

# Embodied in a Metaverse: “Anatomia” and “body parts”

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## ABSTRACT

In this paper, the artist/author wishes to examine corporeality in the virtual realm, through the usage of the (non)-physical body of the avatar. Two sister art installations created in the virtual world of Second Life®, both of which are meant to be accessed with site specific avatars, will provide the creative platform whereby this investigation is undertaken.

While the installation “*Anatomia*” wishes to propel the visitor towards reflections of an introverted nature, involving the fragility of the physical self; “*body parts*” seeks to challenge the residents of virtual environments into connecting with the virtual manifestations, i.e., avatars, of others in an emotionally expressive/intimate manner.

## Keywords

virtual, presence, avatar, hybrid actors, embodiment, physical, corporeal, metaverse, experiential, installation, art.

## BACKGROUND

### The body is the message: Presence and the Avatar

Presence is defined as a sense of “being there” in a mediated environment (IJsselsteijn, deRidder, Freeman and Avons, 2000). Lombard and Ditton (1997) define it as an illusion of non-mediation in which a user no longer perceives the display medium as a separate entity. A high level of presence will help users remember a virtual environment as more of “*a place visited*”, rather than “*a place seen*” (Slater et al., 1999). A success indicator of the attainment of presence is also considered to be the realization of similar behavior patterns in virtual environments to those in the physical realm (Slater and Wilbur, 1997), and even the manifestation of similar physiological responses towards a given event to its approximation in the physical realm (Meehan, 2000) [1].

Various definitions of the term “Presence” and their relevance to the immersive virtual experience are discussed by Mantovani and Riva [2] who challenge the notion that

experiencing a simulated environment deals with the mere perception of its objective features; instead proclaiming that presence in an environment (real or simulated) means that individuals can perceive themselves, objects, as well as others not only as situated in that external space but as immersed in a socio-cultural web connected through interactions between objects and people, leading us to the paramount importance of the interacting agent within a virtual culture, i.e., the avatar.



Figure1: The male and female avatars of “body parts”

Yee and Bailenson have observed that while the modality of movement between virtual dyads is entirely different to those of encounters in physical space (i.e., via keyboard and mouse as opposed to eyes and physical limbs), nonetheless the norms of gender, interpersonal distance, and eye gaze transfer in three dimensional virtual environments shows significant correlations between agents operating in virtually and those in the physical realm [3]. Yee and Bailenson further demonstrate the relevance of the physical attributes of the three dimensional avatar, finding that both the height and the attractiveness of an avatar in an online environment are significant predictors of the player’s performance. Thus, according to *The*

*Proteus Effect*, not only do our virtual bodies change how we interact with others in the online communities themselves; but this effect is indeed powerful enough to be carried through to subsequent face-to-face interactions amongst the physical handlers of the avatars participating in the experiment [4].

A validation for realizing art work based upon an investigation of the power of physical embodiment in a virtual world can also be found in various studies conducted upon the effects of virtual environments on sexual behavior: Brewer et al. discuss the relevance of sexual interactions to HCI [5], asserting that sexual practices are presently understudied in the overall field, drawing attention to the emergence of a new generation of online communities, within which a colorful array of fetishistic subcultures has become visible; concluding that therein lies a potential to stimulate new questions about online identity, social stigma and the role of technology in shaping social attitudes. Similarly Renaud et al. show the potency of sexual embodiment in the virtual realm through a study showing the effect of virtual encounters in determining sexual preferences [6]; while Julian Dibbell describes the power of predatory sexual encounters in MUD's, proclaiming that *"what happens inside a MUD-made world is neither exactly real nor exactly make-believe, but nonetheless profoundly, compellingly, and emotionally true"*; concluding that *"the information age is bringing about a paradigm shift that the firewall between word and deed is not likely to survive intact"* [7].

A rewarding overview of the literature on the avatar within the context of embodiment comes from Benjamin Joerissen [8]: Joerissen starts out by pointing out the co-relation between the ideological affinity of the avatar and the human body: Drawing upon Plato, as well as the Sanskrit meaning of the word avatar itself, he points out that within these doctrines the human body itself can be identified as the disparaged, earthbound hybrid carrier/avatar of higher, divine, i.e., non-physical attributes. In a play upon McLuhan's famous statement Joerissen continues to say that if soul is indeed "form", the body is then the medium within which form becomes corporeal and as such the body becomes the very message which it carries. However, according to Joerissen, a recent, post-Cartesian shift in the attributes with which an avatar is endowed is also noteworthy: In the post-humanistic world of artist Stelarc



Figure 2: The female avatar of "Anatomia"

*"cybernetic platonic"* state (List 2001) wherein technology may overcome the shackles of mortality.

According to Joerissen viewing avatars as mere representational agents in virtual realms has become increasingly problematic over the past decade. Instead a holistic approach which weaves together the human handler, the representation thereof and the medium within which this representation materializes seems to be called for: In describing this hybrid actor whose virtual sojourn is a two way experience which can have profound influences on the human behind the keyboard, Joerissen quotes Yee: *“Just as we choose our self-representations in virtual environments, our self representations shape our behaviors in turn. These changes happen not over hours or weeks, but within minutes”*.

Drawing his conclusion Joerissen quotes Mark Hansen who points at a deep reaching biological/corporeal moment embedded within the virtual experience: Whilst placing the digital experience itself within the sensory organs of the biological body, Hansen ascribes a third element to digital embodiment, speaking of a *“body submitted to and constituted by an unavoidable and empowering technical deterritorialization”*, a *“body-in-code”*, which can only be realized in association with technology, and which, in its turn, can lead to unexpected self-perceptions in the human handler. Indeed Hansen endows this novel constellation with the capability of increasing the field of influence of the human operator *“as an embodied being”*. Thus, Hansen predicts a re-definition of the potential of the biological body through virtual embodiment [9].

### **Art and Experience**

Much inspiration as well as clarity of purpose has been attained from reading John Dewey on the experiential qualities of aesthetics and art [10]. In as synthetic a world as the metaverse of Second Life® where the bulk of art work presented is still housed in designated art spaces, such as galleries or museums, Dewey’s concern for the separation of art work from its experiential functions seem to be well founded, given the suitability of virtual worlds for an in-depth reexamination of the role of artistic output in (virtual) society.

Drawing attention to the modernist practice of relegating art work to rarefied but sterile repositories where they pursue an existence essentially cut off from everyday usage and appreciation, as would indeed be the case with museums, Dewey draws attention to cultures, ancient as well as contemporary, where aesthetic appreciation is inextricably bound with day to day usage, saying that *“we do not have to travel to the ends of the earth nor return many millennia to find peoples for whom everything that intensifies the sense of immediate living is an object of intense admiration”*, adding that the present task at hand *“is to restore continuity between the refined and intensified*

*forms of experience that are works of art and the everyday events, doings, and sufferings that are universally recognized to constitute experience”*, thus elevating art work from its current state of being the provider of mere *“transient pleasurable excitations”* into once again becoming the powerful carriers of experience.

### **THE ARTWORK**

Based upon the research described above, the artist/author wished to create an experiential environment along the tenets of John Dewey; one which would aspire to create a socio-cultural presence as defined by Mantovani and Riva, from which the visitor might depart retaining a sense of *“a place visited/experienced”* as opposed to *“a place seen”* (Slater et al., 1999). Taking into account the studies conducted by Yee and Bailenson, which underlined her already strong sense of the paramount importance of the avatar in the engenderment of such a sense of presence, both the installations are based upon the central figure of the avatar.

Considerable time has thus been devoted to creating custom designed avatars with which the visitor is expected to enter these installations, neither one of which comes even close to reaching its full potential unless these avatars are in fact utilized.

The first of the two installations, *“Anatomia”* is a space intended for solitary, introverted reflection concerning the fragility of the human body; hence only one avatar (available in either sex) has been created. It is this site specific avatar that the visitor is expected to wear whilst interacting with the space through a *dance macabre* which he/she can personally choreograph through the sequential usage of animated pose balls placed in great profusion inside the installation. It is aimed that this process will help attain a sense of split between what he/she is actually composed of anatomically and what he/she is surrounded by, i.e., the mechanically precise, *“perfect”* renditions of his/her fragile physical substance. The aim is to create an awareness of the fate which humanity shares with all living entities, which is indeed this very fragility and ultimate demise. The anatomical drawings which have been mapped onto the bodies of the male/female avatars of *“Anatomia”* have thus been rendered in the earthen hues of decay and corrosion, these being complemented with body attachments created out of exposed bone structure, horns and frayed, feather-like anatomical drawings; all of which have been assembled to resemble biological, but non-human elements.

Conversely, the second installation *“body parts”*, urges the visitor to celebrate life by looking outwards, through connecting with the virtual body of another. Consequently, this installation needs two participating avatars, both of



Figure 3: Dancing couple inside the installation of “body parts”

whom are asked to dress in custom designed skins adorned with attachments, in order to conduct a virtual *pas de deux* of heightened emotional intimacy not readily manifest in the metaverse otherwise. To this end, the avatars have the caressing hands of their virtual partner painted onto their own skins, while soft, tentacle-like human limbs reach out from their own bodies towards the other. However, the couple is not alone in that they are also surrounded by a conglomeration of sculpted human body parts melting into one another. This mass of physicality is expected to create a sense of heightened connectivity through which the dancing couple may transcend into a state of collective consciousness, as would have been the case during Dionysian rites. Again, a profusion of animated pose balls is utilized, but in this instance these balls are paired up to create intimate couple poses, which enforce prolonged eye contact and the invasion of interpersonal distance, the Real Life observances surrounding both of which are strenuously observed in virtual life as well, as discussed by Yee and Bailenson in *The Unbearable Likeness of Being Digital* [3].

Although the two projects were instigated separately, they soon evolved to become sister installations, given that they both address the issue of corporeality in a (non)-physical

environment. Additionally, the installations carry similar functions in that both are the conveyors of a challenge to acknowledge corporeality, albeit through different means and within entirely different contexts. Consequently the two installations are placed in close proximity to one another, housed in huge, enclosed, sky borne spheres, entirely separated from the geography of Second Life®. While the “Anatomia” sphere is black, the “body parts” sphere is a light, seductive white, which, together with the participating avatars, gets a pink hue from the custom sunset colored sky settings of the land upon which they have been placed. Both spheres have been created as stages in which a particular dance has been choreographed, a solitary dance macabre for “Anatomia” and a romantic valse for “body parts”. However, interacting agents are at liberty to modify the pre-set choreography by accessing the provided pose balls in a sequence of their own creation.

Given the importance of the existence of the audio element in the overall immersive experience [11/12], both spheres have custom created soundscapes embedded into them: While a dull, persistent heartbeat, superimposed upon a hollow, ambient spatial sound provides the underlying audio theme for “Anatomia”, a series of unintelligible,

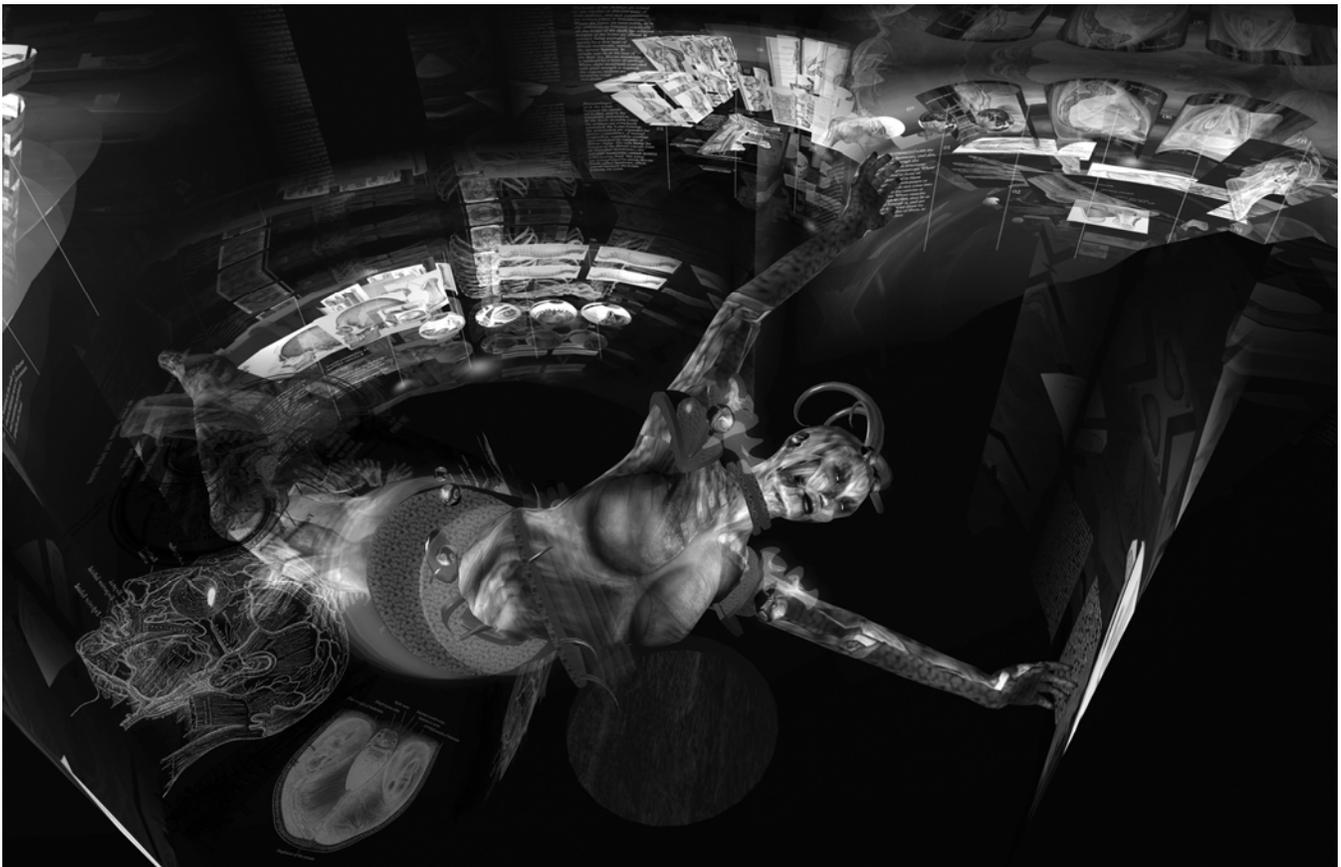


Figure 4: Anatomia, installation and female avatar

barely audible whispers and water gurgles accompany the sequence of events at the “body parts” location.

**Artist’s Statement: Anatomia**

What happens when we look at anatomical drawings such as the ones which Dr. Gray compiled all those many years ago? Aren’t they projecting our very innards outwardly? However, with the implication of immortality embedded into the very experience? While our bodies are essentially convoluted labyrinths filled with all kinds of fluids which suffer pain, Gray’s anatomical drawings are reassuring in that suddenly the whole conglomerate starts making sense, is elevated to the clean precision of a perfectly working scientific diagram. No longer human, no longer smelly. What seems to be implied in Gray’s Anatomy is that this imperfect mess with which we walk around can be a perfect machine, incapable of malfunction, incapable of decay...

I have tried to deliberately make the dweller of the exhibit un-clean... Not a continuation of the pristine, sharp black and white image assembly, with the odd spot of clean bright color here and there, but something mussed up with organic textures, layered and superimposed with elements that seem confusing and out of sync. The avatar of Anatomia is quite fragile: This is not a perfect, unbreakable machine, a thing rendered to help us gain insight into the workings of a superlative system, but rather a tangled up

and confusing black and yellow mass - the colors of when things go bad in our bodies. Not the red of living blood but the low saturation of decay.

He/she is not all human either: I have tried to weave the human elements, the drawings and the 3 dimensional bones into shapes which would be reminiscent of botanical growth, sprouting from his/her shoulders and his/her knee. I have also used quite a few horns: These adorn the head and circle the ankle and the midriff. Horns belong to Dionysius and I want the anatomical avatar to be endowed with the attributes of the demonic forces of nature, which are symbolized by this God. In short, I do not want this visitor to an exhibition of anatomical drawings to have illusions of grandeur regarding his/her elevated status as a human, or indeed even an animal or mammal. I want him/her to be vulnerable, perishable and impure. I want him/her to gaze upon something other than him/herself – an alien space in its cleanliness, its shiny surfaces, its clean bright lines, its mechanical perfection.

Thus, what I aim for is to create a sense of split, of division, of distancing between the visitor, clothed in the avatar described above and provided at the installation’s location and the surrounding in which he/she finds themselves. I do not know if we attain this sense of our own fragility, the messiness of our innards, the thin line between a working and a malfunctioning organic

mechanism, the fluids (fresh as well as refuse) coursing through our system when we visit the places where such anatomical drawings are displayed in Real Life. My hunch is that our Real Life persona, clothed in its everyday attire, more often than not in the company of others, keeps the wolf of self-perception from our door; enabling us to hide behind the security of intellectual appreciation regarding the superb craft which is present in the anatomical drawings compiled and created by Dr. Henry Gray. The Anatomical Avatar will hopefully make us perceive the difference between our flesh and blood bodies and the schematic, precise depictions of an idealized mechanism.

#### **Artist's Statement: Body parts**

Avatars. Male and female. Or indeed two of the same sex. No faces, they could be anyone, anywhere, anytime.

I do not want them to have recognizable identities - what they are engaged in goes beyond names and faces: The urge to connect on a physical level. And yet they are unphysical in their monochromatic, almost white, state. Because that is really how I see myself in the metaverse: No matter how many skins I buy or make - as an avatar I am colorless in my very being. The lifeblood drained out of my body language has been replaced by the endless cycle of animations emulating physical expression which my avatar simply cannot convey.

It seems to me that once we begin to scratch the depths of all of the creativity, the play, the games; all of the wonderful shopping and the building - in the end what remains is a big howling empty space where physical connection should have been. This is loneliness. Aren't we trapped in the perpetual youth of our avatar bodies with no outlet, no way of showing our craving for intimacy? And yet, do some of us even crave that intimacy? Have they not run away from the world of the corporeal to this land of "play", of non-physical emotion and thus by extension, of non-emotion, precisely because they could not cope with the pain, the at times utter humiliation of the physical?

They are monochromatic, the avatars that are meant to go into this space - white as they should be. No room here for human skin tones, for the illusion of the reality of the flesh. This is what is here: Ephemera, a spook, a specter of a human being - an avatar, either trying to connect or desperately avoiding to do so. Here I am challenging them to it, to connect, with whatever meager means are at my disposal: Pose balls equipped with affectionate poses and animations, paired up. So, really no sense whatsoever in hopping on one by yourself, you will need another ephemeral white being to complete the circuit as you slowly rotate in a landscape where all is body and yet all is silent, maybe even dead. Avatar body parts. That is what your physicality has become: As fleshless as these marble sculptures which are embracing all around you, as you and your sweetheart slowly dance your romantic valse.

Because it isn't sex which is lost in the metaverse, but it is the expression of love. How, in the absence of a physical interface, can the subtle shades of tenderness, of caring even be conveyed? Or passion and joy? Anger, humiliation and hope? How far can type-chatter possibly go in the expression of what is probably the most complex of all human emotions?

#### **CONCLUSION**

"Anatomia" and "body parts" are currently accessible in Second Life and have been visited by several hundred avatars to date. What is aimed at in both locations, as well as with both sets of avatars is a challenge: Connecting on an emotional level in one and becoming aware of one's own fragility in the other; both undertaken in an environment which nurtures the illusions of eternal youth, if not indeed immortality on the one hand and full impersonality, if not anonymity in the face of emotional entanglements on the other.

Both installations can be said to possess ceremonial/ritual properties, a ritual in which the avatars are expected to become integrated into the ceremony through wearing the attire and objects associated with the experience for an "*intensification of the sense of immediate living*" in accordance with the tenets of Dewey. The artist is gratified by the results of an informal survey conducted amongst the visitors to the installations which have indeed revealed a significant increase in the sense of participation/of having "an experience" in those that have worn the proper attire for the ceremony.

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