# body parts

Elif Ayiter

Sabanci University

**ayiter@sabanciuniv.edu**

## ABSTRACT

In this project, the artist wishes to examine corporeality in the virtual realm, through the usage of the (non)-physical body of the avatar. An art installation created in the virtual world of Second Life®, which is meant to be accessed with site specific avatars, will provide the creative platform whereby this investigation is undertaken. Thus, "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

Art, installation, presence, avatar, 3D, immersive, corporeal, hybrid actor, experiential, metaverse

## 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.

Avatars are the all important, if not indeed the sole agents of virtual social interaction since their inhabitants both consciously and unconsciously use them in ways very similar to their material body (Damer et al, 1997). They can be endowed with a wide range of physical attributes, and may be customized to produce a wide variety of humanoid and other forms. Furthermore a single person may have multiple accounts, i.e. "alts" and thus be represented through multiple identities in a synthetic world. Given that they visually portray an inhabitant and allow visual communication, Suler contends that avatar appearance is crucial for identity formation as well as attaining Presence in virtual worlds (Suler, 2007).

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].



Figure 1: Connecting on an intimate level: The installation of "body parts" with male and female avatars

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].

Positioning the concept of Presence primarily within a socially interactive context finds further resonance in Edward Castranova who places the social nature of online synthetic worlds, i.e., the agency of "social presence" as possibly the single most important contributing factor to the sense of joy and satisfaction that being immersed in these worlds brings to their inhabitants: Social interactions such as emotions and successes shared, the formation of close bonds and affections as well as wider peer groups and alliances, the attractions of social discourse, joint memories and experiences would seem to be vast enhancements which the social world of online gaming provides over the video game performed in isolation. Indeed such is the pull of the social factor in online "Presence" that when the future market strategies of

video game producers are held under scrutiny it becomes quickly apparent that all major developers are planning upon bringing their consoles online within an immediately foreseeable future (Castranova, 2007). [8]

A rewarding overview of the literature on the avatar within the context of embodiment comes from Benjamin Joerissen [9]: 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 the avatar is no longer the belittled,  lesser manifestation of the higher "form" but rather the "upload" of a perishable, mortal physicality into the mundus possibilis of a virtual, non-corporeal space; an agent in the realization of a "cybernetic platonic" state (List 2001) wherein technology may overcome the shackles of mortality.
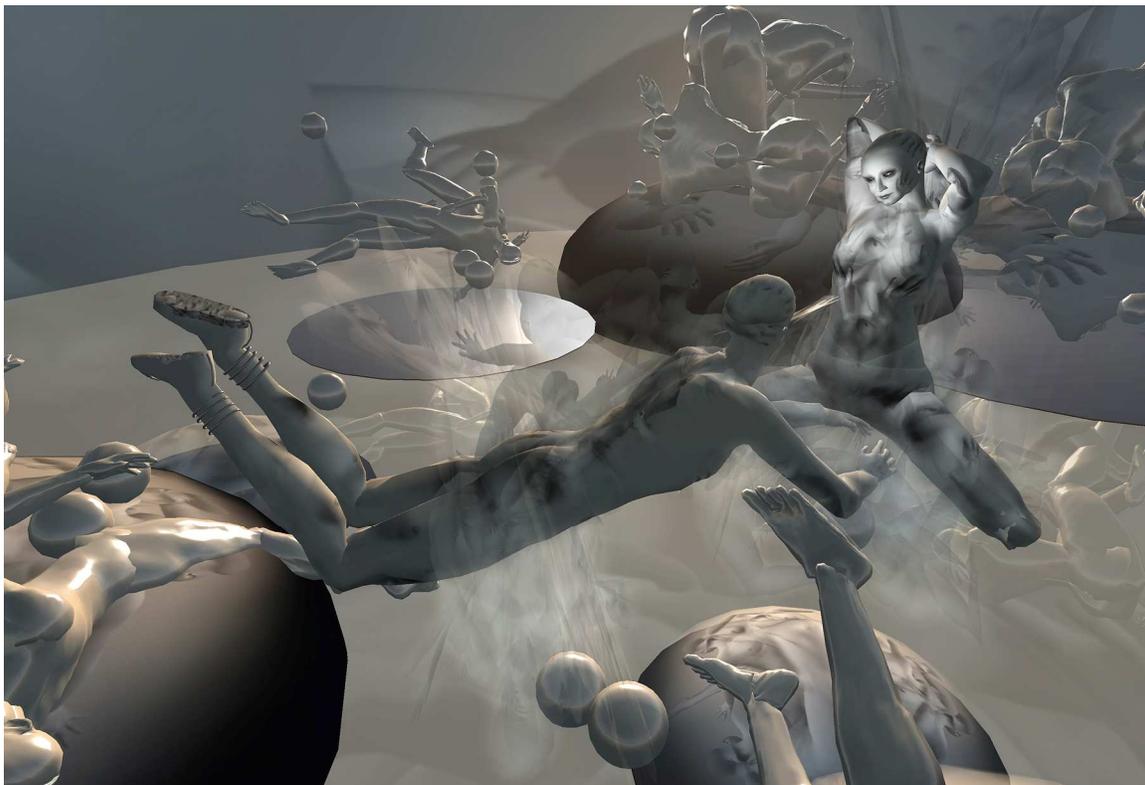


Figure 2: Couple inside the installation of "body parts"

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 [10].

**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 [11]. 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.



Figure 3: Dancing couple

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 as well as the appearance thereof. Considerable time has thus been devoted to creating custom designed avatars with which the visitor is expected to enter the installations. Indeed based upon the findings of *The Proteus Effect* (2009) as well as Suler's earlier findings (2007) regarding avatar appearance, the project is not expected to reach its full potential unless these avatars are utilized.



Figure 4: A conglomeration of "sculpted" humanity aids in the achievement of a Dionysian state of corporeal transcendence

"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 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].

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. The sphere has been created as a stage in which a particular dance has been choreographed, i.e., a romantic waltz. 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 [12/13], the sphere has a custom created soundscape consisting of a series of unintelligible, barely audible whispers and water gurgles embedded into it.

**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 doing 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 waltz.*

*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?* [14]

**CONCLUSION**

"body parts" is currently accessible in Second Life and has been visited by several hundred avatars to date. What is aimed at with both the location itself, as well as with the avatars created for this environment is a challenge: Connecting on an emotional level 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.

The installation 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 installation which has 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.

## REFERENCES

1.Takatalo, J., *Presence and Flow in Virtual Environments: An Explorative Study*, University of Helsinki, 2002. http://www.tml.tkk.fi/Opinnot/T-111.080/2003/takatalo_presence%20and%20flow.pdf  Retrieved on 03/04/2009.

2.Mantovani, G., Riva, G., "Real" Presence: How Different Ontologies Generate Different Criteria for *Presence, Telepresence, and Virtual Presence, Presence: Teleoperators & Virtual Environments*; Oct99, Vol. 8 Issue 5, p540, 11p.

3.Yee, N., Bailenson, J. N., Urbanek, M., Chang, F., Merget, D., The Unbearable Likeness of Being Digital: The Persistence of Nonverbal Social Norms in Online Virtual Environments, *CyberPsychology & Behavior.* 2007, 10, 115-121.

4.Yee, N., Bailenson, J.N., & Ducheneaut, N. (2009). The Proteus Effect: Implications of Transformed Digital Self-Representation on Online and Offline Behavior. *Communication Research*, 36, 285-312.

5.Brewer, J,  Kaye, J.J, Williams, A., Wyche, S., Sexual interactions: why we should talk about sex in HCI, *Conference on Human Factors in Computing Systems archive CHI '06*, 2006, P: 1695 - 1698.

6.Renaud, P., Rouleau, J. L., Granger, L., Barsetti, I., Bouchard, S., Measuring Sexual Preferences in Virtual Reality: A Pilot Study, *CyberPsychology & Behavior*; Feb2002, Vol. 5 Issue 1, p1-9..

7.Dibbell, J., "*A Rape in Cyberspace, or How an Evil Clown, a Haitian Trickster Spirit, Two Wizards, and a Cast of Dozens Turned a Database into a Society*", http://www.juliandibbell.com/texts/bungle_vv.html   Retrieved on 04/03/2009.

8. Castranova, E., (2007), Exodus to the Virtual World, Palgrave MacMillan, NY, NY.

9.Joerissen, B., The Body is the Message. Avatare als visuelle Artikulationen, soziale Aktanten und hybride Akteure, *Paragrana*, Volume: 17, Issue: 1, 2008

10.Hansen, M., Bodies in Code: Interfaces with Digital Media. Routledge, New York, 2006

11.Dewey, J., *Art as Experience*, 1934, Perigree Books, NY, 1980, Pp: 6, 10,

12.Hendrix, C., & Barfield, W. (1996). The sense of presence within auditory virtual environments. *Presence,* 5:290–301.

13.Larsson, P., Vastfjall, D., Kleiner, M., *AES: 22nd International Conference: Virtual, Synthetic, and Entertainment Audio*, 2002

14.Ayiter, E., "body parts", http://syncretia.wordpress.com/2009/03/08/body-parts/ Retrieved on 11/11/2009