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Striking a Balance between Property and Personality *The Case of the Avatars*

by Norberto Nuno Gomes de Andrade, European University Institute, Florence, Italy

Abstract

Virtual worlds, as powerful social platforms of intense human interaction, gather millions of users worldwide, producing massive economies of their own, giving rise to the birth of complex social relationships and the formation of virtual communities. By enabling the creativity of the player and figuring as an outstanding example of new online collaborative environments, virtual worlds emerge as context for creation, allowing for users to undertake a digital alter-ego and become artists, creators and authors. Nevertheless, such digital egos are not merely creations, but a reflex of their creators, an extension of their personalities and indicia of their identities. As a result, this paper perceives the avatar not only as a property item (avatar as the player's or [game-developer's] property) but also, and simultaneously, as a reflex of our personality and identity (avatar as the projection of one self in the virtual domain, as part of an individual persona). Bearing in mind such hybrid configuration, and looking at the disputes over property rights in virtual words, this essay makes three fundamental arguments.

Firstly, it proposes a re-interpretation of intellectual property rights (namely of copyright law) according to its underlying utilitarian principles, as such principles seem to have been forgotten or neglected in the sphere of virtual worlds. The idea is to re-balance the uneven relationship between game owners and players perpetuated by the end-user license agreements (EULAs), recognising property rights to users over their own virtual creations. In order to evaluate whether a user's contribution to the virtual world amounts to an original and creative work and is worthy of copyright protection, the essay proposes the image of a jigsaw puzzle as a tool and criteria to carry out such examination.

Secondly, the author states that the utilitarian theoretical justification for intellectual property rights does not account for all the dimensions and aspects involved in the user/avatar relationship, namely for the personal attachment and the process of self-identification the former develops toward the latter. In order to fill such lacuna, the author resorts to Margaret Jane Radin's Theory of "Property for Personhood." In this context, Radin's theory is deemed to be successful in capturing the personal attachment users develop with their avatars, recognizing such characters not merely as property interests, but as personal and intimate connections to one's sense of self. Furthermore, such theoretical perspective reinforces the convergence of both property and personality dimensions upon the figure avatar, a key feature of this character.

Thirdly, the author argues in favor of granting users with virtual property rights over avatars, drawing from Fairfield's theory of virtual property, but justifying such entitlement in light of Radin's theory of "Property for Personhood." By articulating a hierarchy of stronger and weaker property entitlements in terms of their relationship to personhood (through the image of a continuum from fungible to personal), Radin's theory is indicated as particularly suitable to resolve property rights disputes between game owners and users. Such understanding is based upon the conceptualization of the avatar as personal property, which, according to the "Property for Personhood" thesis, merits stronger legal protection than fungible property.

Finally, by combining Property for Personhood theory with the Utilitarian one, the paper advocates a more "ecumenical" view in the articulation of the different property theories, refuting the generalized prejudice of perceiving them as rival and incompatible perspectives.

Keywords: virtual worlds; avatars; property; personality; intellectual property; personhood; virtual property.

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Striking a Balance between Property and Personality The Case of the Avatars

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Scope, Claims and Structure of the Paper

This paper places the avatars at a crossroad between property and personality. From a legal point of view, such peculiar standing is very interesting as it forces us to conceptualize those characters not only as a property item (avatar as the player's or [game-developer's] property) but also, and simultaneously, as a reflex of our personality and identity (avatar as the projection of one self in the virtual domain, as part of an individual persona). Bearing in mind such hybrid configuration, and looking at the disputes over property rights in virtual words, between game owners and users, this essay makes two fundamental arguments.

Firstly, it proposes a re-interpretation of intellectual property rights (namely of copyright law) according to its underlying utilitarian principles, as such principles seem to have been forgotten or neglected in the sphere of virtual worlds. The idea is to re-balance the uneven relationship between game owners and players perpetuated by the so-called end-user license agreements (EULAs), which forces users to waive any property rights before entering the virtual world, recognising property rights to users over their own virtual creations. In order to evaluate whether a user's contribution to the virtual world amounts to an original and creative work and is worthy of copyright protection, the essay proposes the image of a jigsaw puzzle as a tool to carry out such examination.

Secondly, the author argues that the utilitarian theoretical justification for intellectual property rights does not account for all the dimensions and aspects involved in the user/avatar relationship, namely for the personal attachment and the process of self-identification the former develops toward the latter. As such, the author argues in favor of a virtual property right over the avatar, attributed to the user and grounded upon Margaret Jane Radin's theory of "Property for Personhood," in certain relationships established between the user and the avatar (combining thus Radin's thesis with Fairfield's theory of virtual property). By emphasizing the dispute resolution function of Radin's theory, the author identifies the latter as particularly suitable to resolve property rights disagreements in virtual worlds. In this sense, it is argued that Radin's theory provides a supportive argument for the users' ownership of avatars and a possible solution for a property rights dispute against the game owner.

The paper is divided into six parts. Accordingly, Part I introduces the two lines of enquiry guiding our analysis of the avatars: property and personality. Such part examines the inextricable and historical connection between the two concepts, providing concrete examples of positive law evolution and legal doctrine creation that reflect the intimate bond between property and personality.

¹ Such re-interpretation should be done, moreover, at the level of the EULAs.

² Agreements established between game developers and players defining the entrance conditions of the latter to the online worlds and the rules governing their behaviour within the corresponding virtual world.

Part II describes the environment where avatars live and grow – virtual worlds, explaining the origins, characteristics and importance of these new digital environments. Within virtual worlds, the paper focuses on the case-study of our paper - the avatars-, examining their concept and implications within such environments. Most importantly, this Part investigates these virtual characters taking into account the peculiar intersection where they are located, that is, at the crossroad between property and personality. By surveying the pertinent legal literature devoted to virtual worlds, the paper acknowledges its dichotomic view over avatars, placing the latter either in a property framework or in a personality rights discourse.

Part III addresses the property paradigm structuring virtual worlds, describing the application of the main theories of property to such environments, and giving particular emphasis to the theory of virtual property authored by Joshua Fairfield. Through the analysis of the latter, the essay underlines the current mismatch between virtual and intellectual property in the regulation of virtual worlds. Still in the same section, the paper proceeds to the analysis of the intellectual property law framework governing these digital platforms, taking a particular look at the turbulent and deeply unbalanced relationship between users and game-developers (namely concerning the controversial question of ownership within virtual worlds). In the examination of IP law in virtual worlds, the essay highlights the predominant utilitarian philosophical underpinning which has guided the general justification and application of IP rights.

Based upon the findings of the previous analysis, Part IV depicts virtual worlds as inherently cooperative and participative; characteristics which render the application of IP law in these digital platforms a rather problematic task. In this context, the essay identifies the two main problems that IP law encounters when regulating virtual worlds: the "dogma" and the "mirror" problems. Within these two problems, the section focuses on the dogma one, describing how IP law is failing to follow its underlying utilitarian principles, creating an unbalanced relationship between game developers and users, as the latter are rejected any property entitlements to their own creations in virtual worlds (namely the avatars).

Confronted with such problem, Part V proceeds to solving it. As such, the essay proposes the representation of virtual worlds through the image and metaphor of jigsaw puzzles, using the latter as an operational criterion through which the "problematic" authorship over avatars can be correctly asserted within a utilitarian framework.

Finally, Part VI goes beyond the puzzle and the utilitarian reasoning behind property rights', focusing on the second problem that IP is faced with when regulating virtual worlds: the "mirror" problem. Such problem reveals the insufficiency of the utilitarian view over property rights in capturing the full complexity of the avatars, namely the personal attachment and the process of self-identification the user develops towards the latter. As a result, the essay resorts to Radin's theory of "Property for Personhood" to solve the problem. In this context, the paper examines such theory, listing its problems and merits when applied to virtual worlds and avatars. By providing solutions to the problems identified (heterogeneity of avatars, the mismatch between virtual and intellectual property, and the market problem), the author argues in favor of the recognition of virtual property rights to users over their avatars, grounded upon Radin's theory of property for personhood. Furthermore, the theory is deemed to play a fundamental role in deciding specific property rights disputes between game owners and users within the virtual world context.

I. Property and Personality: An Introduction

In philosophy, as in law, there is, and has been, an intimate bond assumed between property and personality. The reason is simply and is grounded in the belief that there is a close link between what one owns and who one is.

The bond between property and personality starts, in fact, in the etymology of the word "property." In this regard, it is interesting to note that the word property derives from the Latin *proprius* meaning 'one's own,' or something 'private or peculiar to oneself' (Onions & Burchfield, 1966, p. 716). As Gray and Symes (1981) wrote, "semantically, 'property' is the condition of being 'proper' to (or belonging to) a particular person" (p.7). In this sense, "the etymological root of the term (*proprius* – one's own), gives us the sense of the connection between property and what possesses it" (Minogue, 1980, p.11), or in other words, "between the possessing subject and the object or thing possessed by that subject" (Davies & Naffine, 2001, p.5).

Furthermore, although the concepts of property and person appear to be, at a first glance, antagonistic and perfectly distinct concepts, they are in fact closer to each other than one might think. In this regard, Davies and Naffine (2001), in the book "Are Persons Property – Legal debates about property and personality" question the distinction that modern law makes between person and property, arguing that "in a number of important respects, persons can still be rendered unfree and effectively reduced to something akin to the property of another in certain situations and under certain conditions" (p.2). In identifying ways in which persons continue to assume some of the incidents of property, the authors allude to the status close to that of property that our bodies acquire when we die, to the alienable proprietary "right of publicity" which people in the Unites States have over their "persona" (including their name, their image, and other recognisable aspects of their personality), and to the controversial patenting of biotechnological processes and products based upon genetic material, which "may be characterized as creating property in human life" (Davies & Naffine, 2001, p.3).

There is thus an inextricable and historical connection between property and personality, as examples from classical theories justifying the very existence of property rights; from the development of certain property rights into personality ones (and vice versa); and from new doctrinal constructions, seem to demonstrate. In what follows, we shall look at each of these three examples.

Regarding the theories of property, namely Locke's and Hegel's classical theories of property, it can be identified in each of those an underlying connection between property and personality (although differently framed). As such, in Locke's Desert-labour theory, the philosopher explicitly conveys the idea that we own ourselves – our persons and our labours.

"Though the Earth and all inferior Creatures be common to all Men, yet every Man has a Property in his own Person. This no Body has any Right to but himself. The Labour of his Body, and the Work of his hands, we may say, are properly his". (Locke, 1967, pp. 287-288)

As Davies and Naffine (2001) synthesize, "Locke famously employed the argument that we all naturally own ourselves as a justification for private appropriation of the commons" (p.4). Locke sustained that "once we mix our labour (which we own naturally) with an object in the

commons, we gain property in it. Self-ownership therefore provides a foundation for ownership of the external world" (Davies & Naffine, 2001, p.4).

Hegel strengthened even further the link between property and personality, arguing in fact that property is "embodied personality" (Hegel, 1952, p.51). Hegel, which property theory is denominated "Personality theory," "argued that in becoming a person one must put oneself into the external world and then reappropriate the self through the appropriation of objects in the world. Taking the world unto ourselves is our method of completing our subjectivity and individuality, because it involves the purely subjective person externalising their personality and regrasping it in the form of an external object" (Davies & Naffine, 2001 p.4).³ In this sense, "Personality is that which struggles ... to claim the external world as its own" (Hegel, 1952, s.39). According to these philosophical constructions, "the idea of the person is in fact deeply imbued with the idea of property. To be a person is to be a proprietor and also to be a property – the property of oneself' (Davies and Naffine, 2001, p.5). From Hegel's theory, the American scholar Margaret Jane Radin formulated her theory of "Property for Personhood", departing from the assumption that "almost any theory of private property rights can be referred to some notion of personhood" (Radin, 1993, p.35). By arguing that that property over determined objects is closely related, if not determinant, of individual identity, such theory emphasizes the crucial association between property and personality, conceiving the latter in terms of a relationship with the former.⁴

Moving from legal theory to positive law, the birth and conceptualization of the right of privacy in the United States and its evolution into the right of publicity constitutes another good example (the second in our list) of the historical and inextricable connection between property and personality.

As such, the original conceptualization of the right to privacy - enshrined in the famous Harvard Law Review article written by Warren and Brandeis - signalized the "shift from the protection of property to the protection of personality in the United States" (Beverley-Smith, Ohly, & Lucas-Schloetter, 2005, p.48). The authors, in such groundbreaking article, argued that the protection afforded by common law copyright in particular circumstances was merely the application of a more general right to privacy (Warren & Brandeis, 1890). Warren and Brandeis developed their argument by distinguishing between the cases based upon the right to prevent publication of manuscripts and works of art – which they conceded as right of property -, and "cases beyond those involving the reproduction of literary and artistic compositions, which called for an alternative, non-proprietary, basis," (Beverley-Smith et al., 2005, p.48) since "the value of the subject matter did not lie in the profits of publication, but in the piece of mind or relied afforded by the ability to prevent any publication at all" (Warren & Brandeis, 1890, p.200). In other words, the common law right allowing the individual to determine the extent and manner in which his thoughts might be communicated – the right "to decide whether what was inherently his own should be given to the public" (Beverley-Smith et al., 2005, p.48) -, should not always be based on the narrow grounds of protection of property, but grounded on the more general premise of protection of personality. As Warren and Brandeis (1890) explained:

³ "At the same time, it is important to place Hegel's account of property in the larger framework of his Philosophy of Right. The acquisition of property for Hegel is only one preliminary 'moment' in the constitution of subjectivity" (Davies & Naffine, 2001, p.4). We shall look into this more carefully in Part VI of this essay.

⁴ Radin's "Property for Personhood" theory will be examined in detail in Part VI of this essay.

"the protection afforded to thoughts, sentiments, and emotions, expressed through the medium of writing or of the arts, so far as it consists in preventing publication, is merely an instance of the enforcement of the more general right of the individual to be left alone ... The principle which protects personal writings and all other personal productions, not against theft and physical appropriation, but against publication in any form, is in reality not the principle of private property, but that of inviolate personality" (p.205).

Thus, the right to privacy – envisaged as part of the more general right to the immunity of the person and the right to one's personality (Warren and Brandeis, 1890) – was born within a general framework of property rights, evolving into a separate right of personality.

Nevertheless, the story does not end here as the evolution of the right to privacy suffered another "twist" that again proved the inextricable connection between property and personality. In order to explain such new twist, it is important to note that the right to privacy was initially conceived to give legal expression to the rather nebulous principle of 'inviolate personality' and secure a person's right 'to be left alone' (Warren & Brandeis, 1890). "The emphasis lay on the non-economic nature of invasion of privacy; the basis of the law's intervention was the protection of personal dignity rather than the protection of property rights" (Beverley-Smith et al., 2005, p.49). However, such intended characterization soon failed, as "although the right of privacy was originally conceived as a right of inviolate personality, it quickly began to develop distinctly 'proprietary' attributes" (Beverley-Smith et al., 2005, p.52). In fact, "from a relatively early period in its development it became clear that the right of privacy could be used to secure what were essentially economic rather than dignitary interests in preventing unauthorised commercial exploitation of a person's valuable attributes in name and likeness" (Beverley-Smith et al., 2005, p.9). "The difficulties in reconciling a right to privacy with a right to prevent the unauthorised commercial exploitation of essentially economic attributes in personality proved to be considerable, and led to the development of a separate right of publicity" (Beverley-Smith et al., 2005, p.53). As such, the right of privacy eventually developed into a separate right of publicity, envisaged as a property right. In other words, the right of publicity - which is dominantly conceived as a property right (more precisely, as a fully fledged intellectual property personality right)—, by deriving from the right to privacy, had its roots in a personality right.

To make a long story short (which point is to demonstrate the historical connection between property and personality), the right of privacy (right of personality) departed from property rights and, later on, gave birth to a separate right of publicity, which is conceptualized as a property right.

A third and final example of the inextricable connection between property and personality consists of the conceptualization of copyright in Germany, jurisdiction which has transcended the distinction between non-economic personality rights and property rights. According to German doctrine, "copyright is a hybrid between a personality and a property right" (Beverley-Smith et al., 2005, p.10). The well-known metaphor of Eugen Ulmer vividly

⁵ In this way, "even in the earliest right of privacy cases, the courts were protecting interests of an essentially economic or proprietary nature rather than dignitary interests in inviolate personality" (Beverley-Smith et al., 2005, p.52). Examples of such cases are the following ones: Edison v. Edison Polyform Mfg Co. 67 A (1907); Flake v. Greensboro News Co. 195 SE 55 (1938).

⁶ Paragraph 11 of the German Copyright Act provides: 'Copyright shall protect the author with respect to his intellectual and personal relationship with his work, and also with respect to the utilisation of his work.'

captures such dualistic nature, as the scholar compares copyright to a tree with a single trunk but with two roots – the one being property, the other one being personality – and with branches some of which are nourished only by one root, some by both roots.⁷ Furthermore, German courts "have also held that personality rights have the dual purpose of protecting both economic and non-economic interests" (Beverley-Smith et al., 2005, p.10).

Property and Personality are, thus, two concepts intricately intertwined, sharing in many occasions a common historical background, influencing the development and theorization of one another throughout centuries and till our current days. Taking into account such strong connection, this essay puts forward an analysis of the phenomenon of virtual worlds, namely of the "inhabitants" of such territories – the avatars. Such analysis will go beyond the traditional utilitarian perspective of property rights normally pursued in the examinations of these digital environments. In this regard, the article proposes other readings of property law theory that are able to incorporate the neglected personality dimension of the avatars. Departing from the premise that avatars are at the crossroad between property and personality, this article introduces other theoretical ramifications of property law theory, which encompass the personality element, in the legal literature of virtual worlds and avatars. The scope is to capture the full picture of the avatars, focussing on their ambiguous position between property and personality, two concepts – as we have seen – inextricably connected in history, theory and law. But before moving to those theoretical insights, we shall briefly describe the object of our study - the virtual worlds -, explaining what they are and what they represent in the realm of cyberspace. Afterwards, we will move to the central unit of virtual worlds - the avatars - and explicate in more detail the crossroad in which they find themselves in.

II. Virtual Worlds and Avatars

Games, as interactive social experiments and forums of human artistic expression, have always accompanied mankind throughout its existence. From story-telling activities and festive rituals of ancient human societies⁸ to the period of table role-playing games, they have now reached the computer age and the digital era. Through their alliance with modern computer technology, games are now surpassing the element of pure entertainment and play, becoming worldwide forums of communication. These new communicational platforms are enhancing human interaction to unprecedented levels, forming dynamic virtual communities engaged in the establishment of daily social relationships, commercial trading, development of artistic creations, education, political expression and many other activities. All of these social meaningful actions and behaviours are taking place in a new world...in the virtual world...where law is striving to find its place...

⁷ Ulmer, Urheber- und Verlagsrecht (3rd edn, Berlin 1980), paragraph 18 I 4 (p.116), (cited in Beverley-Smith et al., 2005, p.112)

⁸ Ung-gi Yoon, referring to the work of Won-bo Kim (Wob-bo Kim, 2004, "Games and mythology", Sumsori, Issue n.8, Toji Center for Literature/Irum, Winter 2004), indicates that the latter author "in his discussion of the relationship between games and mythology, argues that myths and rituals, the two fundamental elements of ancient human societies, later evolved into story-telling and play. He further argues that today's computer games are reuniting the function of story-telling with that of play, reviving a primitive and original form of human art where the two were now facets one and the same activity. Computer games, according to him, are a medium combining ritualistic and festive characteristics." (Yoon, "A quest for the legal identity of MMORPGs", 2005, p.5)

A. Virtual Worlds and the "new" Cyberspace: Geography and Population

Virtual worlds,⁹ as powerful social platforms of intense human interaction, gather millions of users worldwide, producing massive economies of their own, giving rise to the birth of complex social relationships and the formation of virtual communities. The technological construction of these new digital environments was inspired by previous images and metaphors coming from the cyberpunk literature, such as the "Other plane" of Vernor Vinge (True Names, 1984), the "Mirror worlds" of David Gelernter (Mirror Worlds, 1991) or the "Metaverse" of Neil Stephenson (Snow Crash, 1993). The latter term was coined as a successor to the Internet, constituting the author's vision of how a virtual reality-based Internet might evolve in the near future. Metaverse was, thus, a virtual world – a three dimensional simulation of reality in cyberspace – where people lived, worked, and socialized.

From literature to reality, virtual worlds can be technically defined as shared, persistent, dynamic and representational computer-generated environments that allow players to interact with each other and engage in a wide range of activities through the control and manipulation of a given character/interface - the avatar. Six main characteristics have been identified in virtual worlds: (1) shared space: the world allows many users to participate at once; (2) graphical user interface: the world depicts space visually, ranging in style from 2D "cartoon" imagery to more immersive 3D environments; (3) immediacy: interaction takes place in real time; (4) interactivity: the world allows users to alter, develop, build, or submit customized content; (5) persistence: the world's existence continues regardless of whether individual users are logged in; and (6) socialization/community: the world allows and encourages the formation of in-world social groups like teams, guilds, clubs, cliques, housemates, neighborhoods, etc.

With the increasing popularity and massive use of these 3D digital environments, cyberspace is going through a revolutionary change. Through these virtual worlds, accompanied by the incessant technological development and the uprising of graphics and bandwidth, images and movement are being introduced in cyberspace, complementing its verbal and written layers. In this sense, virtual worlds constitute a revolution in the way we perceive and act in cyberspace, constituting one of the most significant milestones in the evolution of the Net. Unlike the older text-based cyberspace, made up of pages, letters, text, pictures and links, and when compared with the first generation of World Wide Web technologies, "virtual worlds reintroduce location, place, and space to Internet interactions" (Balkin & Noveck, 2006, p. 12). From flat screen text-based, articulated through hyper links and read and write exchanges, cyberspace is now becoming a true space, regaining a sort of territoriality and geography. "This new technology is spatially oriented and has its own geography of space" (Noveck in Balkin & Noveck, 2006, pp. 266-267). In this way, these new immersive environments allow for the creation of a geographical sense in cyberspace, tricking us into the illusion of being located in a specific space, land, or region.

Such digital environments - interactive 3D platforms - have not only created the new territory of cyberspace, but have also populated it. The new inhabitants of cyberspace are called

⁹ Also known as Persistent, Synthetic, Simulated or Digital Worlds, Metaverses or MMORPGs - Massively Multiplayer Online Role-Playing Games.

¹⁰ Book, B. What is a virtual world? Retrieved September 8, 2008 from: http://www.virtualworldsreview.com/.

avatars and are the digital bodies through which we explore this new geography. Avatars are the characters we control and manipulate in virtual worlds, that is, our interfaces in virtual worlds.

B. Avatars - Concept, Definition and Implications within Virtual Worlds

Avatar (avatāra) is a central concept in Hindu mythology, religion, and philosophy. Literally the term means "a descent" and suggests the idea of a deity coming down from heaven to earth (Jones, 2005). As "the incarnation of a Hindu deity", avatar designates the manifestation of the god *Visnu* in corporeal form (Pye, 1994). According to the Hindu religion, a god needs some type of a representational vehicle to embody his holy being when interacting with humans. In this way, the deity appears to humans via an avatar of either human or animal form (Bailenson & Blascovich, 2004, pp. 64-68). This idea of descent into a different reality and embodiment in a different corporeal form, conveyed by the term avatar, was then used in the late twentieth century by the so-called Cyberpunk science-fiction writers and by scientists studying human-computer interaction to represent the digital "incarnation" of humans in some kind of virtual reality. In other words, the notion of avatar was adopted to symbolize the representational vehicle used to embody the human being in virtual reality (Bailenson & Blascovich, 2004). Avatar is, thus, a digital human representation, a projection of one's self in the virtual world (into an avatar body) and a persistent extension of the correspondent human user, whose behaviours are executed in real-time by a human being.

Through the creation of this digital representative, one can now appear in cyberspace as an embodied character. This new interface surpasses the old interfaces of email addresses or chat usernames. Although still restricted to a screen, keyboard and mouse, in the future the nature of this interface may respond not just to our typing and to our mouse clicks, but perhaps also to our voice, 11 our touch, 12 and maybe even to our thoughts (Laurel, 1991). The trend is, thus, to have an increasing immersive and seductive cyberspace, in which the person is completely swallowed and absorbed by an irresistible feeling of engagement and immersion. As William J. Mitchell (1996) correctly observed (and anticipated) "cyberspace places will present themselves in increasingly multisensory and engaging ways" (Mitchell, p. 114-115). Avatars play an exceptionally important role in the path towards such full immersion and engagement, as it is through these characters that we make our presence visible in the Internet, exploring the endless potentialities of this new cyberspace. In fact, through the control of avatars, virtual worlds create a more intuitive, natural, spontaneous and richer context for interaction. Such characters, in this regard, represent the user more explicitly and persistently, 13 manifesting and transmiting (most of

Which is already a reality, as voice-chat systems already feature in many virtual worlds; see Craig, K. (2006). *Voice chat comes to online games*. Retrieved July 8, 2006 from http://www.wired.com/gaming/gamingreviews/news/2006/08/71540

¹² In this regard, it is worth mentioning the revolutionary "ambient experiences" (amBX) technology in the virtual world of Second Life, which enables an even more immersive experience. "Driving the next generation of home entertainment, it's a scripting language, a software engine and architecture". Through this technology "the virtual world reaches out from your screen; you feel the action: the movement of vehicles, shifts in lighting, rumbling explosions, ricocheting bullets, wind in your face; the mix of ambient lighting, vision, sound and tactile sensations mean the gaming experience will never be the same." *What is ambx?* Retrieved September 12, 2008 from http://www.ambx.com/site/about/what
¹³ "An avatar (or, indeed, any graphical object) can change its state (colour, size, costume, etc.) to reflect the state of

¹³ "An avatar (or, indeed, any graphical object) can change its state (colour, size, costume, etc.) to reflect the state of mind. Or intentions, or promises, or reputation, or circumstances, or rights and duties (!) of the user." (Johnson, 2004-2005, p.52).

the times)¹⁴ a sense of humanness. Such a rich and malleable interface, through which we experience cyberspace, allows for a more accurate representation of the mind of the user, conveying, to a certain extent and for the first time, nonverbal information (Yee, Bailenson, Urbanek, Chang, & Merget, 2007), such as intonation, facial expressions, gestures, and body language, as well as actions such as locomotion (moving, walking, flying) and a panoply of different human modes of self-representation.

For the first time, and through visual and graphic representation, people are able to see themselves and the others in cyberspace, which now acquires a human face. With avatars wandering around in virtual worlds, assuming our identities, performing our actions and reflecting our personalities, we are now given the opportunity to jump into the screen in a digital body, participating in cyberspace animated by a feeling of immersion and belonging to this new environment.

C. Avatars at the Crossroad between Property and Personality

As we have seen, cyberspace has suffered profound transformations with the rise of virtual worlds. Such new platforms, providing for new representational places and characters, have filled cyberspace with its own geography and population. As real-time social environments, one of the main features (if not the main one) of these virtual worlds is the representation of a real person through a digital self – the avatar. As a matter of fact, millions¹⁵ of people around the globe are now dressing up as avatars, invading these new spaces, spending considerable amounts of time¹⁶ in this novel territory, and identifying themselves with the avatars they create and control.

In legal terms, one of the most puzzling questions surrounding this renewed cyberspace is the legal status of such digital "alter-egos." The legal characterization and classification of avatars is ambiguous and unclear, as it is difficult to establish what legal discipline should regulate such "characters."

The difficulties in finding an appropriate legal framework for these user-controlled entities can be explained by the fact that avatars stand in the intersection between property and personality. From a legal point of view, such peculiar standing is very interesting as it forces us to conceptualize those characters not only as a property item (avatar as the player's or [game-developer's] property) but also, and simultaneously, as a reflex of our personality and identity (avatar as the projection of one self in the virtual domain, as part of an individual persona). The legal study of avatars leads us to an inevitable confront between property and personality rights. Such ambivalent categorization, moreover, has been captured by the scholarly legal literature,

¹⁴ Users normally assume an avatar with a human shape, but there is also the possibility of assuming animal, other races and monster forms, among others.

¹⁵ To give an example of the astronomical number of users participating in these digital environments, the most popular virtual world at the moment – "World of Warcraft" – has surpassed the 10 million subscribers. Geddes, R. (2008). *World of Warcraft Tops 10 Million Subscribers*. Retrieved January 22, 2008 from http://pc.ign.com/articles/846/846752p1.html

According to a calculated estimate, the average period of time spent by these participants in virtual world is almost twenty-two hours per week. *The Daedalus gateway*. Retrieved September 12, 2008 from http://www.nickyee.com/daedalus/archives/001365.php

which, in this matter, has followed either the property or the personality approach, being as creative and imaginative as divided and diverging. 17

In this regard, the mainstream literature has in fact encapsulated virtual worlds and avatars in a property rights framework, debating the legal problems that have arisen within those digital environments through the lens of property law. As such, the great majority of the literature devoted to the legal examination of virtual worlds locates avatars in the realm of property, considering them a matter of intellectual property. Taking into account that intellectual property law is the dominant law governing virtual worlds; it comes as no surprise that the legal academic writing follows and comments such predominant proprietary focus. ¹⁸ In such context, scholars have argued that virtual world users have real property interests in virtual objects (Lastowka & Hunter, 2004)), 19 while others have claimed that the imbalance between proprietors and participants within virtual worlds can be solved by the attribution of property rights to the latter, associating democracy with property rights (Jankowich, 2005). Furthermore, a theory of virtual property, following the Benthamite utilitarianism and welfare economics, ²⁰ has been put forward, defining virtual property as a concept closer to land or chattel than to intangible property (Fairfield).²¹ Finally, many other scholars have discussed the challenges, problems or insufficiencies of copyright law applied to virtual worlds – enshrined in the so-called EULAs (Garlick, 2005; Meehan, 2006). Such academics have presented a number of important arguments favouring a more balanced articulation between the rights of game owners and users. Nevertheless, such academic contributions do not abandon the property paradigm, carrying their analysis within a virtual property rights framework.

On the other side of the coin, nevertheless, there is a minority view in the virtual worlds legal literature that removes the avatars from the property habitat, placing them in the personality shelf. The most interesting point in this particular literature is the slight tendency to move the analysis of avatars towards a discourse of personality rights (droits de personalité), moving away from the property sphere. Thus, and even if the question of the legal treatment of avatars (and other virtual items) has been predominantly framed in terms of property rights and contract law, part of the virtual worlds juridical literature is proposing alternative legal frameworks to this question, introducing notions of non-property rights and proposing an extension of a wider set of possible rights to virtual spaces. This new way of perceiving the dynamics of virtual worlds aims

¹⁷ It is important to note that these two approaches – the property and personality – are not necessarily antagonistic within virtual worlds and can, in fact, be reconciled inside these digital environments. Lastowka and Hunter (2004) prove this point, as they both argue in favour of property interests in virtual objects without undermining the possibility (although articulated in a rather vaguely fashion) of endorsing avatars with enforceable legal and moral rights, characterising the latter as "persistent extension of their human users." Such compatibility between the property and the personality approaches requires, then, that one distinguishes between avatars and other virtual items.

¹⁸ Furthermore, also the jurisprudence has been following the "property" approach, as the current case law reinforces the proprietary view over avatars. As an example, the case of Marvel Comics v. NCSoft was based and decided upon the assumption that the avatars created through the avatar creation engine did implicate intellectual property rights and, in that way, infringed marvel trademark rights.

¹⁹ Nevertheless, those very same scholars have also alluded, for the first time, to non-property rights of avatars

⁽p.97). ²⁰ "Virtual property ought to be protected because it represents the best way of splitting up use rights so as to cause people to use it efficiently" (Fairfield, 2005, p.1094).

¹ Fairfield's theory of virtual property will be analysed in more detail in Part III of this essay. In the same direction, Schwarz and Bullis (2005) argue that the boundary between intellectual and physical property should fall at the point where rivalrous consumption begins.

at resisting the increasing commodification of these online environments,²² excluding the property discourse and advancing with the attribution of legal personhood and human rights (non-property ones) to avatars.²³ In accordance with this "movement", the degree of interaction and socialization deriving from the user-controlled mediated relationships established in virtual communities will soon extrapolate from the traditional property law discourse.

In this line of thought, Lastowka and Hunter (2004) unveiled the curtain on the revolutionary question of avatar's own rights, discussing whether these characters could have enforceable legal and moral rights. The authors investigated the complex issue of whether the close interrelationship of avatars and their controllers could give place to new and enforceable rights, advancing the possibility that the avatar (which they called "cyborg") could indeed possess rights distinct in nature from the rights of the human controller. In this sense, they argued that as new residents bring with them expectations of property rights, they bring with them expectations of other human and constitutional rights as well (Lastowka & Hunter, 2004). 24

Ren Reynolds has gone further on this issue, advocating a pressing need to examine the expansion of human rights to avatars. In several articles (Reynolds, 2002, 2003a), the author considers property law as an inappropriate²⁵ approach to handle the legal questions concerning avatars and virtual items. The author undertakes an analysis of current IP law applied to virtual items and avatars, concluding that these characters are not subject to property rights and are thus not owned by either the game owner or any individual player.²⁶ At the end, although without developing this idea, Reynolds (2003a) proposes a non-property *sui generis* right in avatars based on Hegelian concepts of the relationship between property and autonomy.

The Honourable Judge Ung-gi Yoon also follows this approach, supporting the idea that avatars should not be seen as empty shells, but as entities to which the status of a dynamic and live persona should be given. The author advocates the attribution to avatars of in-game rights similar to constitutional rights and personal rights, including privacy rights, ²⁷ the right of publicity and even citizenship²⁸ (which would have to be accompanied by a wholesale review of disciplinary actions currently in use, such as suspension and deletion of avatars – Yoon, 2005). Furthermore, Ung-gi Yoon elaborates this idea on his article about avatars (2006), defending a very interesting position of naming the personal right attached to avatars with the term of "persona":

²² The literature, in this regard, has identified an overwhelming commodization of almost all aspects of the Internet, including tokens of identity such as email address and avatars.

²³ Raph Koster, a game designer and virtual world theorist, was one of the first to launch the notion of avatar rights: Declaration of the Rights of Avatars, available at http://www.raphkoster.com/gaming/playerrights.shtml

²⁴ Nevertheless, Lastowka and Hunter did not arrive at any definite conclusions on this issue, suggesting that the issue of avatar rights would be one of timing.

²⁵ For detailed arguments against property law application, namely against player's and game developer's ownership of avatars and virtual items in virtual works, see in particular Reynolds (2003b).

²⁶ For more detailed arguments on the failed attempt of applying copyright in the case of avatars, see Stephens (2002). For an opposing view, see Miller (2003), demonstrating the ways in which the actions and characters of participants and other virtual items fit into copyright law.

The author announces in his article that he is currently studying the possibility of approaching the question of MMO avatars from the perspective of information privacy law rather than from intellectual property law.

²⁸ Faltin Karlsen, "Media complexity and diversity of use: thoughts on a taxonomy of users of multiuser online games", quoted in Ung-gi Yoon (2005).

"Awaring [sic] that the existing views regarding avatars as characters in novel, animated film or computer-role-playing-games or as personal information like that of identities had some limitation, I carved out the players' personal right that welded on the avatar with the chisel named of 'persona' in Carl G. Jung's psychology and Friedrich W. Nietzsche's philosophy"²⁹ (Yoon, Ung-gi, personal communication, May 9, 2007).

Beth Simone Noveck (2006) shares this "human" dimension attributed to avatars, considering them as persona and citizen – a legal and moral personage distinct from the private individual – who acts in a social capacity. The author conceives avatars as social personalities and citizens of the online world, imbued with rights and responsibilities (in Balkin & Noveck, 2006).

This paper departs from the intersection point between property and personality rights where avatars are located, defining and recognizing the latter in this dualistic conception. Avatars are thus conceived not only as property items, but also as a reflex of our persona and persistent extension of the human users (Lastowka & Hunter, 2004). Nevertheless, the paper does not fall into the "personality" box to examine this double dimension of avatars, deciding instead to frame its analysis within the context of property law. However, and contrarily to the "property" literature briefly surveyed (dominantly utilitarian), this essay pursues other interpretations and theories of property, namely the ones that recognize the importance of the personality element in property. In this way, the paper attempts to capture the full complexity of avatars, contemplating not only the proprietary focus but also the personality dimension involved in such characters. In this way, we believe that there is still room of manoeutre in property law to cover the avatars. Nonetheless, to that effect, one should resort to a non-utilitarian view of the issue and endorse a personality or a "property for personhood" theorization.³⁰

Before shifting our analysis to these "new" property-personality theoretical interpretations, we shall, firstly, analyse how the classical main theories of property have been applied to virtual worlds (in order to sustain the grant of real-world property expectations in virtual property); secondly, describe the theorization of virtual property that has been formulated and applied to virtual worlds (Fairfied's theory of virtual property), and through which we will find out a current mismatch between virtual and intellectual property.

III. Virtual Worlds and Theories of Property

With the new "geography" of cyberspace introduced by virtual worlds, a new conceptualization of property has been formulated – the so-called "synthetic" or "virtual property", a foundational element in the functioning of virtual worlds but a problematic concept

²⁹ Extract of the English abstract of Ung-gi Yoon's article on avatars given to the author in an email exchange. I would like to thank the Honourable Judge for his kind contribution to my research.

³⁰ In this regard, and as preliminary note, it is important to acknowledge that the claims portrayed in this essay can only be verified under determined conditions and specific circumstances. In this sense, only avatars that can, in fact, be characterized as persistent extension of the human users will lend themselves to this property for personhood theoretical treatment. This means that a case-by-case approach should be followed in this respect, in order to distinguish the avatars that can reclaim such specific hybrid proprietary-personality understanding. This point will be better explained at a later stage of the article.

deeply analysed in the legal literature of virtual worlds (Jankowich, 2005; Lastowka & Hunter, 2004; Fairfield, 2005; Meehan, 2006, among others). Such property, although intangible, evanescent and untouchable, floating as 0s and 1s in computer servers and databases, creates a feeling of real ownership and property expectation in the minds of the players, who invest large sums of money in its acquisition, either in the form of virtual castles, islands or clothing. This property can, thus, be traded, bought and sold for real money (or for virtual currency which can then be exchanged for real money, as many virtual currencies have established their own exchange rate with real currency) in real-world auction sites³¹ or within the virtual world itself.³² Such property is thus responsible for the development of massive virtual parallel economies, which lend themselves to economical analyses just like real world national economies. To give an example, Castronova (2001) has analysed Norrath, the virtual world in Everquest, finding some remarkable economic results: the effectively hourly wage was US\$3.42 per hour, which was significantly higher than hourly wage of workers in India or China; and the economy of Norrath as a whole was significantly larger than Bulgaria (Castronova, 2001).

Taking into account the relevance and the real-world implications of such particular form of property -, several legal scholars have analysed the main theories of property, applying their philosophical justifications and reasoning to virtual property. Lastowka and Hunter (2004), in their article "The laws of the virtual worlds", provide a framework for understanding the issue of property in virtual worlds, demonstrating that virtual objects are indistinguishable from other legally recognized property interests. The authors apply the three main normative theories of property - Bentham's Utilitarian, the Lockean's Labour-Desert and the Hegelian Personality theories - to the case of virtual property, finding in all of them plausible normative justifications to recognize property interests in virtual items. At the end of their analysis, the authors reach the conclusion that there are nor descriptive neither normative objections to granting property interests in virtual assets.³³

In fact, narrowing down the analysis to the case of the avatars and taking a brief look at the three main theories of property, one realises that they can all theoretically be applied to avatars.

Following Bentham's utilitarian theory of property, which foundational principle seeks the greatest good for the greatest number, "the grant of property rights in an object will increase the production of such objects" (Lastowka & Hunter, 2004, p. 59). According to the logic of such theory, people will only tend to create and produce certain things if they are given property rights to use those very same things. Such a thesis can also be applied to avatars if one assumes that people will feel more compelled to create and produce their own digital alter-egos if they can assert some kind of ownership over them.

 $^{^{31}}$ Such as general auction sites – eBay, Yahoo – or auction sites entirely devoted to virtual property, such as $\frac{\text{www.playerauctions.com}}{\text{mod www.mysupersales.com}}$. In this regard, Sony's online virtual world EverQuest II launched in 2005 its own auction service – Station

³² In this regard, Sony's online virtual world EverQuest II launched in 2005 its own auction service – Station Exchange – providing players a secure method of buying and selling the right to use in game coin, items and characters, available at http://stationexchange.station.sony.com/

³³ More recently, Reuveni (2007) analyzed those three main property theories within the framework of intellectual property rights, reaching the conclusion that all three support the granting of copyright to players who create artistic works in virtual spaces (p.276).

Locke's property theory, also called a theory of desert-from-labour theory, that states that the person who expended labour to render the "thing in nature" into valuable form deserves to reap the value of it (Lastowka & Hunter, 2004, p. 61-62), 34 can also fit in the case of avatars. In this sense, such a theory can also explain and justify player's ownership over avatars, as these are built and constructed by players, not existing before. Players devote a great amount of time, labour and effort to create and develop their avatars, deserving – according to Locke's theory – to be granted with property rights over such laborious process and creation.

According to the Hegelian theory, property is conceived as an extension of personality, and thus as a necessary antecedent to human freedom.³⁵ In the words of Thomas Grey (1980), following Hegel's reasoning, "[o]wnership expanded the natural sphere of freedom for the individual beyond his body to part of the material world." The emphasis, on the one hand, on the intimate relationship between property and the development of one's personality and, on the other, the characterization of the avatar as the persistent extension of the human user makes Hegel's Personality theory particularly appealing and suitable for our case-study: the avatars. In this regard, the configuration of these virtual alter-egos seems to match perfectly the vision of property as an extension or embodiment of the user's personality. Within the legal analysis of avatars to which this article is devoted, and among the three property theories previously analysed, the personality theory is the one clearly standing out as it encompasses both property and personality dimensions in the figure of the avatar. As apparently tailor-made to fit the case of user-controlled characters, Hegel's personality theory, and namely the theory of Margaret Jane Radin – "Property for Personhood", will be further detailed in Part VI.

A. Theory of Virtual Property

In studying the emergence and relevance of this particular kind of property in virtual worlds, Fairfield (2005) has coined such emerging property form with the term "virtual property", defining it as computer code designed to act like real world property³⁶ and setting forth a correspondent theory – the theory of virtual property. Within such theoretical construction, virtual property is defined as a particular kind of code (which encompasses not only virtual world items, but also many of the most important online resources, such as domain names, URLs [uniform resource locators], websites and email accounts)³⁷ emulating real and tangible objects, and replicating the "physical" qualities of the latter (Fairfield, 2005). Such virtual items, although intangible, are programmed to act as if they were tangible. In this sense, they share three legally relevant characteristics with real world property: they are "rivalrous" (one person's use of the code prevents another person from using it),³⁸ "persistent" (unlike the software on your computer, they do not go away when you turn the computer off), and

³⁴ See also Munzer (1990), explaining Locke in terms of desert from labor; Radin (1993, pp. 105-06), calling the theory the "Lockean labor-desert theory").

³⁵ Lastowka and Hunter (2004), (citing Georg Wilhelm Friedrich Hegel, Hegel's Philosophy of Right (T.M. Knox trans., Oxford Univ. Press 1967) (1821).

³⁶ Such code, moreover and according to Fairfield (2005), should be regulated and protected like real world property.

³⁷ And, of course, avatars.

³⁸ In this sense, virtual property operates as the opposite of intellectual property, which protects the creative interest in non-rivalrous resources (Fairfield, 2005).

"interconnected" (other people can interact with them).³⁹ Virtual property is thus defined as an emerging property form "that is not intellectual property, but that more efficiently governs rivalrous, persistent, and interconnected online resources" (Fairfield, 2005, p.1048).

In this context, property rights, taken in its broad legal sense⁴⁰ and traditionally divided into two categories (chattel or real property rights - often simply called "property interests"-, and intellectual property interests)⁴¹ seem to witness the emergence of a third category: virtual property, that is, intangible property designed to act as tangible. Nevertheless, and interestingly enough, the co-existence of the virtual and intellectual categories of property is not necessarily problematic. In this sense, and as Fairfield (2005) explains, "recognition of virtual property rights does not mean the elimination of intellectual property" (p.1097), as the "ownership of a thing is always separate from ownership of the intellectual property embedded in a thing" (p.1097).⁴² Such distinction impedes, for example, the owner of virtual property to own the right to copy it. Bearing in mind such separation, "intellectual property need not conflict with virtual property. In fact, the two, if well-balanced, will complement each other" (Fairfield, 2005, p.1097).

In spite of all this, such peaceful co-existence does not undermine the problem of having virtual property governed through the law of intellectual property. In this regard, and as a result, "holders of intellectual property rights have been systematically eliminating emerging virtual property rights by the use of contracts called End User License Agreements ("EULAs") (Fairfield, 2006, p.1050).

B. The Mismatch between Virtual and Intellectual Property

Having briefly described the dominant theories of property in the "real" world and their application to virtual worlds (utilitarian, desert-from-labour and personality theories), and having analysed the recent theorization of virtual property, we reach the conclusion that virtual property is not only undistinguishable from other legally recognized property interests (as the three main normative theories of property seem to recognize), but is also – as the theory of virtual property argues - much similar to chattel or real property than intellectual property. At this point, we arrive at a very important preliminary conclusion: although avatars, as items of virtual property, present the qualities and features of tangible (land or chattel) property, they are, nevertheless, governed through property laws meant to regulate intangible objects, that is, intellectual property

³⁹ Fairfield (2005) argues that the naturally layered nature of the internet is leading to overlapping rights of exclusion that cause underuse of internet resources, demonstrating that the common law of property can act to limit the costs of this internet anticommons.

⁴⁰ "A property right enables the proprietor to exercise control over a thing, the object of property, against the rest of the world" (Davies & Naffine, 2001, p.6).

⁴¹ As Richard Posner (2000) has pointed out: intellectual property is characterized by high fixed costs relative to marginal costs. It is often very expensive to create, but once it is created the cost of making additional copies is low, dramatically so in the case of software, where it is only a slight overstatement to speak of marginal cost as zero. On the contrary, "real" property interests have roughly equal fixed and marginal costs (in this sense it is as expensive to build a second house as to build a first one).

⁴² As Fairfield (2005) illustrates, "ownership of a book is not ownership of the intellectual property of the novel that the author wrote. The book purchaser owns the physical book, nothing more. Ownership of a CD is not ownership of the intellectual property in the music. The music purchaser owns that copy of the music, nothing more" (p.1097).

law. There is thus a mismatch between what virtual property really is (tangible property) and how it is actually being regulated (intangible property).

Bearing in mind such property mismatch, the next section proceeds to describing the current legal framework through which virtual worlds and avatars are being regulated – the IP law framework. Inspired by the overarching question of ownership over such environments, we will take an attentive look at the turbulent relationship between game developers and users (in which both claim ownership) and to the particular nature of virtual worlds as "ongoing collective works." Those two features, which are intimately intertwined, combined with the intrinsic structural difference between virtual property and intellectual property pose serious problems and difficulties to the application of IP law to virtual worlds and, in particular, to the figure of avatar.

C. Intellectual Property Law and Avatars

Intellectual property Law has undoubtedly been the main legal tool used to govern and regulate avatars. There are many reasons behind this choice. Firstly, IP law is the primary area of law dealing with online games, category in which virtual worlds are included and where avatars "inhabit". Online games are typically protected by copyright, area of law which occupies a large and important place within broader intellectual property law. As such, and in terms of copyright, electronic games are protected by copyright as "audiovisual works". 43 44 In this regard, the U.S. Copyright Act defines an audiovisual work as a series of related images, together with accompanying sounds, intrinsically to be shown by the use of machines or devices, regardless of the nature of the material objects in which the works are embodied. Furthermore, Reuveni (2007) considers that virtual worlds exhibit the creativity, originality, fixation and tangibility requirements of copyright law, qualifying them for copyright protection as audiovisual works. Such protection encompasses the game art 46 and the game story. Moreover, electronic games are registered with the U.S. Copyright Office. 48

Secondly, the EULAs, the agreements established between game developers and players defining the entrance conditions of the latter to the online worlds and the rules governing their behaviour within the corresponding virtual world, often display many legal notions pertaining to intellectual property law. Terms such as patents, trademark and copyright are easily found in the drafting of those agreements. The "property legal terminology" used in EULAs to characterize and classify game characters and items is, thus, manifest and evident. Furthermore, as we can deduct from the language used in the EULAs and its "imperialistic" statements of control, copyright law is commonly (if not abusively) used by game developers in the EULAs to retain complete and absolute ownership over the characters, game-items and creative works produced and developed within virtual worlds.

⁴³ Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 967 (9th Cir. 1992).

⁴⁴ Copyrightable works of authorship include literary, musical, dramatic, choreographic, pictorial, audio, audiovisual, and architectural works, 17 U.S.C. paragraphs 102 (a) (1)-(8) 2000. Freedman (2005), in his article "Machinima and copyright law" suggests, instead, the categorization of virtual worlds as "architectural worlds", another type of "works" protected by copyright.

⁴⁵ 17 U.S.C. paragraph 101.

⁴⁶ Micro Star v. FormGen Inc., 154 F.3d 1107, 1110 (9th Cir. 1998).

⁴⁷ *Ibid*, p. 1112.

⁴⁸ World of Warcraft, for example, was registered in November 24, 2004, as a videogame, in the U.S. Copyright Office (http://www.copyright.gov/) by Blizzard Entertainment.

Moreover, IP law arguments are often used by game developers to assert their rights over in-game property and to preclude certain actions undertaken by players.⁴⁹ In this way, game owners resort to copyright law as their legal basis to prohibit sales of characters or other virtual items which take place against the virtual world's own rules and policy. 50 51 In the view of the game owners, the auction of characters and items infringe their established copyright. In this matter, "one of copyright's exclusive rights - the right to prepare derivative works" - is frequently cited by game providers as the legal basis supporting their actions to shut down outof-game trading or out-of-game creative expression" (Garlick, 2005, p. 436). In order to assert their rights, companies often proceed to erasing player accounts or to work with auction websites in order to remove in-game items for sale. In addition, and on the other side of the dispute, players often assume that avatars are potential items of property and specifically intellectual property. As such, IP law figures as the law most often applied in disputes over these characters.

Finally, the fact that virtual worlds are built upon the idea of property constitutes a further argument for proposing IP law as the departure point for the analysis of virtual worlds and avatars. In this sense, virtual worlds are by rule based on a "property paradigm" (Lastowka & Hunter, 2004), having their structure and foundations settled upon a logic of property. As commented by Lastowka and Hunter (2004),

"Central to the operation of most modern virtual worlds is a property system, with all of the familiar real world features of exclusive ownership, persistence of rights, transfer under conditions of agreement and duress, and a currency system to support trade (p.30) ... virtual worlds all cleave to familiar real world expectations of property systems. This may be as a consequence of resource scarcity. No modern virtual world allows for unlimited resource creation, so the laws of economics operate much as they do in the real world". (p.33)

Further to being the main instrument governing and regulating virtual worlds, it is important to note that the application of IP law in this domain (and in general) has been grounded upon utilitarian principles and objectives. In this context, and taking into account that the Anglo-American copyright system is based is underpinned by utilitarian considerations, one should acknowledge that utilitarianism – as the most popular among the theories of IP – is fundamentally concerned, when shaping property rights, with the maximization of net social welfare. The pursuit of that end, in the context of intellectual property law, "requires lawmakers to strike a balance between, on one hand, the power of exclusive rights to stimulate the creation of inventions and works of art and, on the other, the partially offsetting tendency of such rights to curtail widespread public enjoyment of those creations" (Fisher in Munzer, 2001, p.169)

⁴⁹See, among others, MDY Industries, LLC v. Blizzard Entertainment, Inc., No.CV-06-2555-PHX-DGC, 2008 U.S. Dist. LEXIS 53988 at *5-6 (D. Ariz. 14 July 2008).

⁵⁰ The practice of sales of game items through "out-of-the-game procedures" is described by the term "farming."

⁵¹ Examples of out-of-game sales of in-game items can be found in popular auction websites, such as eBay or Yahoo, which normally display in their catalogues a list of avatars and other in-game objects. The price of such items depends on the amount of time, effort and skill that the seller took to develop, create or acquire them through ordinary game play. For two illustrative examples of out-of-game auctioning of in-game items coming close to judicial scrutiny, see Garlick (2005), pp. 428-430.

² The 1976 Copyright Act, 106(2)

D. The Question of Ownership within Virtual Worlds and the Turbulent Relationship between Game-Developers and Users

The question of who owns the virtual world has been without doubt the main one structuring the legal debate on this area. This question, which has been repeatedly approached through the parameters of ownership,⁵³ has been inflaming the legal minds, instigating different legal theories and applications to these new artificial online environments. The conflict over the ownership of virtual worlds has opposed two main actors - game developers and users.⁵⁴

Game developers, on the one hand, as the creators and designers of these worlds, feel entitled to assert their ownership over what they created.⁵⁵ The large amount of money invested in the construction and maintenance of these worlds, carried out by big media and audiovisual companies driven by a business-profit orientation, propels that feeling of ownership. On the other hand, users are not mere passive consumers of a finished product. Virtual worlds, as particular types of online games, introduce a new genre of experience where consumers buy the entertainment to produce their own entertainment (Garlick, 2005, p. 423). This hybrid role of a consumer/ producer has been described as that of a "conducer" (Garlick, 2005). As such, users participate in the construction and development of these worlds, raising buildings, creating objects and elaborating their avatars - reasons for which they also believe to have a word in the ownership and right of property over virtual characters and items.

The liaison between game developers and users is simultaneously beneficial and detrimental to both actors, resembling, in this sense, a sort of "love and hate" relationship.⁵⁶ In any case, the relationship between them is structurally uneven and unbalanced, pending clearly in favour of the game companies. The position of superiority of game owners towards users and the lack of autonomy of the latter regarding the former has been well documented in the literature. In fact, to illustrate the disequilibrium of powers and rights between these two actors within virtual worlds, scholars have referred to a current default rule of nearly absolute wizardocracy (Lastowka & Hunter, 2005) to dictatorships of the most absolute kind (Lastowka & Hunter, 2003) making comparisons with science-fiction artificial environment Hollywood

⁵³ Property disputes have always been present in the history of virtual worlds, making their mark already in the first versions of virtual worlds – the text-based environments MUDs and MOOs, as Lastowka and Hunter (2004) explain: "...even within the community-minded LambdaMOO, the concepts of 'property' and 'ownership' in virtual assets surfaced almost immediately. For instance, in the earliest stages of LambdaMOO, a dispute arose over who owned the air-space over privately-owned territories, which became an important issue for the navigation of aircraft" (p. 35).

The terminology regarding these actors has been very rich and diversified. Game Companies have also been called Game owners, Game Designers and Platform Owners, Game Operators, Game Developers, Game Developers, Publishers, Game providers, Proprietors, "gods" and "wizards"; as for Users, the terms Players, MMORPG players, Participants and Gamers have also been used; whereas for Avatars, the expressions Player-characters, Characters, Cyborgs and Proxies can also be found in the literature. For a criticism to the widespread use of terms in this field, see Jankowich (2005).

⁵⁵ In fact, and as we have seen, the EULAs confirm that very same reasoning.

⁵⁶ Jankowich (2005) employs a biological metaphor to illustrate such relationship: "the proper way to view the new interaction between proprietors and property-owning participants, whose characters inhabit the proprietors' virtual worlds, is a mutualistic symbiosis. In biology, a mutualistic symbiotic relationship exists where two organisms engage in a mutually beneficial relationship (p. 209) ... Characters are created to exist in the virtual spaces and proprietors are dependent on character presence and sociability for the success of their worlds" (p. 210).

movies (Jankowich, 2005),⁵⁷ or applying the classical medieval metaphor of landlords and serfs (Jankowich, 2005).⁵⁸

This fundamental power imbalance (Jankowich, 2005) existing in virtual worlds is explained by the fact that game developers are the gate keepers of technology and law concerning virtual worlds. In this sense, game owners are, on the one hand, the code-makers, that is, the ones creating and operating the software through which they build, design and maintain their worlds. Such technological privilege permits gamers to alter all the software instructions and rules that compose every aspect of the virtual worlds, giving them the ability to unilaterally change, delete, produce and create any element pertaining to these computer-animated environments. Through code, game producers become genuine "puppet-masters", keeping absolute control over what happens in the puppet-theatre - the virtual worlds (Lastowka & Hunter, 2003). In fact, taking into account Lessig's golden rule that code acts in cyberspace as a true regulator - as law -, (Lessig, 1999) game developers "provide the law, courts, constitution, and the very physics of existence" (Lastowka & Hunter, 2003, p.9) in these interactive spaces, retaining the possibility to dictate player's behaviour within their worlds.

Furthermore, and amounting to the technological guardianship and supervision, game producers are also "law-makers", retaining a legal monopoly in the regulation of virtual worlds by means of contractual law, that is, by unilaterally drafting and imposing upon players the End-User License Agreements (EULAs). The EULAs, as agreements through which players are granted access to virtual worlds, complement the code, establishing a set of terms and conditions for playing the game that cannot be effectively controlled through the software implemented in the game. A classic example of such rules is the assertion of property rights – namely copyrights – over all the content of virtual worlds in favour of game developers. Taking into account such non-equal footing state of affairs, users are, thus, subject to arbitrary and unilateral decision-making by gamers, who – through code and authoritarian EULAs - are that world's *de facto* authority (Lastowka & Hunter, 2003).

⁵⁷ "The Matrix and similar movies explore highly sophisticated technology-generated artificial environments where individual autonomy turns out to be far more limited than the level of technology would suggest." (Jankowich, 2005, p. 174)

p. 174)
⁵⁸ "A medieval metaphor, however, is even more appropriate for virtual worlds populated by property-less participants. In such worlds, participants pay tribute money to their game proprietor overlords to prevent being killed (account termination), and anything they produce (their intellectual property) belongs to their lord except what participant serfs are allowed to retain for support." (Jankowich, 2005, p. 203)

In this sense, Lastowka and Hunter (2003): "virtual worlds are representational creations of constructed human-written code that designers can manipulate with uncommon precision" (¶ 10)

⁶⁰ The client software and the use of the game are licensed to the player through these EULAs. Such agreements are normally displayed in the screen of a computer after the software of the game has been installed, requiring the player to tick on the "I agree" button in order to start playing. This license can, nevertheless, be exhibit in other forms, such as in printed form with the software package or displayed on the game developers website – or any combination thereof. Such agreements also go by the name of "shrinkwrap" or "clickwrap" agreements. Julian Dibbell suggests that "EULAs are perhaps better understood as a working embodiment of the social contract idealized by Rousseau, Locke, and other theorists of democracy" (Dibbell, 2006).

⁶¹ The description and critical assessment of the ideas and solutions proposed by the scholarly legal literature to appease the tumultuous relationship between game developers and players goes beyond the scope of this article. For the suggestion that virtual worlds should be considered as associations or corporations, proposing a new model of agreement, conceived along the lines of corporate law, see Ung-gi Yoon (2005), David Johnson (2004-2005) and Edward Castronova (2005). Such "corporation approach" envisages the establishment of a common entity formed by both gamers and players, which would balance the set of rights and duties between these two actors, allowing for the

IV. Special Nature of Virtual Worlds and the difficulties in applying IP Law to such environments

Virtual worlds, as important steps in the age of personal and participatory media, ⁶² ⁶³ in which people no longer only consume but also actively participate in the media, challenge the traditional boundary author / consumer in which IP law is settled upon. The fact that virtual worlds take on board permanent contributions of users to the design and development of their environments (in a sort of double or co-authorship with the players) renders the task of finding an appropriate legal framework under the auspices of IP Law a very problematic and intricate one. The conflict between game developers and users, described above, reflects the special nature of virtual worlds, as works of collaborative authorship between the owners and the participants. While the owners set the stage of the world, the users populate and develop it, adding up to the initial scenery their own artistic creations. As such, users take an active, entrepreneurial and creative role in virtual worlds, being responsible for the creation of their avatars and virtual objects, and for the sub sequential development of those platforms. In this particular feature lies the special nature of these environments, seen by many scholars as ongoing collective projects (Balkin, 2004), cooperative production processes (Humphrey, 2004) and works in progress, rather than finished products ready for consumption (Yoon, 2005).⁶⁴

The cooperative nature of virtual worlds explains, thus, the difficulties behind the application of copyright law to these environments. The clear cut attribution of authorship to a given creation entailed by copyright does not fit well in the case of virtual worlds. The tendency of Copyright doctrine to presuppose that a creative work has a singular author, ⁶⁵ and that the product of that singular author remains static once fixed, ⁶⁶ clearly contradicts the collaborative authorship and evolving nature of virtual worlds. In other words, "the binary nature of copyright,

latter to participate on an equal-footing basis with the former in the governance of the virtual world. For an architecture of freedoms with constitutional significance in virtual worlds (freedom of play, freedom to design, and freedom to design together), as a way to harmonize the relationship between game developers and players, see Balkin (2005). The "constitutional approach" intends to resolve the imbalance of powers and rights that currently characterizes the relationship between developers and players through the attribution and protection of constitutional freedoms to those actors. Such approach is then complemented with models of regulation (the company town model of regulation and the place of public accommodation model), which, taking into account those very same freedoms, would ensure the protection of player's interests in circumstances where their rights could be undermined by the game producers.

⁶² Among the audience. A survey of new media, The Economist, April 2006. Retrieved September 12, 2008 from http://www.economist.com/surveys/displaystory.cfm?story_id=6794156

⁶³ This participatory age is also reflected in other popular phenomenon present in the net, such as "MySpace" and "YouTube", among others, which also give a predominant role to the user.

⁶⁴ Constance Steinkuehler (2006), in her essay "The mangle of play", discusses, in the context of Lineage, the ways in which the game that is played by the participants is not the game that designers originally had in mind, but rather one that is the outcome of an interactively stabilized "mangle of practice" of designers, players, in-game currency farmers, and broader social norms.

⁶⁵ See Aalmuhammed v. Lee, 202 F.3d 1227, 1233 (9th Cir. 2000) (defining an author as "the person to whom the work owes its origin and who superintended the whole work, the 'master mind'" (quoting Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 61 (1884)); Lindsay v. R.M.S. Titanic, 52 U.S.P.Q.2d 1609, 1613 (S.D.N.Y. 1999) ("An individual claiming to be an author for copyright purposes must show 'the existence of those facts of originality, of intellectual production, of thought, and conception." (quoting *Burrow-Giles*, 111 U.S. at 58)); See also Chon (1996), (discussing and challenging the notion that a particular creative work has one particular author).

⁶⁶ See Burk (2000). See also 17 U.S.C. paragraph 101 (2000) (defining fixation); id. paragraph 103 (discussing derivative works); Mai Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 516–18 (9th Cir. 1993) (discussing fixation).

which is dependent on a division between either author and reader or artist and copier, fails to anticipate the collaborative creation occurring in virtual space" (Reuveni, 2007, p. 272).

One could then resort to some types of collaborative authorship foreseen in the U.S. Copyright Act, such as joint-works, works made for hire, collective works and compilations. However, these forms of collaborative works also fail to capture the particular nature of virtual worlds. These categories rely on the legal fiction of a single author in the context of collaborative authorship and treat the final work as if it were the work of a single guiding genius. These categories also render player alterations to virtual environments at best unrecognized, and at worst illegal under copyright law (Burk, 2000, p.23) – referring to the manipulation of digital texts. The intentionality of authors required under copyright law to qualify as a "joint-work" or the requisite of an employment relationship for a "work made for hire" are, for example, clearly missing in the relationship between game developers and players within virtual worlds.

The "test-case" most often analysed in the literature to prove the inadequacy of IP law in protecting in-game creative works produced within virtual worlds has been the sale of virtual items in real markets, ⁷⁰ namely avatars. These sales escape the rules and procedures stipulated by the game companies, taking place outside the boundaries of virtual worlds, 71 namely in auction sites such as eBay or Yahoo. Users simply advertise the virtual products that they have acquired or developed in the lists of those sites (the more powerful an avatar⁷² is or the more rare a given item is, the higher their bidding price in the auction will be) and, having found a buyer and received the money through bank transfer, the seller then transmits to the buyer the details of his account in the game, giving him the access and control of the avatar or, in case of any other virtual item, arranges a meeting of avatars with the buyer in the virtual world to conclude the transfer. This process, known as "gold farming", exposes the vulnerabilities of copyright law in regulating virtual worlds. Such sales, in fact, illustrate the general failure of intellectual property law to protect digital content creators and their works (Stephens, 2002). The shortcomings of copyright law in this field leave "... the practice of avatar sales in a legal netherworld" (Reynolds, 2003a, p. 11), as neither the users have the right to sell avatars as abstract items of property and neither the game developers have the right to stop or regulate the trade (Reynolds, 2003a, p.11).

A. The Two Problems of IP law

The collaborative nature of virtual worlds, the inefficiency of copyright, and the characterization of avatars as persistent extension of the users' personality expose, thus, the two

⁶⁷ See Burk (2000), (discussing the difficulty in applying traditional copyright law to collaborative digital works of authorship).

⁶⁸ A "joint work" is a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole. 17 U.S.C. paragraph 101.

⁶⁹ A "work made for hire" is (1) a work prepared by an employee within the scope of his or her employment. 17 U.S.C. paragraph 101.

⁷⁰ Such test-case is also used by scholars to speculate on the question of ownership of game developers/players over characters and in-game items within virtual worlds.

⁷¹ There are virtual worlds which provide their internal auction services for items and characters pertaining to their world, such as the "Station Exchange" from Sony's EverQuest II, available at http://stationexchange.station.sony.com/.

⁷² In World of Warcraft, the level of the different avatars (evaluated in terms of skill, intelligence, abilities, powers, etc) ranges from 20 to 50, www.worldofwarcraft.com.

main problems that IP law encounters when regulating virtual worlds: the "dogma" and the "mirror" problems. While the dogma problem underlines the IP law utilitarian "distortion," recognizing that the current application of intellectual property law in virtual worlds is failing to follow the utilitarian principles that it should, provoking an unbalanced and abusive distribution of rights between the game developers and the users (illegitimately favouring the former); the mirror problem reveals the insufficiency of the utilitarian view over property rights in capturing the full complexity of the avatars. In other words, a strictly utilitarian view of IP law is argued to only perceive the avatar as a property item in its economic vest and pecuniary value, failing to perceive the virtual character according to its sentimental value and personal bond established with the user, that is, as a persistent extension of the user's identity and personality. In this regard, the problem has been termed "mirror" in order to illustrate the idea that one sees himself in the objects, capturing thus the Hegel idea of property as "embodied personality" or Radin's "property for personhood."

In what follows, we will describe the dogma problem of copyright – according to which, IP law's current codification in the EULAs is rendering the authorship attribution of creative works to virtual worlds users a very difficult (if not impossible) task. Confronted with such problem, we propose the representation of virtual worlds through the image of jigsaw puzzles. Such metaphor, furthermore, will serve as an operational criterion through which the "problematic" authorship over avatars can be correctly asserted. While the first problem (the "dogma" one) can still be solved within a utilitarian understanding of IP law applied to virtual worlds, the second problem questions that very same utilitarian justification, calling our attention to the other important dimension involved in the relationship between users and avatars: the personal attachment and the self-identification process the users develop with their avatars. In this sense, it is argued that utilitarianism does not capture the whole complexity of avatars, focusing solely upon the economic component and value of the latter, and thus neglecting the "mirror effect" of avatars, that is, the personality extension and the self-identification process that also characterizes the relation between the user and the avatar. As such, in Part VI – entitled "beyond the puzzle" –, we will analyse the "mirror" problem, proposing the theory of "Property for personhood," authored by Margaret Jane Radin, as a possible solution. But before, we shall address our first problem: the dogma one

B. The "Dogma" Problem

Looking briefly at the main objectives and principles justifying property rights, namely in the US, one soon realises that property law follows a utilitarian "dogma." In this regard, the US Constitution is clearly inspired by utilitarian views over property, stating as underlying justifications for property the endorsement of certain policy goals, such as promoting the progress of science and useful arts. Following the utilitarian reasoning, the fundamental premise of copyright law is that creative works benefit society as a whole. In this sense, and continuing with the example of the U.S., copyright law is intended to maximize the production and dissemination of creative expression, providing creators with economic incentives in order to encourage the production of creative works that concomitantly yield tangible benefits to the

⁷³ U.S. Const. Art. I, paragraph 8, cl. 8

⁷⁴ See, e.g., Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 578–79 (1994).

⁷⁵ Goldstein (2003) paragraph 1.14.

public. ⁷⁶ As such, "U.S. copyright law is said to be utilitarian because it offers private incentives for the purpose of realizing this public objective." (Garlick, 2005, p. 436) The monetary reward given to creators is, thus, a secondary consideration lying in the shadow of the copyright's primary concern – the general access to literary and artistic works as a public good. ⁷⁷

Nevertheless, due to the peculiarly collaborative nature of virtual worlds and taking into account the dominant utilitarian objectives of intellectual property law in the US, one can claim that IP law, when applied to virtual worlds, is failing to follow its own utilitarian "dogma" and its fundamental principles. On the one hand, copyright's current codification does not recognize the user's creative works and contributions within virtual worlds. On the other hand, copyright – as a "law primarily designed to encourage and protect creative expression." (Garlick, 2005, p.43) – should provide for the player's creative work protection. In other words, copyright is blocked in its current legal drafting and interpretation, failing to attain and pursue its primary goals and concerns.

In this aspect, one should not forget that the overriding utilitarian objective of IP Law, namely of copyright, is to maximize the creation and dissemination of creative works. Virtual worlds, as places of imagination and creation, although not envisaged by current copyright drafting, should not be precluded from copyright's foundational rationales and assumptions. In this sense, if technological change has rendered copyright's terms ambiguous, copyright law must be construed in light of its fundamental purposes. In sum, the creative effort and artistic work entailed by the user should not be neglected and disregarded in copyright's current framework and interpretation, but valued and protected through IP law's principles.

Consider[ing] the stated overriding utilitarian purpose of U.S. copyright law – to maximize the creation and dissemination of creative works – how is it that the grant of exclusive rights to game providers is deemed likely to achieve that purpose, but that the recognition of online gamer rights is not? (Garlick, 2005, p. 455).

Since the grant of exclusive rights to game providers is made possible through the EULAs, an answer to such question should entail a re-interpretation of these End-User License

⁷⁶ See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984); United States v. Paramount Pictures, 334 U.S. 131, 158 (1948) ("Reward to the author or artist serves to induce release to the public of the products of his creative genius.").

Fe.g., Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 349–50 (1991) ("The primary objective of copyright is not to reward the labor of authors, but 'to promote the Progress of Science and useful Arts.' . . . To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work." (quoting U.S. CONST. art. I, paragraph 8, cl. 8) (alteration in original)); Sony Corp., 464 U.S. at 429 ("The monopoly privileges that Congress may authorize are neither unlimited nor primarily designed to provide a special private benefit. Rather. [sic] the limited grant is a means by which an important public purpose may be achieved."); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) ("Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts."); Mazer v. Stein, 347 U.S. 201, 219 (1954) ("The copyright law . . . makes reward to the owner a secondary consideration.' . . . It is 'intended. . . to afford greater encouragement to the production or literary [or artistic] works of lasting benefit to the world." (citations omitted) (first bracketed alteration in original)).

⁷⁸ Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) ("The immediate effect of our copyright law is to secure a fair return for an 'author's' creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good. . . .When technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose.") (internal citations omitted).

Agreements. As we have alluded before, the EULAs force the players to waive any property rights before entering the virtual world, preventing them to claim any sort of ownership over the items they create and produce. As a result, the game developers retain all the property rights over virtual worlds, framing copyright within the premises established in those contracts. Leaving aside the question of whether private contracts can supersede elements of the intellectual property law regime, courts should interpret the terms of those contracts in light of the copyright's utilitarian foundational principles and constitutionally enshrined. Those principles, in my understanding, should allow for the recognition of virtual artistic and literary creations authored also by the players, envisaging the expansion of the real public domain, and thus the public good. The policy would then be to encourage creative works so as to increase the public good. In this sense, virtual worlds should be seen "... not only as games, but as mediums through which creators can contribute to the public good of both virtual and real environments" (Reuveni, 2007, p.296)

The "dogma problem", furthermore, causes copyright law to reward and value only some authors and not others.⁸¹ In other words, copyright law constructs a very narrow conception of author, in which game developers are, within virtual worlds, the only ones allowed in. The removal of users from any kind of authorship entitlements, leaving their contribution "not just undervalued but unvalued" (Garlick, 2005, p. 457), is due to what Mia Garlick (2005) calls the "problem of the Romantic Author" (p. 455).

Players are thus ostracized "precisely because they are not perceived as equivalent to the Romantic author, for whom creativity occurs independently. When compared with the Romantic author, online gamers who commercialize or rely on the content of games for creative expression will be deemed to be 'free riding', even 'pirating', on the hard labor and genius of these more genuine authors, adding nothing which society considers worthy of reward and encouragement." (Garlick, 2005, p.457)

In theoretical terms, the proposition is simple and fair: if IP law is to be interpreted according to its primary utilitarian objectives, copyright protection to the player's original creative works within virtual worlds should be recognized and granted. In practical terms, nevertheless, the question is far more complicated. How can one evaluate if a user's contribution to the virtual world amounts to an original and creative work worthy of receiving copyright protection? In order to answer the question and analyse correctly the nature of the contribution provided by the user, we propose the "jigsaw puzzle" metaphor as a tool to carry out such examination.

Bearing in mind that the user's highly participatory role in virtual worlds (as a conducer) challenges the current EULAs drafting and correspondent in-game practices, which distort a correct utilitarian understanding of property attribution in virtual worlds;⁸² we propose a new

⁷⁹ "It is unfair to permit a powerful contracting party to enrich itself at the expense of a powerless gamer by extracting the gamer's intellectual property rights as the price of admittance to the virtual world" (Reuveni, 2007, p.304)

p.304)

80 The analysis of the validity and enforceability of the EULAs and the relation between copyright and contract law go beyond the scope of this article. For a detailed account of that issue, see Reuveni (2007).

⁸¹ Garlick (2005, p. 457) citing David Lange, At play in the field of the word: copyright and the construction of authorship in the post-literature millennium, 55 SPG *Law & Contemp. Probs.* 139, 143 (Spring 1992).

⁸² And in the view of others, challenging the very fundamentals of copyright law (Garlick, 2005, p.454).

way of seeing and analysing virtual worlds, which hopes to cover and explains these virtual intricacies and subtleties – Jigsaw Worlds.

V. Jigsaw Puzzle

jigsaw (puzzle) noun

1 a picture stuck onto wood or cardboard and cut into irregular pieces which must be joined together correctly to form the picture again

 ${f 2}$ a complicated or mysterious problem which can only be solved or explained by connecting several pieces of information. 83

puzzle over sth phrasal verb

to try to solve a problem or understand a situation by thinking carefully about it.⁸⁴

Virtual worlds, just like the term jigsaw, can represent both a puzzle cut into pieces which can be joined together, as well as a complicated problem difficult to solve. The first section of this part will deal with the "virtual-world-puzzle," applying the jigsaw metaphor to those environments and explaining how such term can be used to explain the workings and dynamisms of virtual worlds. The second section will tackle the "virtual-world-problem," revisiting the IP law questions and problems deriving from the "distorted" utilitarian application of copyright to these environments. The idea is thus to offer a tool and a criteria through which copyright can be better understood (and hopefully) applied within the utilitarian framework. The final section of this essay will, instead, focus upon the issues that go beyond the jigsaw and the utilitarian scope, crossing the boundary between property and personality.

A. Virtual World Puzzle

Imagine a jigsaw puzzle composed of millions of different pieces, each one with different shapes, sizes, colours and functions. Some of the pieces would be musical; others would be textual while the remaining would be graphical ones. It would be a special jigsaw, as those pieces could be combined together in an infinitely imaginative way, fitting together in a billion of different manners to make an endless range of different constructions, characters and settings. The jigsaw would be fun, compelling and challenging. You would spend long hours playing around with the pieces, moving them from one side to the other, fitting and putting them together in all sorts of ways and manners. Moreover, you would share this jigsaw with thousands or millions of other people, each one assembling the pieces in a different but harmonious way.

In order to do the jigsaw though, some conditions would have to be respected. First of all, the jigsaw puzzle would not be yours. What you had bought was not the box with all the pieces inside, but a license giving you the right to open the box and play with the pieces. Secondly, you could not keep to yourself any of the constructions you had made with the pieces, as at the end you would have to return all the pieces and put them inside the box. In other words, as long as the pieces you used to make constructions with were the ones given by the owner of the jigsaw,

⁸³ From Cambridge Advanced Learner's Dictionary, available at http://www.dictionary.cambridge.org/define.asp?key=42681&dict=CALD

⁸⁴ *Ibid.*, available at http://www.dictionary.cambridge.org/define.asp?key=100863&dict=CALD

the latter would be the owner of all such constructions. Those constructions, nonetheless, would continue to exist on the next day, as the jigsaw would be persistent and continuous. Nevertheless, the owner of the jigsaw could, at any time and at his will, introduce more pieces, change some and delete others. The owner could even take the box from your hands, prohibiting you to continue playing. What kind of jigsaws are these? Puzzled? Welcome to the virtual-puzzleworlds.

Jigsaws share important features and characteristics with virtual worlds, fact which can be used to explain the composition and the functioning of the latter. Jigsaws are not presented to us as products already made and constructed, instead they are cracked into pieces which we have to join together. No one buys puzzles already made; the fun of it is to make them! Just like virtual worlds, the idea is to build those worlds and to construct our character from scratch – fitting together the pieces that the game developer supplies to us. In this sense, both jigsaws and virtual worlds are continuous and collaborative projects, requiring the time and skill of players. In this sense, the profile of a jigsaw user corresponds to the profile of a virtual world user, as both fit the model of a conducer, that is, of a kind of hybrid consumer/producer who buys entertainment to produce their own entertainment.⁸⁵

Furthermore, the pieces and the process of combining them together to form the jigsaw reflect, metaphorically speaking, two different aspects of the virtual world's own processes and mechanics. On the one hand, jigsaw pieces represent the bits, as the most elementary unites composing the game. In a way, and looking rather crudely at the technicalities of game play, playing in virtual worlds (and online games in general) equates to be manipulating bits in a database. As a result, bits, like jigsaw-pieces, are put together and inserted in a determined place within a database in order to attain a certain effect or produce something in the game. The possibility of the jigsaw owner changing, deleting or introducing new pieces, as mentioned before, corresponds to the role of game developers as code-makers, operating the software through which they control every aspect of the virtual world. On the other hand, the fitting of the pieces together represent also the accomplishment of quests and the resolution of enigmas and puzzles that make up the game and challenge the player. In this sense, and according to game-designer Will Wright, the game represents a problem landscape. According to Wright, while most games have small solution landscapes, in which there is only one possible solution and one way to solve it; the games that tend to be more creative, have a much larger solution space, allowing the player to potentially solve this problem in a way that nobody else has.

In terms of game design, the jigsaw metaphor also illustrates the two "spaces" involved in the conception of online games, that is, the "possibility space" and the "topography space."

⁸⁵ Garlick (2005), p. 423 (citing "Sims, BattleBots, Cellular Automata God and Go, a conversation with Will Wright by Celia Pearce, 2 *International Journal Of Computer Game Research*, (July 2002), at http://www.gamestudies.org/0102/pearce)

⁸⁶ In this aspect, we are referring essentially to virtual worlds which establish goals, missions and objectives, such as the defeat of a given monster or the discovery of a certain treasure in the so-called "sword-and-sorcery" games like "World of Warcraft" and "EverQuestII", or "social" goals such as finding a partner and getting married in "The Sims Online". Open-ended worlds such as "There" and "Second Life" have no plotline or goals, "merely" consisting in social platforms.

⁸⁷ Pearce, C., Sims, BattleBots, Cellular Automata God and Go, a conversation with Will Wright, 2 International Journal of Computer Game Research, July 2002. Retrieved September 12, 2008 from http://www.gamestudies.org/0102/pearce.

⁸⁸ Ibid.

As such, a user in an online game is free to choose a number of actions – the possibility space – within a set of pre-determined constraints – the topography space. Thus, in a sense, players determine their own game within the series of parameters set by the game provider (Garlick, 2005, p.424).

In the jigsaw the process is similar to the one in virtual worlds, ⁸⁹ in the sense that a user is free to make the puzzle at his own way (having at his disposal a million of different ways to do it, starting from the corners or from the centre, doing it in parts, etc) but within the constraint of having to attain, at the end, a given image represented in the jigsaw as a whole. The distinction between the possibility and the topography spaces, as well as their respective sizes comparing with one another, touches the issue of control of the game developer over the user in the game, as well as the degree of freedom that the latter has within the virtual space. In this sense, the bigger and more complex an image of a jigsaw is, the more constraints ⁹⁰ a user will have in joining the pieces together

B. Virtual World Problem

The image of virtual worlds as jigsaws can also be useful in the analysis of the questions and problems that these new digital environments pose to intellectual property law. Such difficulties, as we have seen, derive from the collaborative nature of virtual worlds, where the player takes an active and artistic role, investing time, effort and skills in the development of ingame items and in the creation of characters. As a result, and as we have already seen, a conflict between game developers and user has been formed over the question of ownership over these virtual assets. The complexity of the question of ownership in virtual worlds is especially reflected in its most salient feature – the avatar – in which the combined efforts made by both game developers and players in its creation and development also converge. As a result, the question that urges to be answered concerns the authorship over avatars. Who exactly owns the avatars – the company that creates the game, or the player whose time and effort brings the avatar into existence? Who should be considered the author of the avatar - the game developers or the players? Who is the puzzle maker, the one that made the pieces or the one that puts them together?

Such question is problematic and difficult, as the origins and birth of avatars are somewhat nebulous. On the one hand, the characters are already pre-defined by the game developers. As such, even the most advanced and powerful avatars have all been programmed beforehand by the game designers. The set of attributes that compose the avatar, such as the character's physical characteristics – including body proportions, facial features, clothing and skin colour – or even the avatar's psychological qualities⁹² were all formerly set by the game developers. Recurring to our image of a jigsaw, everything concerning the appearance and the

⁸⁹ Obviously the level of creativity and interaction permitted in virtual worlds is completely different from the one allowed in the making of jigsaws. Nevertheless, and for the purpose of illustrating the player's freedom and constraints in virtual worlds – distinguishing between possibility and topography spaces – the jigsaw-puzzle metaphor stands.

⁹⁰ Meaning, in this case, difficulties.

⁹¹ Julian Dibbell Owned!, State of Play 138 (substituting the terms "game-world economies" and "economy" with the term avatar)

⁹² In the Sims Online is even possible to choose the astrological sign, the aspirations, objectives and desires of our avatar.

attributes of our avatars have been previously set and established (just like the overall picture craved in a puzzle), being afterwards cracked into small pieces that the player has to join together. As a result, the contribution of players would merely be an investment of time, involving "... the selection and arrangement of pre-determined images and plotlines of game providers" (Garlick, 2005, p. 455), ⁹³ just like a player fitting together a group of pre-defined pieces of a jigsaw-puzzle. On the other hand, "complex characters require hundreds of hours to create, and although the game developers have created the potential for these characters to exist by programming them into the software code, they do not actually appear in the game until a player has invested a significant amount of time in overcoming game obstacles to build the character" (Stephens, 2002, p. 8). In "puzzle terms," the players argue that the amount of time spent in putting the pieces together to do the jigsaw should entitle them to claim property rights over the puzzle. In addition, the investment of time and skill creating and developing the character sparks in the player a feeling of ownership over the avatar. ⁹⁵

In terms of attributing intellectual property rights over avatars, and following the jigsaw puzzle metaphor, the normal and most recurrent situation is to grant ownership to the game developers, who are in fact the authors of the work, fulfilling both copyright requisites of originality and fixation. In this sense, they emerge as the original and creative jigsaw makers, while the users merely reconstruct what was previously done. The contrary position would be as odd as a player putting the pieces together of a jigsaw and claiming afterwards to be the author of the picture or painting represented in that jigsaw.

In this respect, the image of a jigsaw puzzle can also be of some assistance in the clarification of the concept of originality, as "touchstone of copyright subsistence" (Garlick, 2005, p. 455). The modicum of creativity required to qualify a given work as original, as well as the source of its authorship – game developers versus user - can be more easily assessed. Originality, thus, could not emerge as long as the user is only moving the pieces provided by the game developer, putting them together in one way or the other. The constructions resulting from that process would not be original, pertaining thus to the game designer.

Nevertheless, there are situations in which the grant of property rights to players over their avatars can be duly justified. In accordance with the fulfilment of certain conditions, fitting the pieces together to make a jigsaw can amount to the necessary originality to deserve copyright protection. Such view is supported by three arguments.

Firstly, it is important to bear in mind that copyright demands only a low threshold of creativity (comparing to patent law for instance). In fact, for copyright to subsist, the amount of contribution must be more than a merely trivial variation and involve a modicum of creativity. ⁹⁷

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⁹³ In addition, mere effort and labor are insufficient for copyright to subsist. Feist Publ'ns, 499 U.S. at 340.

⁹⁴ Moreover, it would be unlikely that such kind of contribution, translated into "... an investment of time and decisions about a series of choices within a pre-determined 'possibility space' would be considered by the courts to be the kind of original creativity which merits copyright protection." (Garlick, 2005, p.455)

⁹⁵ See Leslie Brooks Suzukamo, Online role playing games gain in popularity, Knight Ridder-Tribune Bus. News, Feb. 26, 2001, 2001 WL 15013352.).

⁹⁶ In this sense, "Although players invest a good deal of time and creativity in developing their characters, the characters are made possible only by the game developers. The game developers have created the foundation and potential for these complex assets and characters, which suggests that the developers should have some rights in these works" (Stephens, 2002, p. 10).

⁹⁷ Feist Publ'ns, 499 U.S. at 340.

Such minimum level of creativity leads us to the question of what should be deemed as an original contribution from the user and what should not. The answer will vary according to the virtual world in question. The game City of Heroes, ⁹⁸ for instance, offers "... a complex character development system providing players billions of possible combinations when rendering an avatar's graphical appearance" (Reuveni, 2007, p. 282). Furthermore, City of Villains, ⁹⁹ NCSoft's follow-up to City of Heroes, boasts a "staggering" range of possible player permutations, effectively providing players endless choice in creating their avatars" (Reuveni, 2007, p. 282). ¹⁰⁰

Within these games, the wide range of possibilities given to the players (whose possibility space, in this matter, is almost endless) may justify the grant of copyright protection to their avatars. In this sense, Reuveni (2007) argues that a "truly complex system might provide sufficient choice to justify copyright" (p. 282). In other worlds, such as MappleStory, ¹⁰¹ in which the configuration of avatars presents very few different possibilities, copyright will not be granted. In the case of this game, "given the limited tools most game developers provide players for character creation, many characters will likely fail to satisfy the level of distinctiveness that copyright requires" (Reuveni, 2007, p. 282).

Accordingly, such a panoply of options poses the question of knowing how much "room of creative manoeuvre" a game developer can give to the user in order for the latter to claim copyright protection over his or her creations. In sum, taking into account the low threshold of creativity required for copyright and the fact that a number of virtual worlds offer a possibility space composed of thousands and millions of variables available for the avatar's appearance, copyright protection should be rightfully granted in those cases. ¹⁰²

As a second reason for supporting an eventual copyright grant to player's creations, one should be aware that virtual worlds do not come from zero; they are not devised "ex nihilo." Instead, they are based on existing material, bringing their characters, stories and settings from other sources. Virtual worlds are inspired by ideas, thoughts, and works from other authors and creators. Many of them even present common characteristics and features. ¹⁰³ In this sense, virtual worlds fit into Lavoisier's theory that "nothing is lost, nothing is created, everything is transformed." An evocative example of this transformative flow can be found in Tolkien's legacy, the English writer and university professor who popularized fictional settings and fantastical creatures known as Hobbits, Elves, Dwarves, Wizards or Orcs through his literary works, namely "The Hobbit" and "The Lord of the Rings". Such fantasy and imaginary universe has since then inspired short stories, video games, artworks and musical works. Moreover, adaptations of The "Lord of the Rings" have been made for radio, theatre, film (the

⁹⁸ http://www.cityofheroes.com/

⁹⁹ http://www.cityofvillains.com/

¹⁰⁰ Reuveni (2007, p. 282).

¹⁰¹ http://en.mapleeurope.com/Maple.aspx

Moreover, it would be unreasonable to argue that those creations do not gather the minimum modicum of creativity based on the fact that they would inevitably correspond to a given variable programmed by the game designer (within the million other ones inserted into the software).

¹⁰³ "Indeed, many in-game features of online games are similar, for example, three different classes of avatars and the presence of different worlds connected by portals/ stargates in both Asheron's Call 2 and Earth&Beyond. Other games share features such as the ability to trade in-game and engage in player versus player combat. All games share the common overall objective of levelling up. The question is where to draw the line between protected and unprotected elements." (Garlick, 2005, p. 476)

widely acclaimed and Hollywood Oscar winner trilogy) and, inevitably, to virtual worlds, with the MMORPG "Lord of the Rings – Shadows of Angmar." Other examples of original works coming from books or movies and reaching the domain of virtual worlds are the games "Star Wars Galaxies" and "The Matrix Online." Such chain of ideas and inspiration makes us wonder how legitimate it is for a game designer, self-proclaimed property owner of his virtual world, including characters which he borrowed from Tolkien and others, to preclude players from asserting any property rights of their own.

The third reason supporting the possibility of granting players with property rights deals with the incentives to create in virtual worlds. As such, those environments are spaces designed to incite creation, foster artistic activities and cultivate imaginative endeavours. Virtual worlds are made of and for creation, invention and imagination. As such, copyright's underlying principles and assumptions should protect and promote those places by recognizing the creative flow of artistic works produced by users within its premises. Copyright should not be locked in private agreements which undermine player's artistic creations by removing their legitimate ownership entitlements on behalf of game developers. Judges, legislators and practitioners must acknowledge that virtual worlds are not mere video games, passive entertainments in which the player is bound to follow the game designers plot, slaughtering the dragon and rescuing the princess. In virtual worlds, the player can be the dragon, creating his own story and following his own plotline. The user is provided with tools to create, to construct and to invent. As such, it is at least paradoxical that such spaces, which are meant to appeal to the player's creative and artistic side, prohibit any kind of player's ownership over such creations. Such restriction, moreover and according to a utilitarian view, diminishes the incentives on players to create within virtual worlds.

Another case in which the player could be granted copyright protection for his constructions would be for jigsaw pieces which would not pertain to the original puzzle, being introduced in the puzzle by the player who would combine them with others. Such "alien" jigsaw pieces intrusion is happening already in virtual worlds, namely in Second Life which provides their players with the coding tools necessary to construct in-game items. ¹⁰⁵ In fact, in Second Life it is possible to create potentially irreplaceable virtual property as their "users...can write computer programs that represent buildings, vehicles, weapons, games, and almost anything the mind can imagine" (Meehan, 2006, p. 42). ¹⁰⁶ As such, "a proficient coder would have far more permutations available to him or her than a player relying on a game developer's preset options" (Reuveni, 2007, p.282). In order to evaluate if the player's creation could in fact merit copyright protection, courts would have to analyze "the amount and substantiality of the portion used in relation to the copyrighted work as whole." ¹⁰⁷ In this context, courts would first consider how many of the original art assets were taken and how important those assets are to the original

¹⁰⁴ Released by Turbine Inc. in the United States and Europe on April 24th of 2007, http://www.lotro.com/

¹⁰⁵ See Second Life Scripting: at http://secondlife.com/whatis/scripting.php (describing the coding tools available to

players in Second Life, a virtual world).

106 In virtual worlds built as spaces for creativity and innovation – as Second Life, in which much of the creativity is derivative, the player's authorship over his or her artistic works is already protected through a limited number of intellectual property rights granted to them.

¹⁰⁷ 17 U.S.C. paragraph 107(3).

game. 108 According to the number of pieces of the jigsaw belonging to the player, the respective work could then be copyrighted (or not) by the player.

In sum, and in accordance with certain conditions, a player can in fact be considered an author under copyright law. 109 Previously, in the context of video games, players' participation was held to be insufficiently creative to render them authors. Playing a video game was seen more like changing channels on a television than writing a novel or painting a picture. 110 With the incessant technological developments and the rise of participatory and collaborative virtual worlds, players should be given the opportunity to qualify as potential creators and artists.

VI. Beyond the Jigsaw Puzzle...

A. The "Mirror" Problem

As we have seen, the jigsaw metaphor is particularly important in terms of delineating the extent to which the utilitarian view of intellectual property rights can justify the attribution of avatar ownership to users (to the detriment to game owners). Nevertheless, the story does not end here as IP law still faces a second problem: the personal attachment and the self-identification process users establish with their avatars, that is, the "mirror problem."

The fact that we mirror ourselves in the avatars, depositing and reflecting in them part of our identity and personality, brings additional problems for the utilitarian understanding of intellectual property. The "mirror problem" demonstrates that the utilitarian perspective pending over IP law does not traditionally account for the emotional and intimate value of the object of property, disregarding in general the psychological attachment that the human user builds upon certain things. Such problem is particularly true in the case of virtual worlds, as the elements of the game to which players have a sense of entitlement and attachment are regarded without such emotional charge, especially in the case of avatars when perceived as extensions of the human user. In other words, the passionate way in which players involve themselves in the game, experiencing a feeling of belonging to that space and projecting their own identity in their avatars, which suddenly becomes a carrier of their personality, is not taken into consideration by the utilitarian perspective of intellectual property law. Furthermore, the inability of copyright (understood in its utilitarian mask) to consider the personal and intimate attachment developed by the player towards the avatar has been identified by several legal scholars. 111 Mia Garlick

¹⁰⁸ Harper & Row, 471 U.S. at 564-66.

¹⁰⁹ Even if one follows Fairfield's theory of virtual property and define virtual items pertaining or created within virtual worlds as virtual property (instead of intellectual one), the jigsaw puzzle maintains its value and usefulness, operating as a criteria individuating which items could be claimed by users as their (virtual) property. In this case, the jigsaw puzzle would support the granting of virtual property rights in those items (rather than IP rights) in favour of the users. In fact, and as we shall see in the following section of the paper, our position is to argue in favour of granting users with virtual property rights over their avatars.

In Midway Manufacturing Co. v. Artic International, Inc., 704 F.2d 1009, at 1002 (7th Cir. 1983)

¹¹¹ In fact, the leading theorist of Property for Personhood, although far from the virtual worlds' context, addresses strong criticisms to the utilitarian view of Property, targeting namely Eric Posner. Margaret Jane Radin, as we will see next in further detail, divides property into personal and fungible, describing the former as essential for our constitution as persons and, as such, arguing in favour of greater legal protection to personal than to fungible property. Taking into account such model, Radin criticizes the utilitarians in this way: "in contrast to these assertions that certain property claims are stronger than others, some utilitarians might claim that since there is only one social goal, maximization of welfare, so there is only one kind of property - that which results in maximization of welfare" (Radin, 1993, pp. 51-52); furthermore, "all entitlements are treated alike in the economic model. Economists

(2005), for instance, refers that copyright law "... is unable to recognize the very real feeling of entitlement which gamers feel in and to online games" (p. 461). In this sense, it is very unlikely that the users will be deemed original authors, as the nature of their contributions involves the investment of time, relationship and emotions (Garlick, 2005, p.461). Reynolds (2003b), going even further in his claim, argues that the relationship between representation of persona and the individual has, in at least some cases, values that may not easily be expressed in terms of property rights (Reynolds, 2003b).

In this context, it is important to mention that avatars can induce in their users a feeling and interest that goes beyond the mere utilitarian property expectation (which deals with private incentives and public goods). In certain cases, the creation and use of avatars have the potential of creating in their respective users a relation of self-identity, shifting our legal analysis beyond the puzzle and away from the utilitarian property framework, entering the field of the complex interaction between property and personality. In this sense, and as we have seen at the beginning of this essay, avatars have the particularity of blurring the supposedly rigid fields of property and personality (according to which, one things is to own and another is to be). When confronted with the mirror problem, the utilitarian justification of IP law looses much of its value and use, as it is not able to include the personality element present in certain property relationships, as the one between the user and the avatar. In order to capture the full complexity of the avatars, namely their blurred location at the crossroad between property and personality, it is imperative to resort to other constructions and conceptions of property theorization. As such, the following section introduces a property theory that, by incorporating the personality dimension in property, will attempt to solve the mirror problem: Margaret Jane Radin's theory of "Property for" Personhood.

B. Theory of "Property for Personhood"

In the modern legal literature, property and personality have been "re-connected" through the theory of "Property for Personhood" authored by Margaret Jane Radin (1982), who argued that property in things enhances the personhood of the proprietor, justifying property "on the basis of a personhood-constituting connection between the potential owner and the thing claimed" (Spence, 2007, p.50).

Such theory derives from the so-called personality theories, according to which private property rights "should be recognized when and only when they would promote human flourishing by protecting or fostering fundamental human needs or interests" (Fisher in Munzer, 2001, p.189). Taking into account the wide variety of possible interests that may be deemed fundamental, and drawing from Waldron's research, Fisher (2001) argues (in the context of intellectual property rights) that "personhood based guidelines for crafting such rights must be found, if anywhere, in some combination of the interests of privacy, individual self-realization, identity, and benevolence" (p.190). Also circumscribed to intellectual property, Spence (2007) advances that the "argument from personhood is that the act of creation entails the embodiment of the personality, or personhood, of the creator on the intangible which she produces. In order to

typically rely on efficiency criteria and not on perspective of autonomy or personhood in seeking to determine whether certain entitlements should be accorded greater protection than others" (Radin, 1993, ft.82, p.216)

protect her as a person it is essential to give her some control over the intangibles in which she has invested herself" (pp.49-50).

Although departing from the property theory of Hegel's Philosophy of Right, according to which the person becomes a real self only by engaging in a property relationship with something external, Radin's (1982) construes a somewhat different thesis. The main difference regards the scope of the theories, as Radin focuses solely upon property, while Hegel uses the latter as only one step in his encompassing *grand* theory of the Philosophy of Right. In this regard, "whereas the theory of personal property begins with the notion that human individuality is inseparable from object-relations of some kind, Hegel makes object-relations the first step on his road from abstract autonomy to full development of the individual in the context of the family and the state" (Radin, 1993, p.45). Hence, according to Hegel, property is only the first embodiment of freedom. Or in other words, "Hegel's property theory is only the first part of a logical and historical progression from abstract units of autonomy to developed individuals in the context of a developed community" (Radin, 1993, p.45). In this context, Spence (2007) argues that the argument from personhood as a justification for property has been wrongly attributed to Hegel, who "has more of a concern for personal autonomy" (p.50).

Radin (1993) has developed her theory of property for personhood, claiming that in order "to achieve proper self-development – to be a person – an individual needs some control over resources in the external environment" (p.35). Following such reasoning, "if property that is intimately connected to, and valued by, the person is taken away, then the person is concomitantly reduced as a person" (Davies & Naffine, 2001, p.7). Based on such premises, Radin argued in favour of the recognition of a right to property for personhood.

The value of property, within this perspective, is so relevant to personality that "certain categories of property can bridge the gap, or blur the boundary, between the self and the world, between what is inside and outside, between what is subject and object" (Radin, 1995, p.426). But not all categories of property are able to bridge such gap. In this context, Radin distinguishes between two types of property: personal property and fungible property. While property for personhood is property that triggers the process of self-construction and self-identification between the subject and the object (blurring the boundaries between the both), amounting to a "relationship to an external thing that contributes to a person's feelings of well-being, freedom and identity" (Davies & Naffine, 2001, p.7); fungible property is property that is interchangeable with any other and exists mainly for wealth creation. In Radin's (1993) own words, while personal property is "property that is bound up with a person," the fungible is "property that is held purely instrumentally" (p.37). In analysing "the strength or significance to someone's relationship with an object by the kind of pain that would be occasioned by its loss" (Radin, 1993, p.37), personal property is – according to Radin - composed by objects closely related to one's personhood, in the sense that "its loss causes pain that cannot be relieved by the object's replacement' (Radin, 1993, p.37), while fungible property encompasses the items which value is primarily monetary and which loss would not seriously affect an individual's personhood.

¹¹² According to Michael Spence (2007), "although Radin bases her argument on the work of Hegel, it is distinguishable from any argument of his" (p.50).

¹¹³ In Hegel's Philosophy of Right, "freedom is finally realized when the individual will unites with and express itself as part of the objective ethical order – an absolute mind or spirit (*Geist*) embodied by the state" (Radin, 1993, ft. 43, p. 211).

In Radin's theoretical construction, property which contributes to personality is socially more important than fungible property, meriting stronger legal protection (likewise, "one element of the intuitive personhood perspective is that property for personhood gives rise to a stronger moral claim than other property" "[Radin, 1993, p.48]). Moreover, the American scholar finds evidence to support her claim in some US Supreme Court decisions, arguing "that they reveal a judiciary that is more willing to protect personal property than fungible property" (Davies & Naffine, 2001, p.7).

Following Radin's thesis that property does not amount to the object that is owned by a subject, but as something that bridges the gap between object and subject, can we apply such property conception to the avatars? By arguing, like Radin, that the object is part of the person's identity, can we claim that avatars are a category of property for personhood and, as such, part of the user's identity? A positive answer would entail the attribution of the avatars' ownership to their users, to detriment to the game developers, as avatars – conceived as property intimately connected to the user – would enhance the personhood of the latter. Nevertheless, to answer that question we must first clarify what type of property can be regarded as property for personhood. Margaret Radin, in her list of examples of property for personhood, mentions a person's primary place of residence, cars and objects of particular sentimental value, such as wedding rings. Moving to the case of the avatars, there are at least three difficulties in applying Radin's thesis to the inhabitants of virtual worlds.

C. Problems in applying the Theory of Property for Personhood in the Virtual Realm

1. Heterogeneity and Diversity of Avatars.

The first difficulty one encounters in applying Radin's theory of "Property for Personhood" is the incredible heterogeneity of purposes and feelings the users have and develop towards their avatars. In this sense, while many players use their avatars just for pure entertainment; others will use to conduct business; while some will acquire immense popularity and notoriety through their avatars, many will rest in the shadow of anonymity; while many develop a complex online identity through their digital selves, others will just create and develop avatars in order to re-sell them afterwards and make profit. Taking into account such disparate interests and processes, it is extremely difficult to fit the avatars, as a homogeneous group, in either the box of property for personhood or fungible property. Nevertheless, the task is not that hard, as Radin does not divide property into personal and fungible as two isolated, dichotomic and non-communicative boxes, but as a "continuum from fungible to personal" (Radin, 1993, p.53), that is, as "a continuum that ranges from a thing indispensable to someone's being to a thing wholly interchangeable with money" (Radin, 1993, p.53). As a result, "many relationships between persons and things will fall somewhere in the middle" (Radin, 1993, p.53). As the avatars can be anywhere in this continuum, the solution for such problem is then to resort to a case-by-case analysis, disentangling the personal and the fungible avatars, and inserting them in the continuum, that is, somewhere between the fungible and the personal end-points. If the avatar is placed closer to the personhood extreme point of the continuum, one would presuppose that users would have constructed, through their skills, time and effort, an avatar to which they relate and identify themselves with. In that case, the user could argue that the avatar is her personal property - condition of her own personhood - and, as such, deserves stronger legal protection than many other different virtual items and characters. But how can one (let's imagine the courts within a legal proceeding) determine that the avatar is here or there in such continuum? How can one evaluate if the user/avatar relationship is constitutive of one's sense of self? In proving or ascertaining that kind of particular relationship, one must obviously construct sufficiently objective criteria to identify subject/object relations that truly give rise to personal embodiment or self-constitution of the person. This concern or problem is identified by Radin as the "Problem of Fetishism," according to which we should not recognize close object-relations as personal property if "the particular nature of the relationship works to hinder rather than to support healthy self-constitution" (Radin, 1993, p.43).

As "the personhood perspective generates a hierarchy of entitlements" (Radin, 1993, p.53), the closer the avatar is placed to the personhood end of the continuum, the stronger the correspondent property entitlement will be. Located, through a case-by-case analysis, in such privileged "position," the avatar will be considered integrative part of someone's identity and a condition for the self-development of the user as a person. In other words, and following Radin's thesis, the value of an avatar would be the same of a wedding ring.

Even if one can successfully make the case that the relation users/avatars – taking into account particular conditions and specific circumstances analysed case-by-case – triggers the personal attachment and the process of self-identification between the user and the virtual character, qualifying the latter as "personal property," there is a second difficulty one should tackle (and which was identified earlier in the article): the mismatch between virtual and intellectual property law.

2. The mismatch between Virtual and intellectual property.

According to such mismatch, avatars present the qualities and features of tangible (land or chattel) property, but are, nevertheless, governed through property laws meant to regulate intangible objects, that is, intellectual property law. In this sense, and according to the EULAs current drafting, avatars are considered intellectual property. There is thus a mismatch between what virtual property really is (tangible property) and how it is actually being regulated (intangible property). Furthermore, and bearing in mind that Radin's theory is about chattel or real property (wedding rings, houses and other tangible objects), how can one reconcile the IP configuration of the avatars with the chattel property interest that lies behind Radin's thesis? The solution for this difficulty is, in my view, to combine Fairfield's theorization of virtual property with the underlying theoretical justification of Radin's property for personhood, arguing thus for a virtual property interest in the avatar based on Radin's theory.

Before proceeding in the development of this idea, and in order to support our argument, some preliminary explanations should be made. In this regard, we should reassure the reader that we are perfectly aware that Fairfield's theory draws from utilitarian justifications for property

Although, in my view, there is no impediment in applying such theory to intellectual property or, as in this case, to virtual property (especially to the latter, as virtual property is basically equated to physical property).

explains, the reification of virtual property the scholar proposes does not entail "the creation of a separate legal regime. Rather, it is an argument that courts ought to apply common-law property doctrines to certain online resources, because people will make better use of those resources if they are packaged in a given fashion" (2005, p.1096). In this sense, the owner of virtual property owns the same rights that the owner of a book does.

(and namely from welfare economics). 116 Nevertheless, wee see no inherent problem or contradiction in adding a complementary theoretical justification for virtual property, such as Radin's theory of property for personhood. In order to sustain such a claim, we find extremely important to make the following caveat: recognizing an underlying property for personhood justification for virtual property rights does not undermine the theory of virtual property, neither its basic utilitarian justification. In fact, the application of such theory to the case of virtual property does not challenge or weaken Fairfield's thesis, on the contrary, it provides a supplementary argumentative justification for the legal recognition of such virtual property rights in the hands of the users. 117 In this sense, we are intervening at the level of the theoretical justification for property rights, and not on the concept of property per se to (in this case the one of virtual property). As intellectual property is justified and grounded upon a number of different theories 118 (such as utilitarian, labour, personality and social-planning theories), why shouldn't virtual property (as a novel property concept or form) be debated, argued and justified on grounds that go beyond and that are different from the ones provided by utilitarians? It is exactly here where that Radin's theory enters and acts upon.

As insistently explained throughout this article, avatars – further to their economic and pecuniary component, which is protected and incentivised according to a utilitarian understanding of property -, also include a very important personality component. In specific and determined cases, avatars are perceived by their users as persistent extension of their own self identity and personality. As such, by endorsing virtual property rights with the theoretical justification of property for personhood, the latter theory finds a supplementary good reason for advocating the ownership of avatars to their users.

Furthermore, we believe the two theories (utilitarianism and property for personhood, framed within a virtual property rights concept) do not undermine each other, but, on the contrary, complement one another, capturing the avatar in its whole complexity, as an element at the crossroad between property and personality. In support of this idea we can resort to Fisher's (2001) research, which states that many legislative and judicial materials are mixing and blending different theoretical arguments justifying intellectual property. By referring to terms and notions, such as "fairness", "incentives", "personality" and "cultural-shaping," in countless passages of decisions, judicial opinions, statutes and appellate briefs, ¹¹⁹ courts are combining utilitarian, labor, personality and social planning theories 120 of IP law (and property law in general) in their jurisprudential reasoning. Such "ecumenical" view and application of the different theories of property by courts is contrasted by a "sectarian" and "individualistic"

¹¹⁶ Fairfield justifies his "quest" for the recognition of virtual property under utilitarian principles, advocating the reification of a particular group of online resources so they may be efficiently used and traded. The theory put forward is, moreover, connected to a concern of an eventual underuse of internet resources: a tragedy of the anticommons. As the scholar declares, while arguing in favour of the efficiency gains of regulating virtual property under the common law of property, "a property approach will lower search and negotiation costs, and will generate social wealth and creative incentives to use important resources as well" (Fairfield, 2005, p.1101). The argument for virtual property is thus surrounded by a discourse of incentives, wealth, efficiency and gains.

A different problem, as we shall see later as the third difficulty (the market problem), is the contradiction between the utilitarian objective of maximizing welfare, contributing to fostering the market and the inalienability of property (namely property for personhood) presupposed in Radin's thesis. ¹¹⁸ For a recent account see Spence (2007).

¹¹⁹ For examples of such passages, see Fisher in Munzer, pp. 175-176.

¹²⁰ Social planning theory is "rooted in the proposition that property rights in general – and intellectual-property rights in particular - can and should be shaped so as to help foster the achievement of a just and attractive culture" (Fisher in Munzer, p. 172)

approach followed by the academia, which continues to see labor theory, utilitarianism and personality theory as rival perspectives. In explaining the reason behind such sharp contrast, Fisher argues that "theorists are seeing the law through glasses supplied by political philosophy. In contemporary philosophic debates, natural law, utilitarianism, and theories of the good are generally seen as incompatible perspectives" (Fisher in Munzer, 2001 p.176). As such, and still according to the same scholar, "it is not surprising that legal theorists, familiar with those debates, should separate ideas about intellectual property into similar piles" (Fisher in Munzer, 2001, p.176). This particular approach to theories of property, characterised by rivalry and opposition (which are in large part drawn from Anglo-American political philosophy [Fisher in Munzer, 2001 p.176]) receives a substantially different treatment in Continental European scholarship, as the already referred example of the German conceptualization of copyright - as a hybrid between a personality and a property right – seems to demonstrate.

Drawing from such insights, we propose to follow a complementary approach in dealing with both utilitarian and property for personhood theories, conciliating both of them in the conceptualization of virtual property rights.

Having advocated a conciliatory view between the utilitarian and personality theories of property, we shall now return to our claim, according to which the problem of the mismatch between virtual and intellectual property in the figure of the avatar (our second difficulty) should be solved by granting a virtual property interest in the avatar based on Radin's theory of personality. Such argument is, moreover, supported by the virtual property theory we analysed in Part III of this essay. In this respect, and following the premises of such thesis, avatars do not amount to intellectual property; avatars, are instead, virtual property: rivalrous, persistent, and interconnected code that mimics real world characteristics (Fairfield, 2005). Defined in this way, there is no conceptual difference – in terms of the relationship proprietor/property - between a virtual world avatar and Radin's wedding ring. Moreover, and perhaps more importantly, there is no conflict between the recognition of a virtual property right in the avatar attributed to the user and the intellectual property interest in the avatar hold by the game owner. As we have previously seen in the section analysing Fairfield's virtual property theory, ownership of virtual property does not threaten the intellectual property interest held by the game developer. ¹²¹ In this way, the ownership of a book is not the ownership of the intellectual property of the novel that the author wrote. Thus, even if Blizzard, for instance, owns the IP in the character, the user owns that one-off copy of the character. 122 This solution, in fact, does not undermine the intellectual property interest that the game owner holds in the virtual world.

In this regard, it is crucial to separate intellectual property interest in the virtual world as a whole from the property interest in the code. As such, and following Fairfield's explanation, one thing is the intellectual property interest of the virtual world owner over the code that creates the graphical representation of textures and surfaces, that is, the "stuff" that composes the three-dimensional virtual environment; another (different) thing are all the valuable work created by the inhabitants of the virtual world. The latter gives rise to virtual property rights attributed to the users and independent from the intellectual property rights of the game owner over the environment as a whole. Since virtual property operates as a unified whole only at the level of

¹²¹ And the other way around is also true: "intellectual property need not conflict with virtual property. In fact, the two, if well-balanced, will complement each other" (Fairfield, 2005, p.1097).

¹²² In the same way, even though Toyota's trademark and patent IP inhere in our car, it is still "our car."

code, Fairfield (2005) proposes property-rights recognition at the level of code for virtual property (p.1097). Such recognition would avoid, according to the same scholar, the encroaching of emergent virtual property rights currently produced by the abusive use of the game owner's intellectual property rights. In other words, as game owners are extending "their (legitimate) claim to the intellectual property in an environment into an illegitimate claim to all of the virtual property possessed by or developed by the inhabitants of the environment" (Fairfield, 2005, p.1083), the recognition of virtual property rights would solve this abuse.

In this way, and bearing in mind the important distinction between intellectual property and virtual property rights, the personhood element would attach to the virtual property component (or more precisely to the virtual property interest that, as we have seen, mimics the real property interest) of the avatar, and not to its IP component.

Nevertheless, there is still a third difficulty one encounters when attempting to apply Radin's theory of Property for Personhood to avatars, the problem of the market.

3. The "Market" Problem.

Having argued in favour of a virtual property interest in the avatar, based on Radin's theory of "Property for Personhood," we still encounter a third problem: the fundamental trouble that Radin's theory suffers when confronting her form of property with the market.

By arguing that property for personhood, as the term implies, is property that a person uses in her self-construction and self-identification, Radin is implicitly arguing in favour of the inalienability of such kind of property. In fact, by resorting to Hegel's Philosophy of Right, Radin (1993) refers that "[t]hose things which constitute the will or the personhood must be ... inalienable" (ft.46, p.211). Moreover, by advocating the recognition and preservation of some conventional property interests as personal property, in order to protect the latter "against invasion by government and against cancellation by conflicting fungible property claims of other people" (Radin, 1993, p.71), one can (correctly) argue that this type of property is inalienable. In this sense, the fact that a given person is "personally" connected to a certain object is the very reason for keeping that object away from others, that is, outside the market. Such a view would entail a prohibition of selling or transferring such particular kind of objects to another person. In other words, if someone owns an object, considering the latter undistinguishable from herself (and, thus, abolishing the boundary between the subject and the object), that object should be considered part of that person and, as such, untransferable. According to Radin, certain forms of property (not the fungible kind, but personal property – such as wedding rings) constitute ways to achieve proper self-development, that is, essential instruments to become and be a person. As such, if that property is loss, then the person is concomitantly reduced as a person. This could almost take a "literal" and painful meaning if one follows Green's understanding of "personality and meaning." According to Green, what is meant by the embodiment of personality is the appropriation of external objects such as they "cease to be external" to the appropriator and "become a sort of extension of the man's organs, the constant apparatus through which he gives reality to his ideas and wishes." In this sense, inalienability is in fact contradictory to the theory. 123

The market problem, moreover, resurrects the contraposition between utilitarianism and "property for personhood" theories that we tried to surpass and solve before. 124 In that sense, one might argue that the existence of a robust market in avatars, through which thousands of virtual characters are sold and bough everyday, counteracts any argumentative attempt to sustain the application of Radin's theory to avatars. Nevertheless, we believe there is a way to circumvent this obstacle, surpassing this problem and re-asserting Radin's theory in the universe of avatars. Two reasons sustain our argument. Firstly, and as already referred, the application of Radin's thesis to avatars is intended to be exceptional and residual, being only applied in cases where these virtual characters effectively qualify as "personal property", that is, as property that is intimately linked to one's personality. In this sense, the majority of avatars will probably not qualify as "property for personhood," and Radin's theory will pose no problems to the blooming market for avatars, as they will be considered fungible property and, as such, susceptible to be exchanged in the market. Having substantially reduced the overall population of avatars existing in virtual worlds, we are still left with the "critical" ones, the avatars that do qualify as personal property. Such virtual characters, as integral part of the user's identity, might present a serious problem for the functioning of the market if one reads Radin's thesis as forbidding the alienability of this kind of property. Nevertheless, the answer to such hypothetical criticism (and here we introduce our second reason) is simple: Radin's theory is constructed and articulated in a way that does not prevent or prohibit the alienability of property. If it did so, the theory would be unsustainably rigid.

Taking a more attentive look at the theory of property in personhood, Radin distinguishes between personal and fungible properties, referring to the former as property that a person uses in her self-construction and self-identification, while describing the latter as property that is interchangeable with any other. As such, given the personal property definition, one can infer that the latter is not interchangeable, as it would not be consistent with the thesis to have property that is concomitantly personal, that is fundamental (and irreplaceable) for the constitution of the proprietor as a person, and fungible, that is transferable. Moreover, such proposition can be inferred *a contrario* from the division and definition of property categories into personal and fungible. As such, one could argue that if personal and fungible properties are opposites and if the latter is interchangeable; then, *a contrario*, the former (personal property) would not be interchangeable. However, there is an extremely important element that should be taken into account. According to Radin's model, property rights are inserted in a continuum with two endpoints, the personal and the fungible. According to this model, and as we have already analysed, the closer the objects are to the personal end of the continuum the stronger the respective property entitlement will be. In other words, "the personhood perspective generates a hierarchy

¹²³ TH Green, Lectures on the principles of political obligation in P Harris and J Morrow (eds), Thomas Hill Green, Lectures on the pinciples of political obligation and other writings (London: Longman, Greens & Co, 1931), section N at 165 (quoted in Spence, p.50).

Regarding the utilitarianism versus the property for personhood debate, and as observed by Davies and Naffine (2001), "[o]ne of Radin's goal has been to develop a way of thinking about property which does not permit the commodification of persons as the property of others, and hence to counteract what she and others perceive as a tendency towards universal commodification, especially within the law and economics school of thought" (p.7). As such, a prime target of Radin's criticism is Richard Posner, a prominent scholar of utilitarianism and welfare economics. In this sense, and as cited by Davies and Naffine, see his "Sex and reason (Cambridge, Mass: Harvard University Press, 1992), for an attempt to analyse sex and sexuality in economic terms.

of entitlements", as "those rights near one end of the continuum – fungible property rights – can be overridden in some cases in which those near the other – personal property rights – cannot be" (Radin, 1993, p.53). 125 In this context, what is important to note is that objects are not "inserted" in such continuum in a static and fixed manner, but in a dynamic way, being able to change positions, shifting from one end of the continuum to the other. In other words, this means that a person can decide whether a given object amounts, to her, as personal property (giving rise, as such, to a stronger property entitlement) or not; or if a given object no longer qualifies as property for personhood, shifting the latter from personhood to fungibility. In this way, it is correct to say that personal property, within Radin's theoretical construction, is inalienable (given the importance and relevance of the property to the self-constitution and identification of the proprietor as a person, it would not make any sense that such person would be willing to alienate it). As such, the inalienability of personal property derives from the logic and consistency of the theory itself: the argument in favour of a right to a property for personhood entails a stronger entitlement protection of that right, implying thus its inalienability. Nevertheless, and this is the crucial point, personal property can be "relegated" to the status of fungible property (changing its position along the continuum), becoming thus alienable. Fungibility then presupposes alienability, things which have become property are alienable simply by withdrawing one's will (such reasoning, as we will see, derives from Hegel's property theory). In sum, personal property is not, per se, alienable (in the sense that the proprietor will not be willing to lose it); but, as such kind of property is susceptible of being "downgraded" to fungible property, (the former) personal property then becomes alienable.

The alienability of property, namely the shift from property strongly associated with our sense of self to the fungible kind, is associated with the volatility and dynamism of the human mind. We - as persons-, for a myriad of different reasons and circumstances, are constantly changing our minds, attitudes and perceptions throughout our lives. And with us, also the meaning, perceptions and values that we attach to resources in the external environment change. Let's imagine Radin's paradigm example of personal property: the wedding ring. While the ring for a happily married woman can have an incalculable personal and emotional value, as the symbol of the love and union of her successful marriage; the very same ring can become fungible (losing the personal value and maintaining only the market price) if the same woman gets divorced after finding out that her husband had been unfaithful during all those years of marriage. The opposite case (from fungible to personal) is also conceivable, as Radin (1993) explicitly asserts: "conversely, the same item can change from fungible to personal over time without changing hands (p.54). We are thus dynamic individuals in a permanent change, continuously re-constructing our individuality and re-identifying ourselves with different external objects and resources.

Furthermore, a final supportive argument for the alienability of property can be found in Hegel's Personality theory ¹²⁶ (from which Radin's theory derived). According to Hegel, property

¹²⁵ As we shall see later on, this idea of stronger and weaker property entitlements (in terms of their relationship to personhood) will be very important in the dispute resolution over property rights between users and game owners.

126 Within the framework of Hegel's personality theory, Lastowka and Hunter are also in favour of the alienability of

property, stating that: "[t]he cynic might argue that the identification of the human with the avatar would mean that there are significant limitations on the alienability of the property justified by this theoretical position. However, just as we assume alienability for wedding rings, or even non-essential body parts, the personality theory provides few limitations on the alienability of the avatar. As the Restatement of Property notes:

[&]quot;Property interests are, in general, alienable. If a particular property interest is not alienable, this result must be due to some policy against the alienability of such an interest. The policy of the law has been, in general, in favor of a

is only property insofar as it is occupied by a person's will. Based on such premise, "the object, which starts as a mere thing, having no end-in-itself, becomes invested with the will and spirit of the appropriator. As long as the person's will remains in the object, it is property. When abandoned, it returns to its former state of meaninglessness" (Davies & Naffine, 2001, p.5). In this sense, and as property is the embodiment of personality, "Hegel's property theory is an occupancy theory; the owner's will must be present in the object" (Radin, 1993, p.45). Hence, there is no permanent and irrevocable property entitlement over any given object; to maintain a property relationship between a person and any particular external thing, continuous occupation is necessary. In this way, "[a]s the autonomous will to possess comes and goes over time, so property must come and go" (Radin, 1993, p.46). Moreover, Radin's theory, interpreted as such, serves to protect the interest of the proprietor in keeping the object for herself and away from others, and not to prevent the proprietor from alienating it, if he or she so decides.

The same reasoning can be applied to the avatars, as their status of property for personhood can be "downgraded" to fungible property according to the user's will. A given property will only be relevant for our self-construction and self-identification process with the external world if our will agrees as such. In this way, our processes of re-construction and re-identification are not linear and predictable; they continuously change and evolve (as the wedding ring "episode" demonstrates), and, with them, the bonds between property and personality. In that sense, personal property for personhood – through its metamorphosis into fungible property - should be held alienable and compatible with the trade dynamics of market. As a result, we have re-established the balance between the utilitarian and the property for personhood theories, finding no unsurpassable contradictions in their contemporaneous and complementary application.

In sum, and coming back to the "mirror" problem, we propose as a solution the recognition of virtual property rights to users over their avatars. Such rights should be based upon Radin's theory of property for personhood, and applied on a case-by-case basis. In that sense, we argue in favour of the recognition of a right to property for personhood (in the sense proposed by Margaret Jane Radin's property theory) in certain relationships established between the user and the avatar. This right is grounded upon the personal attachment and the process of self-identification developed by the users and projected in their avatars. As such attachment and identity connection will not always be established, Radin's property for personhood should be taken as a residual and exceptional theoretical justification for virtual property rights, being only put forward if the user has effectively established such personal attachments and identity bonds with the avatar. Furthermore, the application of the theory of property for personhood in combination with the utilitarian underlying justification for virtual rights has been argued not to be conflictive, but (on the contrary) complementary. 127

high degree of alienability of property interests. This policy arises from a belief that the social interest is promoted by the greater utilization of the subject matter of property resulting from the freedom of alienation of interests in it." (Restatement of Property paragraph 489 cmt. a (1944).

It is not obvious what policy one could formulate to justify inalienability of the property in avatars" (2004, p. 65-66) ¹²⁷ In this perspective, while the justification for virtual property rights on the grounds of Radin's theory relates to the intimate link between the appropriated object and the user's identity and personality, the utilitarian theory deals with incentives to artists, through the grants of property rights over their creations, in order to stimulate further creative production and, as such, to benefit the society as a whole. In addition, and as claimed before, one theory does not eliminate the other. In this way, while user A can be entitled to the ownership over her avatar because of the utilitarian reasoning of stimulating creativity and production in benefit of the overall society), user B can be

D. Merits and Suitability of the Theory

By stressing the strong nexus that a subject can create and establish with certain objects (to the point of blurring the difference between both of them), and by emphasizing the self-identification of the human person through objects¹²⁸ as the justification for property rights, Radin's theory of property for personhood, despite its many criticisms, ¹²⁹ portrays with marvellous accuracy certain relationships between users and avatars. In this sense, Radin's thesis seems to fits like a glove in the domain of virtual worlds and avatars.

The advantages of transposing this theory to the virtual world are numerous. To name only a couple, the first reason is that the theory makes no distinction between the accumulation of real world chattels or land and its virtual counterpart. In this sense, what matters is the reflection of the proprietor's personality in the appropriated object, be it a tangible, intangible or virtual one. In this sense, "to the extent that personality theory justifies private property in land or goods, it justifies property in virtual land or goods" (Lastowka and Hunter, 2004, p.264). As a result, the theory seems to suit itself particularly well in the virtual realm. Secondly, and more importantly, by narrowing down the property for personhood theory to the case of the avatars, such thesis seems to be strongly in favour of granting property rights to the user, ¹³⁰ which constitutes a trend and objective long pursued by the legal academic literature of virtual worlds. In this sense, the use of Radin's theory in this particular context should be seen as a further step in that direction.

The subjective element present in Radin's theory is, in my view, fundamental in the analysis of the nexus between the human and the avatar. The personhood perspective conveyed by Radin emphasizes the subjective nature of the relationships between person and thing. Although the (monetary) incentive to create avatars stipulated in accordance with Bentham's utilitarian view (especially appropriate for those players that use the virtual worlds as a way to make a living), and the Lockean's time, skills and labour invested in avatars can both partially explain the issue of property over avatars, neither of these theories focus on the player, the person holding the property. In this sense, the personhood theory conveyed by Radin is an important addition to the discourse of property rights in virtual worlds, as it "focus on the person...on an internal quality in the holder or a subjective relationship between the holder and the thing, and not on the objective arrangements surrounding production of the thing." (Radin, 1993, p. 54)

attributed with the ownership over her avatar because of the personal attachment and process of self identification the former has developed with the latter. Finally, user C can be granted with virtual property rights over her avatar on both (utilitarian and property for personhood) grounds. In such cases, there would be no contradiction in terms, but complementariness.

¹²⁸ In this context, and when applied to the user-avatar relationship, Radin's theory presents the advantage of supporting the view that personal identity is derived from the relationships with objects. ¹²⁸ By arguing, as Radin does, that "the self becomes an object, because it finds itself in the external world of objects" (Davies & Naffine, 2001 p.7), and by picturing this object as the avatar, one can contend that the users find themselves in the external environment, in this case in virtual worlds, namely in their avatars.

For a criticism of the Radin's theory of Property for Personhood, see Stephen J. Schnably, "Property and Pragmatism: A critique of Radin's theory of property and personhood" (1993) 45 *Stanford Law Review* 347.

¹³⁰ Furthermore, by distinguishing between property that is essential to the personhood of the user from property that is not, and by advocating that some avatars qualify as essential property, we find a theoretical argument to justify the ownership of the latter in the hands of the user.

As a result, Radin's conception of property captures the essence of the relationship between the player and the avatar. With so many players spending large portions of their lives with the avatars as their digital ambassadors, players become emotionally attached to these characters, perceiving the avatar as extensions of themselves and blurring the distinction between what is real and what is virtual. In virtual worlds, "where the psychological aspects of relating are magnified because the physical aspects are (mostly) removed," negative actions perpetrated on avatars, such as mugging or raping, bring about real emotions and feelings (such as anger, fear or grief) on the players behind those avatars. Some of these players even commit real-word actions in response to virtual world events, including violence and suicide. Thus, eventual injuries caused to the virtual alter-ego sometimes leaks over to the physical world, affecting the "flesh and blood" users. This repercussion of digital actions into the analog world, and the spilling out of effects produced in the virtual sphere to the physical one, demonstrates how users project a sense of one's self into an avatar, and how in fact – the boundaries between the subject and the object become sometimes irremediably blurred.

All of these emotions, feelings and actions arising from virtual worlds can only be explained through the perception of the avatar as representation, reflex and continuation of our own personality and personhood in those digital environments. Furthermore, the social networks established within virtual worlds and the development of complex virtual communities through these avatars is due to the perception of the latter as the human extension of the player. In sum, Radin's theory captures the personal attachment users develop with their avatars, recognizing such characters not merely as property interests, but as personal and intimate connections to one's sense of self. Furthermore, such theoretical perspective reinforces the confluence of property and personality on the figure of the avatar, a key feature of this character.

As a result, by arguing in favour of the recognition of the avatars as user's personal property (that is, as "property for personhood" in Radin's scheme) we are also advocating in favour of a stronger legal protection to the users' ownership of such characters within the general property rights controversy opposing users and game owners (described and explained in Part III of the essay). Viewed in these terms, one could argue that, if – in a certain case - the avatars are considered personal property for the user and fungible property for the game owner, then the interest of the former should prevail: the property entitlement should be given to the user and not to the game owner. Such dispute resolution purpose is, moreover, one of the explicitly admitted functions of Radin's theory of property for personhood, which sets to explore "how the

Ibid. See also Dibbell (1998), pp. 11-30.

Regina Lynn, R., *Virtual rape is traumatic, but is it a crime?* Retrieved April 5, 2007 from http://www.wired.com/culture/lifestyle/commentary/sexdrive/2007/05/sexdrive 0504

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¹³⁴ See *Addicted: suicide over EverQuest*?, CBSNEWS.COM, Oct. 18, 2002. Retrieved September 12, 2008 from http://www.cbsnews.com/stories/2002/10/17/48hours/main525965.shtml (reporting on the suicide of a Wisconsin man who may have been addicted to EverQuest); Patrizo, A., *Did game play role in suicide?*, WIRED NEWS, Apr. 3, 2002. Retrieved September 12, 2008 from http://www.wired.com/news/games/0,2101,51490,00.html

¹³⁵ In this context, there are even cases of users who identified more with their online persona than their real one.

¹³⁶ In this respect we obviously assume that the avatar is not likely to be bound up with the personhood of the virtual world owner (which will probably be a large and multinational company)

personhood perspective can help decide specific disputes between rival claimants" (Radin, 1993, p.36). Radin's theory, by articulating a hierarchy of stronger and weaker property entitlements in terms of their relationship to personhood (through the image of a continuum from fungible to personal), is particularly suitable to resolve virtual world disputes over property rights. Hence, and viewing this dispute resolution rather simplistically, one could resolve the dispute by ascertaining where to place the avatar within the users' continuum line (limited by the fungible and personal extremes), if closer to the personhood end point, property rights over the avatar would be granted to the user. Insofar as we are able to determine that a given right is personal (according to Radin's reasoning), we can thus argue that that right should be protected against game owner's illegitimate and abusive claims over the avatars. In other words, Radin's theory provides a supportive argument for the users' ownership of avatars and a possible solution for a property rights dispute against the game owner. Such understanding is based upon the conceptualization of the avatar as personal property, which (as we have seen) gives rise to a stronger moral claim and merits greater legal protection than other property.

Conclusion

We are in the age of participatory media, where new forms of interaction and higher levels of involvement and participation achieve increasing importance. In this age, the traditional boundaries between consumer and author, creator and audience, and designer and player are beginning to blur and to fade. Within this context, Virtual Worlds emerge as context for creation, enabling the creativity of the player and figuring as an outstanding example of this new collaborative environment, allowing for users to undertake a digital alter-ego and become artists, creators and authors. Nevertheless, such digital egos are not merely creations, but a reflex of their creators, an extension of their personalities and indicia of their identities. This hybrid position between property and personality of the avatar was the main target of our analysis.

Focussing, firstly, upon the controversial issue of property ownership opposing game owners and users, this paper has attempted to re-balance the positions of those actors by drawing the attention to the need of re-interpreting copyright law according to its underlying utilitarian principles. The proposition of the image of a jigsaw puzzle helped to shed some light on the correct and fair application of copyright to avatars within such utilitarian reasoning. The metaphor also contributed to analyse the nature of the contribution of the user to the game, providing a tool to ascertain if such contribution could merit intellectual property protection attributed to users. Finally, the jigsaw puzzle idea has also cleared the boundaries, showing the limits of utilitarian IP in capturing the personality dimension involved in the relationship between users and avatars. The "mirror problem" demonstrated that the utilitarian perspective pending over IP law does not traditionally account for the emotional and intimate value of the object of property, disregarding in general the psychological attachment that the human user builds upon certain things.

Having acknowledged such "flaw", the paper then proceeded to a property law theoretical construction that could fill such lacunae, delving into Radin's Property for Personhood Theory. In this regard, by combining property for personhood theory with the

¹³⁷ Such claims could be refuted even if supported by the already mentioned EULAs. Moreover, as already mentioned (*supra* ft.90), the EULAs' validity and enforceability can be challenged in light of the Constitutional principles shaping the intellectual property law regime.

utilitarian one, the paper has also argued in favour of a more "ecumenical" view in the articulation of the different property theories, refuting the generalized prejudice of perceiving them as rival and incompatible perspectives. This paper, thus, aimed at shedding some light at the legal analysis of avatars as intersection points between property and personality, "as online gamers feel a sense of identity with elements of the game and those game elements therefore become a symbol for explaining or valuing that identity (Garlick, 2005, p.461). In this account, and as we have seen in this article, not only arguments related with the investment of time, skill and money from the users can justify their claims of ownership and property rights over their fellow avatars. The emotional attachment towards their characters and their perception as extensions of the users themselves in the virtual space, acting as projections and symbols of their identity and personality, can also constitute a fair claim supporting user's ownership over avatars.

In this sense, Radin's theory, besides providing a supportive argument in favour of the user's ownership of avatars, can also play a fundamental role in deciding specific property rights disputes between rival claimants, that is between the game owners and the users within the virtual world context. Viewing avatars as "personal property" could probably influence courts and legislatures to grant users with property rights over such characters. In forthcoming disputes in this domain, it is thus imperative that courts take into account the personhood perspective in property interests, weighing the relevance of the connection between property and personality in formulating their legal decisions. The idea, nevertheless, is not to claim that personality is always and inevitably a relationship to property, but to argue that in the case of avatars, within determined conditions and specific circumstances, there is in fact an inextricable link between property and personality which justifies a different view of property rights in virtual worlds.

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