisingly, the question of the transition into, and, even more so, of the transition out of the in-game role has not been granted a great degree of importance with respect to tabletop role-

¹ This is due to the fact that the experience of mass and acceleration in the virtual world upheld by the digital simulation (and often enriched by mechanical devices) is inconsistent with how the actual bodies of the pilots adapt and respond to them in the actual world. During the period that follows their computer simulation training, which might last up to several hours, they often experience difficulties with balance. (De Mul, 2010, p. 203)

playing. In his landmark sociological study of *Dungeons & Dragons* player communities, Gary Alan Fine argues that “the consequences of stepping out of role are relatively light,” perhaps because “role flexibility is expected and allowed” (Fine, 1983, p. 283). Fine draws on Goffman to explain the way in which players tend to shift constantly between various interpretative frameworks, moving seamlessly, from one moment to the other, between the roles of social person, player and character (Fine, 1983, p. 186). Due to this role-fluidity within the activity as a whole, the final transition at the end of the activity might not be perceived to be particularly problematic.

Matters are different with respect to the practice of live-action role-playing (LARP), where there have been more explicit attempts at tackling the difficulties associated with the transition between domains and roles at the end of the role-play. Among them, one of the most prominent is the problem of ‘bleed,’ in which the line between the LARP situation and the player’s actual life is blurred, allowing intense and potentially troubling emotions through (Montola, 2010; Bowman, 2013). Most often, this has been addressed by the practice of debriefing (Atwater, 2016).

Eirik Fatland writes about the importance of debriefing in validating the individual’s subjective experience of the LARP, and as a means to process the experience in such a way that it can be translated into “lasting memories, reflection and learning” (2013). According to Fatland, debriefing also offers the opportunity to deal with any residual problems with the individual role-play session (ibid.). Similarly, Lizzie Stark speaks of the significance of ‘debriefing’ at the end of a LARP activity, arguing that it “can help players begin to process their emotions about the game, address things that were or could have been problematic about the game or the way it was played this time, and can provide feedback to organizers” (2013). Though she does not use the term ‘de-roling,’ Stark does state that the first step of a debrief must be to “a little ritual to help people say goodbye to their characters or get out of character.” (ibid.) In a deliberately open-ended list, she suggests that this may be achieved by means of techniques such as asking players to literally disrobe themselves of their character by placing a costume item associated with the character on the ground, or by providing a countdown before the return to the actual domain (therefore, we might say, establishing a temporal threshold between worlds).

Building on Fatland’s and Stark’s suggestions, Sarah Lynne Bowman and Evan Torner and specifically make mention of de-roling as “a form of debriefing and detaching from one’s in-game role, to recover from LARPer’s adoption of an alternate persona for long periods of time, which requires a different frame of reference” (Bowman & Torner, 2016, p. 163). The de-roling techniques that they mention as commonly used in LARPing include “taking off a piece of one’s character’s costume and placing it in a circle, saying goodbye to the character for a time; thinking of one or more aspects of one’s character that one admires and “taking” it with them; thinking of one or more aspects of one’s character one dislikes and wishes to leave behind; speaking about one’s character in the third person during war stories or debriefing to emphasize a sense of distance; and making sure to interact with all the people from a larp both in-character and out-of-character to emphasize the distinction” (Bowman & Torner, 2016, p. 164).

3. A Basic Taxonomy of De-Roling Techniques

After proposing a basic understanding of de-roling in the previous sections, we presented a sweeping overview of techniques through which different socio-cultural practices structure and guide people’s physical, psychological, and perceptual transitions back from an exceptional state of being to their everyday identities. With the objective of providing some initial organization to the various activities involved in de-roling, and with the intention to add further operational details to them, we will begin this second section by articulating an essential taxonomy of de-roling techniques. The following, practice-oriented taxonomy does not aspire to be complete and exhaustive, but constitute an initial, systematic effort to frame de-roling activities. What those practices have in common is

their being embodied, interactive, meaning-making processes in which (or through which) subjects temporarily assume new roles or identities. In the sections below, we subdivided de-roling techniques into two thematic groups based on the observations offered in the previous parts of this text.

3.1. De-Roling Techniques with a Primary Focus on ‘Disrobing’ a Role

This first group comprises activities that are directed towards emphasizing the boundaries that exist between worlds, focused on making the passage between ‘states of being’ explicit and evident to the subjects that are transitioning. Through these techniques, the separation between the actual world (and our everyday identities) and the virtual ones (of drama and digital simulations), becomes an object for the subject’s own, as well as other people’s, critical evaluation. Among the techniques we encountered in the text until now, we list in this group:

- Techniques for segmenting and ritualizing the transition (spatial ‘gating’, rituals for the removal of masks, costumes, makeup items, etc.).
- Procedures focusing on establishing a psychological distance from the experience (the use of humor, of cooling down exercises, the discussion of one’s own character’s life and actions in third person, the post-session use of alcohol and drugs, etc.).
- Techniques that emphasize the non-actuality and the safety of the dramatic representation, that is to say procedures that emphasize - mostly through dialogue - that there is a “protective barrier to be crossed between two kinds of reality” (underscoring the abandoning of the scene at the end of a session by mindfully crossing its spatial boundaries, the ritualized removal of masks, costumes, and makeup, etc.) (Grainger in Jennings, 1992, p. 175).

3.2. De-Roling Techniques Mostly dDirected Towards Accomplishing Therapeutic Objectives

This second group of procedures address the therapeutic effects of de-roling in a way that is more direct and deliberate. Instead of simply focusing on the existence of the boundary, this second group of techniques facilitate a critical approach towards the just-experienced extra-ordinary state and to reflect on what happens ‘across the boundary’. What notions and feelings are important to take with us during the transition? What differences between my virtual identity and my actual one should we direct our attention towards? Given the focus of this group of procedures on verbalization, rationalization, self-criticism, and self-reflection, most of the techniques listed in this group rely on language and dialogue. Based on the social practices observed and discussed in the previous sections, such techniques comprise:

- Methods of engagement through which the therapist invites sharing and verbalization (usually pursued dialogically, prompting the actor to discuss how the various parts of the experience felt, how he or she would have behaved in the same situations that his- or her virtual self had to face, etc.).
- Techniques that encourage self-awareness and self-reflection (group and individual feedback, debriefing moments, etc.).

4. Roles and 'Being-in': Virtual Reality and Game Studies

At first glance, it would appear that the practice of engaging with virtual worlds - whether in the form of screen-based digital games and interactive experiences, or those mediated by virtual reality technologies - has a great deal in common with the various cultural practices described above. As with drama, participants in virtual experiences find themselves adopting characters, pre-designed or otherwise, which they perform at different levels of involvement while maintaining varying degrees of awareness of their actual-self identity.

In particular, the field of digital game studies has expended a great amount of effort in developing theoretical approaches to the player's sense of existing in the gameworld - both in the sense of the player's adoption of the virtual environment of the game as her existential situation, and in the sense of the player taking on of an in-game role or identity, however defined, within that virtual world. With respect to the former, the sense of the gameworld being experientially foregrounded as the player's 'here' has been described through the notion of 'immersion' (Murray 1998; Ryan 2001; Ermi and Mäyrä 2005; Thon 2008) and 'presence' (McMahan 2003; Taylor 2003), building upon foundational work in virtual reality research that had established the use of these terms to describe the user's sense of perceptually inhabiting a virtual domain (Steuer 1992; Sheridan 1992; Pimentel and Teixeira 1993).

In both game studies and virtual reality research, the experience of presence or immersion in virtual environments has been linked to sensory perception. Jonathan Steuer, for example, argues that *depth* and *breadth* of information relating to the virtual world (respectively, the resolution and the number of channels of sensory information) determine the degree of the user's sense of presence (p. 81). Within digital games, Janet Murray defines immersion as the sensory engagement with a virtual reality "that takes over all our attention, our whole perceptual apparatus" (1998, p. 98).

The user's experiential positioning towards the virtual environment, and the player's engagement with the gameworld, cannot be separated from - and, in fact, directly implies - the adoption of a subjective standpoint and existence within that world. Most often, this has been conceptualized as an embodiment in the form of the avatar - the figure the player identifies as 'herself' in the gameworld. Drawing on the phenomenological theory of Maurice Merleau-Ponty, Mark B. N. Hansen emphasizes the *enactive* nature of virtual reality experiences as establishing a "*body-in-code*," a "technically generated body schema" (2006, p. 49) that structures the user's existence in relation to the virtual environment into the shape of a bodily being. In a similar vein, and founded upon both cognitive science and phenomenology, a multitude of game studies scholar argue that the player's investment in the avatar establishes an experiential structure in the gameworld that is, in significant ways, analogous to our embodied experience of the world (Taylor 2002; Grodal 2003; Grodal and Gregersen 2005; Klevjer 2006; 2012; Bayliss 2007a; 2007b; Gee 2008; Martin 2012).

The inseparability of the player's sense of immersion or presence in the virtual environment from one's embodiment within the gameworld in the form of the avatar is expressed, by Gordon Calleja, using the term *incorporation*, which he defines as "the absorption of a virtual environment into consciousness, yielding a sense of habitation, which is supported by the systemically upheld embodiment of the player in a single location, as represented by the avatar" (Calleja, 2011, p. 169).

On the basis of this avatarial incorporation in a virtual world, the player is not only able, but required, to take on and perform a role or identity within the gameworld. Ulf Wilhelmsson's notion of the 'Game Ego' is, once again, founded on the idea of avatarial embodiment in the gameworld, but builds towards a sense of the 'I' or identity the player inhabits in the gameworld which he defines as "a bodily based function that enacts a point of being within the gameworld through a tactile motor/kinaesthetic link" (Wilhelmsson, 2008, p. 61). Taking this further, Daniel Vella develops the

concept of the ludic subject to refer to “the subjective ‘I-in-the-gameworld’ the player crystallizes through engaging with the gameworld by means of the playable figure” (Vella, 2015, p. 22).

5. De-Roling from Virtual Worlds

Despite the considerable body of work that was outlined in the previous section of our essay, little has been written to date regarding the ways in which the player moves into and out of these virtual environment roles and identities. Some efforts have been made in this direction. Murray, for instance, refers to the notion of “threshold markers” to delimit virtual experiences (1998, p. 117). Such gestures have, however, been relatively cursory.

In order to account for this academic lack - at least with respect to game studies and virtual worlds research - it is relevant to note that although, as we have seen, digital game studies emphasize the player’s sense of being-in-the-gameworld and the embodiment in an in-game role, this is qualified with the caveat that the player’s investment in this role is never total. Katie Salen and Eric Zimmermann have argued that, as a formal structure, the player’s engagement with her player-character “is not a simple matter of direct identification,” but operates according to precisely such a “double-consciousness of play,” with the result that “the player takes on the role of the figure in relation to the gameworld while remaining aware of her own existence as a player manipulating a game object” (Salen & Zimmermann, 2004, p. 453). Vella has attributed this to a “double perspectival structure of ludic engagement” (Vella, 2015, p. 55), arguing that, while playing, the player shifts from moment to moment between inhabiting the experiential position of the ludic subject in the gameworld, and that of herself as the player outside the gameworld. Going further, many games ask players to switch between multiple roles or ludic subjectivities, further destabilizing the player’s investment in a single in-game role (Vella, 2016).

This observation would align digital gameplay with Fine’s earlier remark concerning the frame-switching that frequently occurs during table-top role-playing sessions. However, our review of the existing literature on LARP suggests that, at least for certain categories of play activity, the player’s transition into and, even more so, out of the in-game role, might not be such an inconsequential matter. Moreover, developments in virtual reality technology might fundamentally alter the character of users’ experiences of digital game worlds, likely rendering the shift into and out of a subjective standpoint within the gameworld less trivial.

It is beyond the scope of this paper to identify the factors determining whether or not a particular play activity might require structured de-roling practices. Recent investigations of altered perceptions, automatic mental processes and behaviours induced by virtual immersion identify the following as factors that are significantly associated with those phenomena: (i) the player having pre-existing medical conditions, (ii) the duration of a virtual play session, and (iii) the player focusing on experiential dimensions of role-play such as exploration, customization, and escapism rather than on the game’s aspects relating to socialization (Ortiz De Gortari, 2016, p. 11). To these, we might tentatively add a number of considerations which are likely to affect the person’s degree of investment in the in-game role. Among them, we emphasize the granularity of our sensory engagement with the virtual environment, the ease or difficulty of stepping ‘out of character’ during role-play, and the time and energy spent preparing for a specific role. We hypothesize that the greater the personal investment in the role, the more necessary de-roling practices become in order to avoid discomfort, confusion, and potential psychological damage.

As mentioned in the introduction, we were surprised by the lack of specific academic literature on de-roling in relation to virtual experiences, as digital technologies and the interactive worlds they disclose play what is an arguably increasingly central role in the deconstruction and reconstruction of personal and cultural identity in late- and post-modern societies (Glass, 1993). This observation does not simply ensue from witnessing the growing diffusion of digital and virtual technologies in the

social practices of the Western world, but also from recognizing their potential for problematizing and ‘fluidifying’ the seemingly fixed foundations of our understanding of personal as well as social identity (Glass, 1993; De Mul, 2010, p. 125).

In terms of their contribution to personal as well as social transformations, virtual experiences are often embraced as a particularly relevant (and also particularly conspicuous) application of digital technologies. In the past two decades, interactive virtual worlds have started to be understood, and studied, as the testing grounds where new forms of subjectivity are experimented with, and as the contexts where a new humanism has already started to arise (Gualeni, 2015, p. 12). Accordingly, virtual worlds can be recognized as contributing “to our existential struggle both in allowing us to transcend some aspects of our everyday relationship with the actual world, and in disclosing new ways in which our very incompleteness can be experienced and understood.” (Gualeni, 2016, p. 9)

Philosopher Jos De Mul maintained that a typical trait of the experience of virtual worlds is the blurring of the ‘dividing line’ between real and virtual identities of people transitioning in and out of them. He argued that, within virtual environments, “the story of the self takes shape in ever shifting contexts of use, a fact that may strengthen the bonds with others but may also end up in the virtual world becoming a distinct reality of its own.” (De Mul, 2010, pp. 188-189) Citing Kenneth Gergen, De Mul also emphasized the remarkable growth in the number of dissociative disorders in parts of the world where the use of digital technology also underwent a significant increase (Gegen, 1991, pp. 73-74 in De Mul, 2010, p. 189). Motivated by similar intuitions, Frederick Aardema et al. observed an increase in dissociative events (depersonalization and derealization) as a result of the experience of artificial worlds through virtual reality technologies (Aardema et al., 2010).

We deem important to clarify that, to an extent, dissociative conditions are occurrences that are frequent in our everyday existence as human beings, and not all forms of dissociations correspond to states of distress. Common situations like those of dreaming, daydreaming, religious or sexual ecstasy, like being absorbed in a book, in a film, or in a video game, all involve some degrees of psychological dissociation. The same could be said about chemically-altered conditions such as being intoxicated with alcohol or other psychotropic agents. Given the wide variety of contexts and degrees in which dissociations can manifest themselves, the term ‘dissociation’ ended up referring to a wide spectrum of nonclinical as well as clinical phenomena. In order to bypass confusion concerning the uses of the term, James M. Glass (1993) proposed to distinguish between non-pathological form of dissociation and pathological ones, based on two key characteristics:

1. In a pathological scenario, dissociations are often completely outside of the control of the individual, and are often triggered by external conditions rather than personal decisions. In analogy with the previous point.
2. In their non-pathological expression, the dissociative states are less psychologically intense than the pathological ones. Being less psychologically totalizing, a non-pathological dissociation event allows the subjects experiencing it to maintain a persistent and coherent sense of their actual selves. It is precisely that degree of control and self-awareness that allows the subjects of a non-pathological event to recognize and experience a dissociation as a dissociation.

As observed in the previous section of this paper, the research fields of game studies, human-computer interaction, as well as virtual worlds research, invest a great deal of academic effort to concepts that have close relationships with states of sensory and/or psychological detachment from the actual world. The frequent use of constructs like immersion, presence, and incorporation are the most evident examples of such focus (see section 3). These notions are similar to concepts that are used in psychology to examine dissociative conditions, and even appear to be related: a higher degree of immersion or presence in a virtual world corresponds to a greater level of detachment from the world we share as biological creatures (Aardema et al. 2010, p. 1, Gualeni, 2015, pp. 126-128).

In their article, Aardema et al. propose the perspective according to which individuals, who are reportedly likely to experience pathological kinds of dissociations, will have more difficulty adapting to discontinuities in perceptual environments. On this premise, they went on to demonstrate that perceptual discontinuities, induced by temporarily being absorbed by a virtual environment, increase dissociative symptoms among those with a predisposition to have them (Aardema et al. 2010, p. 2).

Faced with the growing diffusion and the commercial success of virtual reality technologies as a particular, and particularly immersive, way of experiencing virtual worlds, we wonder whether these technologies pose additional dangers to more technologically-developed societies in terms of their dissociative effects. Our questions and concerns are further stimulated by observing how the access to extra-ordinary states of being (in this case, in the form of interactive, artificial worlds) are rendered progressively more experientially undemanding and accessible. Will the enticing, accessible, and phenomenologically rich worlds, disclosed by virtual reality technologies, cause even more intense dissociative states in individuals who might be prone to experience pathological kinds of dissociations? And is there a risk that they might trigger psychological and perceptual dissociations of the pathological kind in those individuals who did not originally demonstrate a predisposition to have them?

If we are ready to accept that, like in the case of drama, the meaning and the experiential effects of virtual environments emerge from lived, bodily experiences, then the intensity and granularity of the virtual experience can motivate our questions and our worries. In other words, the perspective we are proposing here is that virtual reality technology, which we understand as quantitatively exasperating some of the traits and experiential effects of our relationships with digital technology applications, might also aggravate their pathologically dissociative ones.

As observed at the beginning of this text, dramatherapy and psychodrama specifically encourage us to discriminate between, and choose amongst, a range of different roles and worlds. Experiencing and examining different roles and perspectives, creating new worlds and acting within them, are all activities that entail shifts and transitions among different perceptions and ways of perceiving. On the basis of those assumptions, academic approaches to dramatherapy and psychodrama recommend caution when working with clients and patients who might find transitional moments traumatic or difficult to adapt to (Grainger in Jennings, 1992, pp. 171-175). Some of the most important tools that dramatherapists can utilize to assist in those transitions, to alleviate the confusion and discomfort ensuing from them are listed among the de-roling techniques that we recognized as having a chiefly therapeutic objective (see section 2.2).

6. Conclusions

In this text, we have argued that de-roling techniques are currently underused and undertheorized in socio-cultural contexts that involve technologically mediated forms of subjectification. This appears to be the case, for example, with training simulations, video games, augmented- and virtual- reality applications. As a consequence of advances in experimental research focusing on the psychological effects of virtual experiences, and in light of the growing use of virtual worlds in social practices, we envisage that de-roling techniques will become more relevant in the near future. Fields, such as game design, game studies, human-computer interaction, virtual world design, and virtual world research, could benefit from further research into de-roling techniques that were originally explored and developed in pre-digital cultural practices like dramatherapy, architecture and LARPing.

On the basis of what we observed, we believe that de-roling activities can become a constitutive component of virtual experiences, and especially so, as ways to complement experiences that demand a high degree of personal investment, a dimension which we understand as relating both

to the time one spends in a virtual situation (or a virtual world) and the emotional connection one established with a virtual identity.

We additionally envisage that a deeper understanding of roling and de-roling would further encourage and advance the therapeutic uses of virtual reality technologies. As already discussed, de-roling procedures can serve the purpose of facilitating critical attitudes towards virtual experiences, and can clarify the meanings of such experiences in relation with our everyday existence. De-roling techniques can also be used to mitigate the potential dissociative effects ensuing from the virtual experiences. This last benefit extends beyond the nascent therapeutic uses of virtual experiences, and can certainly complement and enrich any technically-mediated experience of that kind (unless it is in the intentions of the designer to suspend or delay the ‘disrobing’ of a virtual identity, to elicit specific experiential effects, like in the case of horror video games or games that aspire to leave an emotional toll on the players).

On top of those foundational observations, in this text we proposed an essential, transversal taxonomy of de-roling procedures, and offered an initial exploration of de-roling as a fruitful notion that has both an academic and practical purposes in the study and design of virtual experiences. In particular, it focused on the psychological dangers posed by virtual experiences and on an understanding of virtual worlds as existential tools, as tackled by Gualeni (2015; 2016). Moving forward from this initial effort, we can foresee four particularly interesting developments on the theoretical stances that were proposed in this text:

1. Complementing the therapeutic uses of virtual reality applications, with a specific focus on its transitional phases (roling and de-roling).

With the diffusion of digital technologies and virtual technologies in social practices, extraordinary worlds and identities can be technically experienced and designed, and are no longer the exclusive experiential domain of drama. Recent research shows that virtual worlds are progressively more important and accessible contexts where to pursue and develop psychotherapeutic experiences and effects (Riva et al., 2016). The use of digital mediation in this therapeutic sense could also provide access to additional information about the preferences and developments of subjects of therapy, storing and analysing data concerning their virtual behaviours and responses.

2. The elaboration of design guidelines for virtual experiences and virtual worlds in relation to their psychological effects.

Initially, the formulation of design guidelines for virtual experiences might take the form of a specific taxonomy of activities that can be designed within a virtual world, or as part of the phases that immediately precede and follow a virtual experience (either in an intermediate, transitional virtual world or directly in the actual one). The purpose of those guidelines would be to inform designers about potential psychological hazards emerging from virtual experiences and offer them an initial framework that would grant them greater awareness and control over these largely overlooked dimensions of their work.

3. The examination of the cross-applicability of de-roling in dramatherapy and virtual experiences.

The first two points in this list aim towards contributing to a more complete and systematic understanding of de-roling techniques for virtual experiences. We predict that they might also help make de-roling procedures more clearly defined and better usable in a variety of design setting, whether for the purposes of entertainment or therapy. As these avenues are explored, the knowledge about de-roling that will be gathered in its virtual worlds could be ported back within the practices of dramatherapy and psychodrama. We expect that this might disclose new fruitful techniques and exercises in relation to these practices that could render new, and potentially more efficient, therapeutic results.

- 4. A detailed analysis of the existential aspects and psychological mechanisms that are involved in the concept of ‘investment’ in relation to roling and de-roling.** As already pointed out, we can intuitively identify, among the elements involved in the concept of ‘investment’ in an extra-ordinary experience. Our non-exhaustive list features: the level of sensory engagement with the virtual environment, the ease or difficulty of stepping ‘out of character’ during role-play, the time spent preparing for a specific role, and the duration of the individual role-play session. We hypothesize that the greater the personal investment in the role, the more necessary de-roling practices might be. A more thorough investigation on ‘investment’ might be one of the most impellent requirements for a deeper understanding of de-roling, as well as at which point de-roling is needed to mitigate potential dissociative effects of virtual experiences.

By delineating these four paths for future research to follow, this paper is aimed at mapping out new territory for the analysis and design of virtual world experiences, providing a tentative initial insight to the ways in which the usage of de-roling techniques in relation to such experiences might aid in structuring, containing and elucidating their psychological dimensions.

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