



**Eugenie Shinkle's Paper was delivered at *Plaything*;
Theorising the Zone: Chaired by Eric Zimmerman.**

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Should we analyse digital games using the same methods as other media, or do we need a new language? The speakers explore the structure of games and the subjective experience of the the gamer immersed in the Zone.

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Corporealis ergo sum: Rez, affect, and the end of the Cartesian subject

Anne Mette Thorhauge (DK)

Playing while making sense - How to understand the position of the videogame player

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Game Screens: Not the Gaze, nor the Glance, but the Glaze

Corporealis ergo sum: *Rez*, affect, and the demise of the Cartesian subject.

Eugenie Shinkle

The hardware may be new, but the structural and ontological foundations of present-day VR are the “product of a [long] succession of western philosophical and cultural enterprises.”ⁱ Among these enterprises, one in particular stands out: linear or Albertian perspective – a Renaissance invention which generates not just a mathematically reproducible virtual space, but a specific kind of human subject as well. Though not a Cartesian subject proper, the subject assumed in linear perspective actualizes a set of basic assumptions about subjectivity that could be called ‘Cartesianesque’. It is a subject for whom the separation between the self and the material world is absolute and unquestioned: a disembodied mind, a rational, decorporeal eye/I that knows the world by seeing it, and acts as an agent by *distancing* itself from its environment, viewing the world as though from outside and above.

Electronic virtual space is structurally dependent on this paradigm, so it’s no great surprise to find the Cartesianesque subject alive and well in present-day simulation technology and in the technocultural world more generally.ⁱⁱ According to some, VR is “a literal enactment of Cartesian ontology, cocooning a person as an isolated subject within a field of [external] sensations.”ⁱⁱⁱ This conviction is shared by many historians of VR, who tend to assume that today’s virtual space is simply “a direct continuation of the tradition of illusionistic pictorial representation,”^{iv} and by a sizeable faction in the R&D field, who see the long-term developmental goal of VR as nothing less than the perfection of this illusion.^v As Mark Hansen argues, “this privileging accorded the visual has so thoroughly seeped into the practical design of virtual environments ... that it might be said to dictate a kind of de facto standard: hard-edged objects and shapes, distance, spatial demarcations ... vivid, surreal image quality, and perhaps most centrally, the deployment of a familiar infrastructural Cartesian grid.”^{vi} These sort of environments take shape around an informed vision, a subject for whom perspective is an embedded technology, a ‘natural’ way of seeing. In VR, vision is not simply pictorial, but *cinematic*, and as such it still owes a considerable debt to the body-bashing paranoia of the Cartesian imagination. The spatial and narrative structure of games and simulation environments, the standards by which realism is judged, and the design of most HMDs and game consoles – all take shape around a perspectival I/eye.

Postmodernity claimed to have done away with the myth of the autonomous self, but it stuck fast to the Cartesian dream of a disembodied mind exploring mathematical space. It is only now, as we put postmodernism to bed, that cultural theorists have begun to re-examine the visualist bias that still animates notions of virtuality. Image perception is in fact deeply reliant on the sense of touch. Brian Massumi and Mark Hansen are among a growing number who argue that the effect of presence a user feels in a VE is as much a function of proprioception and internal kinaesthetic sense as it is of vision.^{vii} Hansen uses the example of Char Davies’ VR installation *Osmose*^{viii} to demonstrate how human perceptual function cannot be reduced to or reproduced by the visual, and how embodiment and hapticity are crucial in generating what appears to be “an exclusively visual simulation.”^{ix} First exhibited in 1995, *Osmose* is an immersive, interactive 3D environment. The user wears a standard HMD, as well as a full-body ‘datavest’ fitted with breathing and balance sensors. Movement is controlled by inhalation and exhalation, and directed by bodily orientation. The hard-edged objects and figure/ground relationships of standard VEs have been replaced, in *Osmose*, by semi-transparent, shifting forms and an ambiguous sense of space. Rather than a cinematic narrative, Davies set out to create “an environment capable of inducing a compelling sensorimotor correlation in the participant.”^x *Osmose* assumes a phenomenological, rather than a Cartesianesque subject. Here,

bodily motility is part of self definition. Rather than just an engine or a specular image, the body is understood as a multisensory *schema* – a posture or “attitude”, as Merleau-Ponty terms it, “directed towards a certain existing or possible task.”(100) The phenomenological subject, in other words, integrates itself and its parts in relation to its projects *in the world*.

This sensibility is increasingly deployed in the design of video game interfaces. In today’s paper, I’ll be focusing on a recent game that invites the subject to let go of its Cartesianesque pretensions. *Rez* was released by Sega at the end of 2001. Visually and narratively, the game is conspicuously retro. Superficially, it appears to be the exact opposite of *Osmose*: the player – positioned “as a probing hand (with gun) and disembodied eye among ... hard-edged objects in empty space”^{xi} – sets out on a mission to rescue an advanced AI from psychosis, thereby saving the world. Your humanoid avatar glides at hyperspeed through Tron-inspired wireframe dataspaces, engaging in bouts of frantic shoot-’em-up activity as an evil giant mainframe mobilizes its various defenses against you. To the casual observer, *Rez* looks like nothing more than a sort of technicolour Gibsonsque satire, a seek-and-destroy mission in Cartesian space.

What sets *Rez* apart, however, is the way that the player is drawn to perform, and the way that this performance influences the progress of the game. *Rez* is Sega’s salute to club culture, and it’s aimed at an audience who are after a particular kind of experience. The soundtrack, composed by leading DJs and house/trance artists, is influenced by onscreen activity. Firing a laser, locking onto or destroying a target produces a sound (a drum hit or sample) that instantly synchronizes with the backing track. The more levels you complete, the richer and denser the soundtrack becomes, and the more hypnotic the visuals. It’s been described as ‘*Tron* on Ecstasy,’^{xii} and playing it is a lot like being at a rave: it’s about visual and auditory overstimulation, bodily and autonomic responses, “a suspension of action-reaction circuits and linear temporality in a sink of what might be called “passion”.”^{xiii} Neither vision nor rational response is privileged here. Like *Osmose*, experience in the *Rez*/rave environment is more about “a sense of enveloping space in which there [are] no sharply defined objects... but rather an ambiguous intermingling of varying luminosities and hues, a totally enveloping and sensuous spatiality.”^{xiv} ‘Feel it, don’t think’ is the motto on Sega’s *Rez* website, and the best way to play this game is to get caught up in it, to dance with it. Led by the soundtrack, your responses become rhythmic, intuitive, and this rhythm becomes part of the game. It’s not long before you enter the feedback loop that occasionally hits on the dancefloor: a feeling that the environment in which you are immersed is itself generated by your bodily actions, a product of your performance. *Rez* is intense, and this intensity or **affectivity** is what sets this game apart from the Cartesianesque sensibility of most video games.

This link to club culture and affect is key to understanding what makes *Rez* so unique. Affect is similar to synaesthesia – it implies “a participation of the senses in each other”^{xv} – and clubbing is an affective activity *par excellence*. Everything about the rave environment – the lights, the music, the crowds, the drugs – is geared towards making you dance, and dancing, in this context at least, doesn’t benefit from too much rational thought. In everyday rational perception, we pay attention to certain things, we hold them “at a correct distance”^{xvi} within the limits of our perceptual reach. Perception, however, also comprises *inattention*. This is not the same thing as distraction – a scattering or absence of attention. Inattention is a way of describing the continuous background perception that accompanies all experience; a “*perception of one’s own vitality*, one’s sense of aliveness, of changeability...”^{xvii} It is this inattentive, affective state – the domain of the sub-rational, fluid self – that the clubber seeks out on the dancefloor, and that the designers of *Rez* aim to reproduce for the gamer.

This ‘dynamic’ subjectivity is profoundly different from the static, image-based sense of self that marks the Cartesianesque subject. In the latter case, the subject’s sense of being is a function of the distance that it establishes and maintains between itself and the surrounding world. As Roger Caillois

suggests in his paper *Mimicry and Legendary Psychesthesia*, interfering with this distance – ‘immersing’ the self in its environment – can result in psychesthesia, a form of psychosis, a ‘decline in the feeling of personality and life’.^{xviii} As Hansen points out, however, Caillois understood that psychesthesia was not confined to the visual register – a fact that many of his subsequent interpreters have overlooked. In the same article, Caillois cites the work of psychologist Eugene Minkowski, who claimed that humans’ fear of the dark arises out of the way that it obscures the distinction between the self and its environment. Paraphrasing Minkowski, Caillois writes that darkness

envelops me on all sides and penetrates much deeper than light space; the distinction between the inside and outside and consequently the sense organs as well, insofar as they are designed for external perception, here play only a totally modest role.^{xix}

In summary, what Caillois suggests here is that the disturbance of the visible body-image – or even its disappearance – is not necessarily a problem. While the Western philosophical tradition may have trouble with this notion, most clubbers do not. In the near-darkness of a nightclub or a rave, body-image is displaced as the enabling frame of reference, and perceptual experience is largely aural and tactile. Rather than distancing yourself from your environment, you function by getting caught up in it. Though you may not fall under the gaze of others, you are subject to their **touch**, and this *proximity* is part of the seduction of the rave environment.

Vision is a passive sensory modality. For Bergson, this passivity – the fact that it can only measure possible action on things – confines vision to the domain of the **virtual**. Touch, by contrast, is an affective sense, the only one in which the subject’s perception of quality is blended with a reciprocal experience of **force**, and the only one that necessarily takes place in conjunction with **movement**. It is touch and movement, not just vision alone, that give spatial coherency to perceptual data,^{xx} touch and movement that form the basis of the body schema. This schema does not take the unvarying form of a visible image: it is in constant flux, “cosubstantial with the **activity** of the body; **dynamically constitutive** of the spatiality of the world,”^{xxi} and thus of the individual’s sense of self. Touch, for Bergson, engages with the perceptual domain of the **real**^{xxii} and incorporates it into the subject’s self-definition. Here, the real is much more than the subject’s irrecoverable other. Tactile perception or ‘affection’ links subjective agency to *active* presence in the world rather than withdrawal from it.

It is affection – tactile, mobile, inattentive perception – that rules on the dancefloor, and in *Rez*. Affection can’t be confined or reduced to one sense. It is ‘delocalized’ perception, extending “over the generalized body surface,”^{xxiii} like the body buzz that accompanies orgasm. Evidently, this affinity was not lost on the creators of *Rez*, who offer a ‘Trance Vibrator’ as a peripheral to the game. A pager-sized object on a ten foot USB cord, the Trance Vibrator is – well, pretty much what it sounds like. Its rhythmic pulsing is synchronized with the music and scripted events. Players are meant to put it, as developer Tetsuya Mizuguchi demurely suggests, “wherever they want.” For many, this means nothing more adventurous than a shirt pocket, but other gamers use it to simulate some of the more x-rated haptic dimensions of club culture. Given the Trance Vibrator’s shape, and the fact that it comes packaged in a washable sleeve, it’s hard to imagine that self-pleasuring *didn’t* cross the mind of the developers – certainly some gamers are convinced that this is the only use for it.

Sony’s latest interface situates the issue of affective relations with technology in a slightly less libidinous context. Released earlier this year, the *Eye Toy* dispenses with hand-held controls, using USB webcam technology to track hand and body movements in real time and interpolate them into the game. In effect, your body becomes the controller. The Eye Toy comes with a suite of a dozen or so games, all of which deploy touch and hapticity in one way or another. In *Slap Stream*, for example, a selection of characters pop up at random on white puffy clouds located in the four corners of the screen. Your task is to slap the evil characters – belching and farting rats – off the clouds, and to avoid slapping the good characters – teenage girls in fluffy bunny costumes. This is much more difficult than it sounds. What tends to happen is that reflex overrides reason, and your hand shoots

out at the first sign of movement on the screen. Here, touch and motility do not function to act on or confirm an initial visual perception.^{xxiv} Instead – in defiance of the Cartesianesque order of things – the body reacts to its environment **before** the conscious mind can stop it. *Slap Stream* is an explicit actualization of the phenomenological claim that will and consciousness are *subtractive*: they are “*limitative, derived functions* that reduce a complexity too rich to be functionally expressed.”^{xxv} All of the games in the *Eye Toy* suite act out similar notions, bringing the concept of embodied perception from the domain of the philosophically abstruse into that of the self-evident.

It is important to distinguish these sort of preconscious or ‘sub-rational’ responses from so-called ‘primitive’ behaviour – responses that are somehow prior to culture and representation. ‘Pure’ affect is a fantasy, because the body is never innocent. Like the technologies that evolve alongside it, the body and its gestures are embedded in history. Affect pertains to the body’s performance not just on its own, but *with instruments* – and, as such, affect is historically specific as well. Canadian pianist Glenn Gould maintained a strong affective relation with his instrument. Gould’s public performances were idiosyncratic to say the least, full of strange gestures and contorted postures.^{xxvi} For some, these odd habits were distracting. For others, they were extraordinarily resonant; to see him at the keyboard was allegedly “to witness someone totally at ease in music, in his being-in-music: his physical presence [was] *part of the sound* he [created].”^{xxvii} In this state, Gould was not simply ‘playing the piano’. His relation with the technology was ontological rather than instrumental: performance, for Gould, was not about using an instrument, but *being* an instrument. This is the experience that *Rez* sets out to deliver to the e-generation.

At the moment, it’s only partially successful – still reliant on a hand-held interface which reduces the active body to a small number of hand movements. However, it’s not difficult to see how *Rez* might be adapted for use with *Eye Toy* technology, releasing the gamer from her/his dependency on transcoded variants of ‘real’ gestures. Even in its present form, however, *Rez*, and games like it, are born out of the emergent notion that interfaces are more than simple tools, they are actualizations of the Bergsonian ‘reality’ of our relation with technologies. The subject is incorporated in, and inseparable from, the world which forms the context and possibility of subjectivity. Technologies are part of this world, and of our worldview, they are part of what shapes us, materially and ontologically, as body-subjects. Neither subject nor technology can be thought apart from the body. *Rez*, and games like it, are designed around a *technologically embodied* subject – fluid, multistable, and multisensory.

Cartesianesque perception engineers a particular perception of the world and invites a particular spatialization of power. Concealed at its source and distanced in its effects, it depletes the actual and re-presents it in the form of an image. In a postmillennial world, it is images that increasingly make up our social and political reality, and the distance we take from them also empties us, as viewers, of any real responsibility for the events they depict. As Kevin Robins remarks of the first Gulf War:

Through the evidential force of the image we knew about the war but it was a kind of de-realised warfare... . It was at once a way of seeing and a way of not seeing. It was possible to be a voyeur before an image and yet to be deaf to its reality.^{xxviii}

If the image imparts a power to act, this power is seldom taken up in real terms. Along with our high-tech virtual wars goes a kind of ‘virtual humanitarianism’ – a concern for others that is sustainable only because these others are ‘somewhere else’.

If this is the ‘freedom of the virtual’ that postmodernity promised, here, it is little more than freedom from real responsibility. It’s time to start rethinking this definition of freedom, along with the historically persistent idea that the body is somehow a barrier to it. Most VR technology requires the user to

adapt her/his movements to suit the demands of the interface rather than the other way around. Game controllers are a case in point, reducing individual bodily gestures to “forms that can easily be manipulated, mass produced, and standardized.”^{xxix} Many current video games also replicate the (violent) ends of the military training applications on which they are based. As Ken Hillis points out, this kind of ‘public entertainment’ is linked to military surveillance, and to the administration of technology as a means of control.^{xxx} The apparent freedom of most VEs is calculated, in other words, on the privileging of vision, the homogenization of the subject, and the consequent anonymity of the technologized self. Here, the price to pay for the euphoria of disembodied consciousness is the loss of control over one’s own being.

There’s no room for affect in this grim scenario – but, as *Rez* reminds us, maybe there should be. Unlike emotion, affect is not socioculturally legible. It cannot be qualified because it lies beyond the limits of conscious-autonomic function, “outside expectation and adaptation, ... disconnected from meaningful sequencing [and] narration ...”.^{xxxi} Affect is difficult to normalize, and impossible to fully explain. It is a form of resistance.

ⁱ (penny1)

ⁱⁱ AI research is often singled out as being particularly culpable in this respect. As Elizabeth Wilson points out, AI research has focused primarily on the construction of “artificial intelligence systems as disembodied, fully functioning simulations of adult minds”. Wilson⁴⁸ See also Erik Davis, ‘Synthetic Meditations: Cogito in the Matrix’ in the same volume.

ⁱⁱⁱ Richard Coyne in Hansen¹... Hansen, Mark, ‘Embodying Virtual Reality – Touch and Self-Movement in the Work of Char Davies’, <http://www.immersence.com/bibliography/Mhansen-B.html> (access 26.03.03)

^{iv} (penny1) In support of his argument for VR as a resolutely visualist technology, Ken Hillis names the camera obscura and stereoscope as two key precursive optical technologies. See Hillis, Ken, *Digital Sensations: Space, Identity, and Embodiment in Virtual Reality*, University of Minnesota Press, 1999.

^v VR researcher [name] Biocca describes this aim as an attempt to transform an “array of light on a visual display [into] a lush landscape in the mind of the viewer.” Biocca in hansen³

^{vi} hansen³

^{vii} see Massumi, Brian, *Parables for the Virtual: Movement, Affect, Sensation*, Duke University Press, 2002.

^{viii} see Davies, Char, ‘Osmose’, <http://www.immersence.com/osmose.htm>; see also Davies, Char, ‘Changing Space: VR as an Arena of Being’, http://www.immersence.com/eph_vrpaper.htm (access 15.2.02)

^{ix} hansen² Citing Held and Durlach, Hansen argues for the “active contribution made by proprioception and internal kinesthetic sense in creating [an] effect of presence.”Held and Durlach in hansen⁵

^x hansen⁵ Davies again, on affect in her work: “My interest lies in going beyond VR’s conventions of photo realism and joystick interfaces which situate the user as a probing hand (with gun) and disembodied eye among passive hard-edged objects in empty space. By working with the participant’s breath as primary interface (enabling them to ‘float’), and using semi-transparency as a means of evoking cognitive ambiguity, I have sought to reaffirm the role of the subjectively lived body within the virtual realm and deeply engage the participant’s sensory imagination.” davies in hansen⁹

^{xi} [get davies ref.]

^{xii} see ‘Sex in Games: Rez + Vibrator’, *Game Girl Advance* website,

http://www.gamegirladvance.com/archives/2002/10/26/sex_in_games_rezvibrator.html, posted by jane, 26/10/02.

^{xiii} mass²⁸

^{xiv} davies in hansen⁹

^{xv} mass³⁵

^{xvi} De Bolla, Peter, *Art Matters*, Harvard University Press, 2001, p61.

^{xvii} mass³⁶

^{xviii} For the schizophrenic, “space seems to be a devouring force. Space pursues them, encircles, them, digests them in a gigantic phagocytosis. It ends by replacing them. Then the body separates itself from thought, the individual breaks the boundary of his skin and occupies the other side of his senses. He tries to look at *himself from* any point whatever in space. He feels himself becoming space, *dark space were things cannot be put*. He is similar, not similar to something, but just *similar*. And he invents spaces of which he is “the convulsive possession.”” Caillois, Roger, ‘Mimicry and

Legendary Psychasthenia,' John Shepley, trans., in *October: The First Decade 1976-86*, Annette Michelson, Rosalind Krauss, Douglas Crimp, and Joan Copjec, eds. MIT Press, 1987, pp59-74; p72.

^{xix} Minkowski as glossed by Caillois, in hansen13

^{xx} "The tactile situation moves to a higher level when the sentient body itself becomes the voluntary agent of that movement which is required for the acquisition of this serial sequence of impression." jonas in hansen7

^{xxi} hansen14

^{xxii} "Perception, understood as we understand it, measures our possible action upon things, and thereby inversely, the possible action of things upon us. ... our perception of an object distinct from our body, separated from our body by an interval, never expresses anything but a virtual action. But the more distance decreases between this object and our body ... the more does virtual action tend to pass into real action. Suppose the distance is reduced to zero, that is to say that the object to be perceived coincides with our body, ... then it is no longer virtual action, but *real* action, that this specialized perception will express, and this is exactly what affection is. Our sensations are, then, to our perception that which the real action of our body is to its possible, or virtual action." bergson in hansen8

^{xxiii} mass25

^{xxiv} Hillis argues the opposite, claiming – reductively, I would argue – that "touch or tactility in VEs remains a very visible tactility." hillisxxii

^{xxv} mass29

^{xxvi} "For some critics and concertgoers Gould's retirement [from public performance] was a relief because it removed from the public domain a player of such pronounced idiosyncrasy that his ticks and mannerisms had become the "content" of his performances. Put bluntly, his playing style or technique – the posture, flattened hands, ridiculously low chair, humming, and self-conducting – distracted audiences from the task at hand: the realization and appreciation of the music. For others, these eccentricities only served to intensify the magic and mystique of Gould's concert appearances." Ibid., p70.

^{xxvii} Ibid., p73.

^{xxviii} Robins, Kevin, *Into the Image*, Routledge, 1996, p64.

^{xxix} Manovich (2001), p60.

^{xxx} "I find it more than coincidental that so many current VR games replicate the trust of ... military training [applications] ... find the enemy and kill 'him'. ... [All] the key elements of modern human-computer interface devices have been developed by the military. Their history has less to do with public entertainment than with military surveillance and the increasing use of technology as part of a quest for control." hillisxxxv

^{xxxi} mass25