New edge : technology and spirituality in the San Francisco Bay Area
Zandbergen, A.D.

Chapter Two: New Edge Salvation

Repertoires of Transformation

> ... you must think of god in this way, as having everything-the cosmos, himself, \<the\> universe-like thoughts within himself. Thus, unless you make yourself equal to god, you cannot understand god. Having conceived that nothing is impossible to you, consider yourself immortal and able to understand everything, all art, all learning, the temper of every living thing. Go higher than every height and lower than every depth. Collect in yourself all the sensations of what has been made, of fire and water, dry and wet; be everywhere at once, on land, in the sea, in heaven; be not yet born, be in the womb, be young, old, dead, beyond death. And when you have understood all these at once-times, places, things, qualities, quantities-then you can understand god.
>
> From *Corpus Hermeticum* XI: 20-22 (quoted according to Copenhaver, *Hermetica* in Hanegraaff 1996: 391)[94]

In her influential book *How We Became Posthuman* (1999) the American scholar of English literature Katherine Hayles opens with a future vision by the roboticist Hans Moravec that strikes her as a nightmare. Moravec's vision is that of a future in which it is possible "to download human consciousness into a computer"[95] (Hayles 1999: 1). This idea of a "postbiological" future (1999: 4), where "mind" is believed to be able to exist separate from the body, Hayles concludes, is characteristic of the contemporary "information theoretic culture" that treats information as "more mobile, more important, more *essential* than material forms" (1999: 19, italics original).

Hayles' association of cyberculture with immateriality and disembodiment characterizes a widespread understanding among academics, journalists, novelists and technofuturists that the global computer networks forge an immaterial

---

[94] The *Corpus Hermeticum* is a Greek manuscript that became available in the Christian West after its translation in 1462. It is generally attributed to a mythical writer Hermes Trismegistus, until the 17th century believed to be the contemporary of Moses. The document was later proven to originate between the first and third century A.D. (Hanegraaff 1996: 398-391). In his study of New Age, Wouter Hanegraaff printed this passage as a way of illustrating his point that the Corpus Hermeticum "contains ideas which would become of crucial importance to Western esotericism", including New Age. "Most important in this respect", Hanegraaff writes, "is its combination f an emphasis on intuitive gnosis and a positive attitude towards the cosmos and to man's role in it" (1996: 391).

[95] Hans Moravec described this dream in his book *Mind Children: The Future of Robot and Human Intelligence* (1988).

ontological order. Whether celebrated by nanotechnologists like Eric Drexler or engineer-futurists like Ray Kurzweil; whether given visual and poetic form by cyberpunk authors like William Gibson (*Neuromancer* 1984) and Vernor Vinge (*True Names* 1981), or by scriptwriters like the Wachowski brothers (*Matrix Trilogy* 1999); whether considered philosophically by scholars like Margareth Wertheim (*The Pearly Gates of Cyberspace* 1999) or Michael Heim (*The Metaphysics of Virtual Reality* 1994); whether discussed by journalists or popular cultural writers like Erik Davis (*TechGnosis* 1998) or Mark Dery (*Escape Velocity* 1996) or whether criticized by scholars or journalists of cyberculture like Katherine Hayles (*How We Became Posthuman* 1999) or Kevin Robins (*Cyberspace and the World We Live In* 1995), discussions, reflections and engagements with the contemporary, 'Western' information technological environment are strongly focused on disembodiment and immateriality. This also accounts the prevalent academic and popular cultural understanding of what the elective affinity between gnosis and information technology consists of.

The affinity that exists between gnostic spirituality and information technology, as discussed in the introduction to this thesis, is typically considered to lie in the way that the immaterial sphere of cyberspace seems to fulfill the alleged gnostic dualistic desire to obtain immaterial salvation. Aupers et al. state that cybergnosticism is rooted in a 'contempt for the body':

> (...) cybergnostics celebrate the possibility of the "liberation from human nature" achieved by the uploading of one's mind into a machine (...) and often display a profound contempt for the archaism of "wetware"- that is, organic substance (2008: 699).

Also the anarchist poet and inspirer of Bay Area cyberculture Hakim Bey writes about "CyberGnosis" as "the attempt to transcend the body through instantaneity and simulation" (Bey 2003: 109). Such understandings resonate strongly with the technospiritual remarks made by psychedelic visionaries like Timothy Leary who projects his dream of disembodied salvation onto the alleged noncorporeal realm of cyberspace. As Leary writes in his *Chaos and Cyberculture* (1994):

> Recite to yourself some of the traditional attributes of the word "spiritual": mythic, magical, ethereal, incorporeal, intangible, nonmaterial, disembodied, ideal, platonic. Is that not a definition of the electronic-digital? (..) These "spiritual" realms, over centuries imagined, may, perhaps, now be realized! (1994: 5)

The elective affinity between spiritual fantasies and the information technological 'realm', so it seems, is rooted in the expectation that this realm can liberate us from the 'meat' of the body.

The image of the Homo Cyber with which I opened this dissertation, seems, at first sight, to resonate with this transformational drift to leave embodied human modes of existence behind and to find salvation in immaterial, informational spaces. The Homo Cyber, a notion coined by the engineer Lorenzo Hagerty at Mindstates 2001, is an evolving new species that will replace the Homo

Sapiens and that is "half information, half human".[96] The Homo Cyber thus seems to be halfway towards full salvation in the informational realm. However, if we consider this vision of the Homo Cyber in its cultural context, comparing Hagerty's vision to the concerns shared by the larger Mindstates crowd, a tension seems here to exist between an alleged concern with informational immateriality and disembodiment, and concerns with quite material things like the human body and ecological preservation. At Mindstates 2005, alongside presentations entitled *Designer Minds* (by roboticist Ramez Naam), *Hyperpeople* (by Virtual Worlds developer Mark Pesce), or *Virtual Species and the Dream State* (by the new media artist Donna Tracy) that focused on virtuality and disembodiment, Mindstates artists and activists also expressed a critique of "large-scale agriculture, over-processed, chemically treated, genetically modified, nutrient scarce food"[97], global warming and species-extinction. And at the last evening of the weekend, when Mindstates closed with a rave, the participants balanced their days of sitting and talking with physical activity. On the dance floor that evening Artificial Life developers, game designers and ecological activists spent an entire night dancing.

Another such combination of physical and informational concerns characterizes the plural activities of Mindstates presenter Bruce Damer. As we will see later in this chapter, Damer dreams of a future where computer intelligence will free itself from the bounds of the earth but also takes his co-Artificial Life (AL) developers to fossil fields to get them "awestruck" about the wonders of "real life". Damer's partner, the dancer Galen Brandt, we will also see, leaves her material body behind when entering cyberspace but finds here a new body, that she calls "cyberbiological". These examples suggest that if the Mindstates participants celebrate both gnosis and cybertechnologies, the affinity between the two is clearly not uniquely informed by contempt for physical reality and by a celebration of the immateriality of cyberspace. Nor is this affinity such that it offers dreams of salvation that cannot be found outside cyberspace: raver Ken, we will see, sees the internet as a container of a mystical kind of consciousness, comprised of all information that exists. In addition, Ken experiences these information flows also outside cyberspace, through the senses of his body.

These examples call for an understanding of the elective affinity of information technology and gnosis that does not root it uniquely in intrinsic capacities of cyberspace, nor uniquely in the resonance between gnostic longing for disembodiment and the assumed immateriality of cyberspace. But how else then should we understand this affinity? This is the main question addressed in this chapter. In the following three sections, I argue that if we want to understand the relation that exists between gnosis and information technology as it is forged in the

---

[96] Lorenzo Hagerty, Mindstates 2001: *Psychedelic Thinking and the Dawn of Homo Cyber*.
[97] *Seeding the Map Catalogue* distributed at Mindstates 2005.

ethnographic environment of New Edge, we should focus on that other characteristic of gnosis: the fact that gnostic knowledge is transformational knowledge. In the first part, I will make this argument by means of an exploration of the transformational fantasies of two ravers and technology enthusiasts. In the second part I explore these transformational fantasies in the context of Virtual Worlds and Burning Man. Finally, in the third part of this chapter I offer a historical perspective on the two types of transformational repertoires that we can find in contemporary New Edge spaces of transformation.

2.1 Gnosis As Transformational Knowledge

"Knowledge" understood "gnostically", as Aupers et.al (2008) put it, is not just "theoretical information about things but is itself, as a modification of the human condition, charged with performing a function in the bringing about of salvation" (2008: 690). In other words, knowledge, from the gnostic perspective is *active* knowledge and has transformational power: by becoming aware of the truth, the truth is created, and by understanding the divine, the divine is realized. This understanding of gnosis resonates with the fact that many Mindstates presenters celebrate information technology not, in the first instance, because of its disembodied characteristics, but for the way in which it enables transformational understanding.

An example of this notion comes from the game designer Katie Salen, whose Mindstates presentation *Tripping the Game Fantastic* celebrated online gaming as transformational practice. Evoking both Johan Huizinga's notion of the Homo Ludens, the idea of the 'magic circle' and Victor Turner's notion of liminality, Salen discussed her online games as playful and transformational. The online world, in Salen's notion, becomes a sphere of possibility, and a "ritual of the imagination".[98] "Playing", Salen emphasized moreover, "has nothing to do with digital technology". She thereby opens the way for comparison between her transformational interest in online gaming and the transformational interests of other Mindstates presenters. Another manifestation of transformational interest comes from two Mindstates presenters who call themselves 'Crystal and Spore.' In a presentation/electronic music performance, these DJ's and rave proselytizers celebrated raving as a "neo-shamanic space of modern ritual", whereby "deep-levels of connectedness are experienced" with the "powerful energies that surround us" so that the "separation from our deeper selves and from the earth" is healed. Raving, for these DJ/performers is about "reconnection", "expressing community"

---

[98] Katie Salen *Tripping the Game Fantastic*, presentation at Mindstates 2005, May 28 2005, San Francisco.

and inducing "powerful social change" by also implementing "clean energy" and "responsible recycle strategies".[99]

Salen's notion of online gaming as "rituals of the imagination" and 'Crystal and Spore's' celebration of raves as "modern rituals" give us a key for understanding the New Edge convergence of gnosis with information technology. Gnosis and information technology, I postulate in this chapter, converge not centrally in the fantasy of disembodied salvation, but in the broader notion of transformational knowledge. If we take this emphasis on transformation as a starting point for charting the overlap of New Age and high-tech, we will see that many forms of being and ways of embodiment are embraced within New Edge, of which Hagerty's cyborgian image of the Homo Cyber and Leary's disembodied fantasy of uploading the mind onto cyberspace are only two. These transformational forms are sometimes cast in terms of escape from physical limitations, sometimes they are cast in terms of 're-embodiment', sometimes in terms of an escape from the bounds of the earth, sometimes in terms of culture-creation and community-building. Sometimes these dreams are projected onto Artificial Life forms and on information technological change in general and sometimes they are felt at the personal, 'cellular' level. The purpose of this chapter is to discuss these diverse gnostic transformational repertoires of New Edge.

I begin with an account of two 'gnostics', 'Ken' and Galen Brandt. Both experience gnostic transformation in technological and 'non-technological' settings alike. Their accounts can help us get a sense of how New Edge transformation is 'eclectic' in the sense that it occurs across technological and non-technological spheres and results in forms of being that cannot easily be captured either in terms of 'embodiment' or 'disembodiment.'

Eclectic Transformation 1: The Gnostic Sanctuary and Raves as Molting Rituals

"I feel a resonance between your left shoulder and those flowers on the table". The electrical engineer and computer programmer Ken (1957) shows me how he does his, what he calls, "healing modalities". Ken senses tensions in people's bodies, feels them in his own body and when he relaxes, the tension in the other person's body subsides as well. This evening he feels a tension in my left shoulder, about which he is right. "I am still very much a scientist", he tells me, "and I was very skeptical when I started, but I was getting results. (...) I want to try and understand the mechanism behind this, but there is maybe no theory within our system that explains the mechanism".

---

[99] 'Crystal & Spore' *Ecstatic Evolution: Dance Music Culture and Transcendent Technology*, presentation at Mindstates 2005, May 28 2005, San Francisco.

We are at a dinner party organized by another programmer and Silicon Valley entrepreneur Gary. Invited are the friends who were, in the early 1990s, active participants of a rave collective, that I call 'Dance'.[100] When I inform the guests about my interests in New Age spirituality 'Silicon Valley-style', Ken tells me about his upbringing in an African Methodist Episcopal Church (Ken is of African-American descent). In the early 1970s he attended the Aquarian University of Maryland. Founded in 1969 by a certain 'dr. Bob Hieronymus', this university was a state-approved school for esoteric studies, offering courses and certificates in Religious Metaphysics, Occult Sciences and the Mystical Arts. "It was in my family", Ken tells me, "this whole psychic happening".

After the dinner party, Ken sent me an email in which he invited me to join him to his church:

> http://www.gnosticsanctuary.org/: The closest thing that I would call "my church".
> If you are interested in going to this church I would love to take you there, it is very beautiful and interesting and no one will try to make you join or believe anything.

On a quiet Sunday morning in August I joined Ken to the 'The Gnostic Holy Eucharist' held in the 'Church of Gnosis', located in the Silicon Valley suburb Mountain View. The Church of Gnosis was established in the mid-1970s by Tau Rosamonde Miller, who is currently the bishop of this sanctuary. After returning from the service, this is the report I wrote on it:

> Tau Rosamonde is leading this service. She wears a blue dress and a purple veil hangs over her shoulder. She is barefoot. Tau begins the service by reading from a book, a passage about gnostic salvation. "It is necessary to be vague about the beloveth", she reads, "because the beloveth cannot be put into words, it has to be experienced". Then she reads about the purpose of gnostic practice in the world today:
>
>> We are entering the scary places of our lives, looking for awakening, looking for the light. (...) True awakening (...) only happens in the now. It is always happening, there is no future and no past, just the eternal now. It involves an out of ego experience, an experience of nothingness, of being in the eternal now. (...) we come from the source, and we go back to the source (...) life continues, the spirit does not end with death.
>
> Then, Rosamonde tells us how this awakening can be induced: "It is really inner vision, or in-*sight*, literally", she says. "The divine reveals itself when we develop a sensitivity of what is around us". Tau makes us listen to the whirl of the airco, the sound of someone coughing, the feel of the temperature. "All these senses", she says, "you experience as one, so that you go beyond your senses".

---

[100] The reason that I don't use the real name of this collective is that some of its key participants don't wish to be publicly associated with 'raving.' As founders of well-known corporations and board members of various scientific and political organizations, they fear that the stigma of raving as an 'irresponsible' drug-indulgent youth movement will harm their contemporary careers. In chapter four, when discussing the life of 'Bill Bright', I discuss this problematic in more detail.

After a break, a long ceremony starts. As someone explains to me, it is an initiation rite, someone is ordained as a priest in the Gnostic Sanctuary. The rite starts with Rosamonde covering her face behind her purple veil. She wears dark laced gloves. As I am told afterwards, Rosamonde represents Sophia. Sophia is the "feminine principle of the Divine", as the textbook that is handed out to us explains.[101] The woman who is initiated sings, she kneels in front of the veiled Rosamonde, who blows onto the top of her head and who whispers something in her ear. Most of what is said during this rite is whispered, and most of what is being performed is shielded from view: a circle of priests encloses the initiate, who is on the ground at some point, blocked from view for the church attendees.

When the ceremony ends, Rosamonde sends us away with the words: "there is this superstition, it is very superstitious, that on the first day of a priests' ordination, she has extraordinary power. It is just superstitious magic, but it doesn't hurt to believe in it". There is loud laughter in the crowd. The service ends with a dancing session.

Because of remarks as this latter one, Ken feels at home in this Gnostic church. When Ken talks about his divine interactions, he is at pains to avoid the impression that he is merely 'believing' in what he has learned at the Aquarian University. As he wrote me in an email: "Belief is what you are left with when you no longer have a direct connection to the Divine". He attends the Gnostic Sanctuary because it is a "beautiful experience". Tau Rosamonde and the other priests of the Sanctuary seemed indeed determined to deliver the service as an 'experience.' At various moments during the ritual, Rosamonde discouraged the church attendees from trying to visually see and rationally understand the 'beloveth'. Instead, Rosamonde directed our attention to the senses, trying to get us to experience 'all senses as one' and build an understanding of the 'beloveth' in this experiential way.

Through his healing practices and his attendance to the Gnostic Sanctuary, Ken enacts a worldview that can be characterized as 'informational.' He believes - or more appropriately, 'experiences' - that he is surrounded by meaningful information, patterns of connection that he can discern through his senses. Ken does not only pick up on these patterns of information at the Sanctuary or as part of his healing practices, but he also locates them in the internet. Ken believes that the internet is "a materialization of Akashic". He explains that 'Akasha' is the "spirit world".[102] The Internet is a materialization of a spirit world that is composed of information, information that people can tap into and use to engender enlightenment.

---

[101] *The Gnostic Holy Eucharist. Ritual of the Bridal Chamber*, publication of the Gnostic Sanctuary, 2007: page i.
[102] The scholar of New Age Wouter Hanegraaff (1996) describes the "Akashic records" to be a Theosophical metaphysic concept of the "universal memory of the Logos or world-soul which can be "tapped into" by physics" (Hanegraaff 1996: 255).

Another practice that attunes Ken to the deeper-lying connections underneath the socialized and materially conditioned reality of everyday life, is raving. In an email Ken told me that in the early 1990s 'raving' was his "religion". In one of the flyers that Ken produced in this period for the 'rave community', he characterized raving as a "dance ritual" that builds "feelings of togetherness, instill courage and break down emotional and mental barriers" and that creates a sense of "Unity and Togetherness" within a "Global Family" of ravers.[103] Ken also sent me a flyer that he thinks presents a particularly inspirational and accurate understanding of raves. In this flyer, which I quoted also in chapter one, raves are described as "a collective molting ritual for the new species".[104]

Taken together, all these different aspects of Ken's way of relating to the sacred are exemplary of the nature of the places and techniques that, from the New Edge perspective, are considered transformational. What stands out in Ken's life, and what represents the general New Edge approach towards transformation, is a persistent eclectic attitude towards gnostic transformation. In Ken's life this shows in several things. In the first place, Ken does not seem to make much conceptual difference between the capacities of information technology and of the human senses to generate awareness. Secondly, with respect to his interest in transformational knowledge, Ken also does not make much conceptual difference between an institutional setting like the Gnostic Sanctuary and an underground, subcultural setting like a rave. In the third place, Ken also endorses an epistemological eclecticism, by seeking to ground the transformational moments in science while also seeing it in terms of 'experience' and of a 're-sensitization' of his body. And finally, the transformation celebrated by Ken is one that accounts both his personal process of awareness and a communal, global transformation.

Ken's simultaneous interest in the transformational potential of the Gnostic Sanctuary and of raves, of offline and online places, of high-tech and of 'natural' means; as well as his simultaneous embrace of personal and collective transformation and his inclination to understand this transformation in terms of science and of embodied experience, is illustrative of the eclecticism that I consider characteristic of New Edge more generally. This eclecticism reflects the holistic philosophy that underlies New Edge thinking and inspires a quite pragmatic approach regarding the question how and where true transformation can occur and how this transformation can be understood. Another example of such eclecticism comes from the dancer and Virtual Worlds artist Galen Brandt.

---

[103] 'Ken' in *CyberTribe Rising* (1993)
http://hyperreal.org/raves/spirit/politics/CyberTribe_Rising.html. Retrieved November 7, 2010.
[104] Rave Manifesto entitled *The Imaginal Rave* written by 'Cinnamon Twist', date unknown but estimated by Ken as an early 1990s publication. Re-published online November 8, 2008 http://www.gashaus.com/component/content/article/55.html. Retrieved October 15 2010.

Eclectic Transformation 2: VIDEOPLACE and Singing To The Trees

The dancer and singer Galen Brandt (1954) has been interested in Virtual Reality (VR) environments at least since the early 1970s. The installation that introduced Galen to the concept of VR was VIDEOPLACE, a creation by the artist Myron Krueger. As described by Krueger in his book *Artificial Reality* (1983), VIDEOPLACE is an installation in which "human behavior is perceived by a computer, which interprets what it observes and responds through intelligent visual and auditory displays" (Krueger 1983: xii, xiii). When VIDEOPLACE was exhibited at various art shows in the 1970s, Galen was one of the dancers to use it. When she moved in the space of VIDEOPLACE, images of her body were projected onto a wall, in the same frame as computer animations that were made in real-time by Krueger. The result was a 'dance' between Galen and the computer animations.

> On her website, Galen recalls the experience that this generated for her:
> When I was moving (…) I became the me that I had known myself to be (…) I never felt so alive as when I was doing that, ever. (...) I lost my recent memory of my body's limitations, and refound my deeper memory of its limitless beauty and power. My body became a true body of knowledge which knew itself as spirit, reborn, embodied and moving.[105]

In a group interview that I conducted with Galen Brandt and with other Virtual Reality and Virtual Worlds pioneers, Galen elaborates about this experience that took place more than three decades ago but that she still considers a foundational moment in her life. The soft-spoken Galen tells us that when she performed in VIDEOPLACE when she was in her early twenties, she gained a new perception and experience of herself. She describes her younger self as "shy", and tells us that dancing in VIDEOPLACE gave her a feeling of real empowerment that was sacred in kind:

> The interesting thing (...) was that I knew that my body, or my soul, or my heart, or whatever it would be, was capable of doing something that this biology [pointing at her body], which in some ways is limited, have brought me to forget, or disbelief, or cease believing it. So, there was this reinvesting of belief (...) It was an ecstatic experience, an excess, an out of senses experience, so as to come back to my senses.[106]

In VIDEOPLACE Galen had to 'come out' of her senses as a way to understand the real ontology, the real being of her body and mind. Galen distinguishes between the biology of her body as it was present during our interview, and the biology of her body as it was evoked in VIDEOPLACE. Her body outside and inside VIDEOPLACE are two kinds of bodies that are different in quality: while her

---

[105] Brandt, G. (1996). *Taking Tiny Dancing Lessons in Cyberspace*.
http://www.virtualgalen.com/virtualhealing/myron.htm. Retrieved November 15, 2010.
[106] Interview Dorien Zandbergen with Galen Brandt, Santa Cruz, California, January 2006.

'biology' outside of VIDEOPLACE is 'limited', her 'biology' in VIDEOPLACE is 'complete'; the one outside of VIDEOPLACE has a 'bad memory', while the one inside the VR installation is totally composed of memory; the one outside of VIDEOPLACE is furthermore disconnected from her origin, while the one inside is in full contact with it. These are the words that Galen uses to express her experience of transformation:

> What I loved about performing is particularly the feeling, when I was moving, that I became re-biologized. The collaboration with machines (...) had reconstituted me, recorporealized me, so that I had become the me that I had known myself to be. I felt a kind of restructuring of myself at the cellular level, in a cyberbiological way (Ibid.).

This 'restructuring' in VIDEOPLACE happened to her in a 'precognitive', 'cellular' way:

> You know that you have these kind of revelations that feel cellular? They are kind of precognitive. There is something that feels so genuine that you know you couldn't have thought about this, because you didn't expect it? You didn't know this was going to happen? That is my sort of template of the truth (Ibid.).

During the interview Galen unwittingly illustrates how this cellular memory has healing capacity even across space and time. Galen had joined us for the interview at the very last moment, hesitant as she was to participate because of a strong headache she was suffering. When she was halfway the recollection of her VIDEOPLACE experiences however, she suddenly remarked: "even talking about it, you can see .. I feel .. you know .. I don't have a headache, it is gone!" The memory of her experiences in VIDEOPLACE, so Galen's remark suggests, has 'awoken' the memory of her 'healthy body.' Even now, reaching across time and place, through the power of memory, Galen could feel the healing powers of VIDEOPLACE.

Even though Galen's notion of her new body as 'cyberbiological' suggests that cybertechnologies formed an essential part of her transformational process, Galen also claims that the kind of transformation she experienced in VIDEOPLACE can also be wrought in very different settings. It also happens, for instance, when she sings and performs at events like Burning Man or when she walks singing through her garden. When Galen sings, she feels like she is "in communion". And when reflecting on it with me, she finds it interesting to realize that the sense of communion she has when "singing to the trees with no technical mediation whatsoever", is the same as what she sensed when she performed in VIDEOPLACE (Ibid.).

In these recollections of her experiences of VIDEOPLACE, we see a similar eclecticism as in Ken's gnostic attitude. From Galen's perspective there is no difference between 'technological' environments and 'natural' environments. And like Ken who understands the transformational process through his mind as well as through his body, the type of transformation wrought by Galen is a

92

combination of cognitive understanding and sensorial experience. This eclecticism also translates into quite a hybrid image of what her transformed body is composed of: even though, at first sight, Galen seems to distinguish between a physical body and an immaterial, 'spiritual' body, her understanding of her 'healthy' body as 'cyberbiological', frustrates any easy attempts to understand her transformation as comprising a move from a biological to a technological body, or from a physical to an immaterial body.

Rave Culture and Virtual Worlds as 'Molting Rituals'

In the aforementioned rave flyer that Ken finds inspirational, a rave is thought of as a "molting ritual for the new species".[107] We saw that game designer Katie Salen, speaking at the Mindstates conference, thought in similar terms of online games, referring to them as ludic spaces and as rituals. These characterizations are exemplary of a more general New Edge celebration of ritualistic environments.

Virtual Worlds, raves and the Burning Man festival as its epic example, are among the spaces that are celebrated as such. The characterization of these environments as ritualistic is endorsed both in academic accounts and in emic celebrations of these spaces. For instance, the Social Anthropologist Gerard Morgan describes raves as a "liminal space the anthropologist Victor Turner believed once belonged to tribal ritual" (2005: 167). They are, according to Morgan, spaces of "ritual transformation" where people "negotiate liminality". The theologian Lee Gilmore suggests the same for Burning Man. She talks of her journey to Burning Man as a "pilgrimage" and turns to Victor Turner's theories of ritual and pilgrimage to explain certain important features of Burning Man (2005:42, 44).

Both these authors postulate also that narratives of ritual are part and parcel of the performances and narratives of participants of Burning Man (Gilmore 2005: 50) and raves (Gerard 2005: 169). Indeed, on the online rave repository 'Hyperreal', on the Burning Man website, in rave flyers, in interviews that I conducted with Virtual Worlds developers, Johan Huizinga's understanding of the "Homo Ludens"[108], the notion of the "magic circle" and particularly Victor Turner's

---

[107] 'Cinnamon Twist', approx. 1992, *The Imaginal Rave*.
http://www.gashaus.com/component/content/article/55.html. Retrieved October 15 2010.
[108] In my interview with Bonnie de Varco she evokes the notion of the "Homo Ludens" as a way of explaining what happens in Virtual Worlds (January 4, 2006); an example of the use of this term by Burning Man participants for self-reflection can be found on: http://cliffypop.com/2008/05/05/movement-celebration-arts/. Retrieved October 26 2010; the anthropological exploration of Burning Man by Doherty, B. (2004). *This Is Burning Man* celebrates Burning Man in similar terms (Doherty 2004: 10).

idea of "liminality"[109] are employed as a way of conveying the understanding that we have here to do with out-of-the-ordinary spaces. Bonnie De Varco (1958), who is an anthropologist by training and a developer of Virtual Worlds for educational institutions, told me about the significance that the term 'liminality' has for her in coming to terms with the meaning of Virtual Worlds:

> a great word that keeps coming up for me that only anthropologists use is 'liminal', 'liminoid'. This means that 'being' is not identified by any specific thing. (…) that whole concept is so key for me in tying all this work back into anthropology (…) it is not what we create, as it is creating the ability to play with modes of being. [110]

As such, De Varco employs Victor Turner's notion of liminality to imagine also Virtual Worlds as ritualistic environments in which people are enabled to play with unconventional modes of being. However, if we compare Victor Turner's notion of 'liminality' with the way in which it informs the New Edge understanding, interesting overlaps as well as differences show. With the concept of liminality, Victor Turner referred to a "transcendental phase, involving a prolonged period in which the participant is both literally and symbolically marginal". This phase of liminality is, in his scheme, always finalized by a phase of "rejoining the group" (Barnard and Spencer 2010: 616). Liminality, in this understanding, involves a state of social exclusion and disempowerment.

Whereas some scholars and emic enthusiasts of raves and Burning Man imagine the liminality of these spaces to reside in a moment of 'transcendence' that also involves a return and reconnection with everyday life afterwards, another understanding of liminality intersects with it. This is the notion that the liminal state is intrinsically empowering - because it is expressive of a higher and deeper truth - and that one should try to achieve it permanently.

Ken and Galen's accounts of cybergnostic transformation point to this other reading of ritual and transformation. They celebrate a process of transformation from false perception to true understanding, and true understanding comes as part of bodies and modes of consciousness that are 'in-between' the categories and ontological concepts of conventional reality. These bodies and modes of consciousness are somewhere in-between the physical and the non-physical, the technical and the natural and the cognitive and the experiential. Unlike notions of ritual that are inspired by Victor Turner and that understand this 'in-between' state to be temporary and always leading to eventual integration with the social reality of everyday life, Ken and Galen's celebration of transformation suggest that this 'in-between' mode of being is the highest form of being that one

---

[109] For an academic account of the significance attributed at Burning Man to Turner's notion of 'liminality' see Hockett, J. (2005). Participant Observation and the Study of Self. Burning Man as Ethnographic Experience. In L. Gilmore, & M. van Proyen (Eds.), *Afterburn. Reflections on Burning Man*. (pp. 65-84). Albuquerque, New Mexico: University of New Mexico Press., pp. 74, 75

[110] Interview Dorien Zandbergen with Bonnie de Varco, Santa Cruz, California, January 4, 2006.

94

should be permanently strife for. This is suggested also by the fact that whereas in Turner's scheme the liminal phase is equated with the disempowering position of marginality, it is in this New Edge understanding equated with empowerment. This understanding is furthermore illustrated by Bonnie De Varco, who told me about her creations of Virtual Worlds:

> What we are doing is to enable ourselves to go to this liminal place, Victor Turner developed this term to describe ritual practice for agents that are in between, that are in the margins, that feel comfortable anywhere because they don't really belong anywhere. (…) That exploration of the liminal I think is part of the sacred space. [111]

Another Virtual Worlds developer and Burning Man enthusiast, Bruce Damer (1963), celebrates liminality in a similar sense. According to Damer, "liminal people, people on the margins are empowered and totally in tune with their environment". His partner Galen Brandt calls liminality similarly "seminal".

What this suggests is that, for these Virtual Worlds performers and creators and Burning Man attendees, liminality is a mode of being that they seek to permanently identify with. In their schemes of transformation, the liminal phase of ritual practice is understood to be characteristic of a higher, truer and fuller mode of being and the 'ambiguity' that participants have during a liminal phase (Mitchell 2010: 618) is thereby turned into a permanent ideal.

In the setting of New Edge, this celebration of liminality as a desirable permanent state of being translates into quite an eclectic celebration of many possible forms of being that 'molting rituals' like Virtual Worlds and rave environments engender. Without an accompanied desire of defining and settling for one image of what the transformation results into, Burning Man and online spaces such as Virtual Worlds become a repository of many different creatures and transformational practices. In the following I discuss these various transformational repertoires of the New Edge 'molting rituals.'

2.2. Molting Rituals: Burning Man and Virtual Worlds

Burning Man

My reasons for going to Burning Man (also 'BM' from now on) in September 2005 came from the field experiences I had in the period March-May 2005. In these three months, I tried to draw a map of the various interconnections between the 'hippies' and the 'hackers' of the San Francisco Bay Area and of the paths that are traveled by the Bay Area 'brokers' between New Age and high-tech. Climbing the notorious steep hills on my bike, I cycled to the seminars at the Long Now

---

[111] Interview Dorien Zandbergen with Bonnie de Varco, Santa Cruz, California, January 4, 2006.

Foundation[112] to the events organized by the Electronic Frontier Foundation[113] to the homes of the hackers and artists I had met in these places, to the Palace of Fine Arts where the Mindstates conference was organized and to the community center where Mindstates would end in a rave. In addition, I descended to Palo Alto to visit the archives of Stanford University and the Computer History Museum in Mountain View. Occasionally, I went further south - to attend, for instance, a hacker conference in the Monterrey Bay.

Along the way, the list of people, organizations and websites I had been pointed to grew longer. So did my understanding grow that Bay Area creative workers were really creating overlaps between gnostic spirituality and high-tech innovation, albeit not in easy, simply to locate and to conceptualize ways. The diversity of interpretations of cybergnosis, modes of interest in technology, background education, type of daily practice, and institutional environments in which this elusive, hybrid cybergnostic phenomenon was emanating, was overwhelming. What was it, I came to ask myself and others over and over again, that connected these spheres to one another? One moment I spent in a squeaky clean, TL-lid room in the Computer History Museum in which vegan, non-alcohol using computer aficionados had, for years in a row, been spending their Tuesday evenings meticulously reconstructing an old mainframe computer. Another moment I stood amidst colorfully dressed, 'zonked-out' 'psychonauts' hugging one another, and me, while moving wildly on the dance floor.

Of course, it was me who connected these places, but this was informed by the fact that people in both spheres pointed me to these other spheres, and by the fact that I began to notice others who traversed these seeming unrelated spheres as well. Prior to my research I had, for instance, heard of the NASA engineer Bruce Damer. In various academic articles, published prior and after my first phase of research (e.g. Krüger 2006; Aupers 2004), Damer has been noted for his 'mystical' understanding of information technology. In the Bay Area, I met Damer in the context of his volunteering activities for the Computer History Museum – guiding the 'geeks'of this museum through his own private hardware museum – as well as in the context of the psychedelic community – where he was dressed in a white robe, speaking about the end of the world and spiritual growth. Another such person is Erik Davis, who writes about hackers and speaks at psychedelic conferences.

Whereas certainly not all volunteers for the Computer History Museum, nor all hackers and geeks in the Bay Area, nor all of the people who are active for

[112] The Long Now Foundation is founded by Whole Earth Catalog founder Stewart Brand and has been discussed in the introduction to this dissertation.
[113] The Electronic Frontier Foundation, also discussed in the introduction, has been founded by John Perry Barlow and Mitch Kapor, who were introduced in chapter one.

the psychedelic community attend Burning Man, the festival does attract visitors from all these different scenes. And most importantly, it provides a home for people like Damer, Davis[114] and myself who want to explore the link between spirituality and high-tech further. It was, in short, clear to me that Burning Man provided an environment in which New Edge spirituality would be best visible and most explicitly expressed.

Studying Burning Man

Burning Man (also BM from hereon) has its historic roots in a small-scale beach-burn of an eight-foot effigy of a man on Baker Beach in 1986. Since this year, both the effigy and the number of attendees raised in size, eventually forcing the event away from Baker Beach towards a more spacious environment. The site is now a prehistoric lakebed in central Nevada known as "the playa". Here, each year around Labor Day a full-blown, 5-square mile (8km2) temporary city, called 'Black Rock City', housing up to 50.000 people (in 2010), is built. The shape of Black Rock City is semi-circular, with concentric streets comprising two-thirds of a circle that surround an open playa. Alongside several large art-works standing on this playa, 'the Man' is the central statue here, functioning as an orientation point for all city dwellers. Being built anew each year, 'The Man' has an average height of 40 feet (12 meters), often standing atop a 32 feet (10 meters) structure. This statue, made of plywood and neon-lighting, is ritually burned each year at the closing of the festival.

In the course of its decades-long existence, countless academic books, dissertations, master-theses and photograph-compendiums on Burning Man have appeared[115] in which 'the meaning' of this event is explored. In addition, during the BM festival itself ongoing contemplations take place regarding its meaning: in the context of 'Salon discussions' or lectures, announced in the 'What Where When' guide distributed upon entrance, 'burners' discuss and try to decide among each other the meaningfulness of this event.[116] In 2005 a workshop was also organized

---

[114] Interview Dorien Zandbergen with Erik Davis, December 2005, San Francisco.

[115] Only a few examples are Davis, E. (2005). Beyond Belief: The Cults of Burning Man. In L. Gilmore, & M. Van Proyen (Eds.), *AfterBurn. Reflections on Burning Man*. Albuquerque: The University of New Mexico Press.; Doherty, B. (2004). *This Is Burning Man*. New York: Time Warner Book Group.; Gilmore, L., & Van Proyen, M. (Eds.). (2005). *AfterBurn. Reflections on Burning Man*. Albuquerque: University of New Mexico Press.; Pendell, D. (2006). *Inspired Madness: The Gifts of Burning Man*. Berkeley: Frog, L.t.d.

[116] An example is the Salon discussion announced in the 'What Where When Guide' with the text: "The meaning of the man: What is the meaning of the man? What role does it play in our consciousness, in our society? Does it change from year to year? What happens to our concept of the Man when we burn it? Join Salon Soleil for an exploration of these questions about our city's centerpiece" (What Where When 2005: 19).

for people "studying Burning Man"[117] and through questionnaires handed out at the event, BM organizers try to assess the various different meanings that BM has for its attendees, publishing the results on their websites.

Unlike such attempts at producing ethnographic facts of Burning Man, the following account cannot be regarded as such. It does not encompass a full discussion of the BM demographics, of its historical moments of transition and change, of the different 'communities' represented at this event, of the day-to-day schedule, of the many different occupational backgrounds that people bring with them to the event and the ways people try to integrate the 'Burning Man experience' into their daily lives.[118] Instead, I will use my experiences of Burning Man 2005 as a way of giving an impression of how this environment operates as a 'molting ritual' for self- and species transformation. This means that in the following account, I have left many things out and that I focus particularly on the ways in which fantasies of self- and species transformation are here enacted, and on the new shapes of species and of self that can here vaguely be discerned on the horizon.

In the following account, I try to stay true to my first-hand observations, but sometimes, for purposes of clarification, it is necessary to use knowledge and insight that I would gain only after Burning Man 2005.

Burning Man 2005: The End of the World, Robots, Dance and Rebirth[119]
It is September 2005. I am in the middle of the Nevada desert, riding my bicycle. The sun is blazing, the ground is cracked and rocky and occasionally covered with piles of powder sand so that my bicycle tires have a hard time maintaining grip. It is little before 3 pm. I am doing my best to speed up but my path is crossed yet again by a large object. This time it is a pirate ship, wheeling its way over the waves of the desert, filled with people, some of them naked, some of them dressed in colorful gear. Some chant, some roar like true pirates and others are simply smiling and looking out over the playa. I am in a hurry, but it is impossible to hurry, here at the Burning Man festival. When the ship has passed, I am looking at the horizon trying to re-find my way. Among the myriad of tents and art sculptures filling the horizon I am trying to make out the shape of what they call a 'geodesic dome.' I am on the right track, the large half round structure slowly arises. I hope that I am on time. Yet, a large robot giraffe, one of the many robotic species that

---

[117] This discussion was announced as follows: "Have your colleagues been giggling at you for your decision to study Burning Man? Let's get together over tea to discuss our individual efforts to document and understand this temporary city" (What Where When 2005: 28).
[118] I will be concerned with these latter two questions in chapter four.
[119] This account of Burning Man does not entail an analysis of the ways in which this event is institutionally and socially created as an 'autonomous zone.' This aspect of Burning Man will be explored in detail in chapter four.

walk the cracked earth at this festival, stops me on my path again. The giraffe walks slowly while the song from the German house duo Kraftwerk "We are the robots", is coming from its body (fig 10).

Finally I arrive in *Snowflake Village* and I enter the large dome that is at the center of this camp of tents and wooden structures. It is a welcome change from the brightness of the sunlight and noise outside. The light is filtered nicely through the garment of the tent and all the sounds I hear are muffled. The ambiance approaches that of a church. I realize that I have not made it in time: the last talk has just ended. About 20 people are still gathered here. I estimate that many of them are in their 20s, most of them having dreadlocks, piercings and tattoos. The people in the back of the dome sit cross-legged on the floor and talk in muted voices to each other. A few have gathered around the stage to have an after-chat with the man who sits there, high up, his legs dangling down from the stage.

The man on stage is tall, has long hair and wears a white long dress. The people around the stage look up to him with very serious faces and their voices sound agitated. They seem to have something serious to discuss - and as I later find out, they do: they are discussing the end of the world. As my 'What Where When' booklet had told me, this man is Bruce Damer, a man who earns his living as a developer of software simulations for NASA. I had been wanting to interview Damer for his combined interests in computer history and the '1960s counterculture': Damer maintains a private Computer History Museum and he owns a replica of the Merry Pranksters bus in his garden. Only recently, at Mindstates, I found out that Damer is also a speaker for the psychedelic community. At Burning Man this community is represented in Snowflake Village, a village that inhabits many of the speakers and attendees that I had met at Mindstates only a few months earlier.

In an interview that I would have later with Damer, he tells me that he had attempted to record his speech at Burning Man in order to put it on his website. Yet due to malfunctioning of recording material, his speech got lost. Fortunately, Damer sent me various other speeches - some of which he held at Mindstates. These speeches, he told me, are comparable to the one given at Burning Man.[120] His Burning Man speech is announced in the booklet as a continuation of his "Consciousness of the Cosmic" series. In a 'series' of speeches given by Damer to the Burning Man attendees and Mindstates 'psychonauts', Damer explores the future of life. This exploration begins with his understanding that "life on earth is highly improbable" and will not last forever: in particular, the physical bodies in which human life is now contained will not be able to reproduce forever. Another

---

[120] At: http://www.damer.com/voice/index.html one can find a collection of Damer's speeches. For the summary I make here of his evolutionary vision, I have made use of these recordings, in addition to versions Damer gave me during our many, long interviews.

form of consciousness will take over. Damer uses his speeches to shape an understanding of what this consciousness is.

> Damer frames his story partly as a realization that came from psychedelics:
> If you have some kind of experience where you dissolve, where you are gone… those kind of trips tend to strip away, they blow away, stuff. (...) I did that once myself and the words that came to me were: 'all it needs is love.' (...) where does that Love come from?[121]

Some questions he put in front of the audience came from his interest in 'science':
> There are all these explanations for where these things come from. But we are in a remarkable era, an era of opening of understanding in Cosmology that is so big. When you start to wade through Scientific American or Discovery or whatever, and you read these articles and put this all together your mind starts to go: 'Oh my god!' (...) it creates this sense of wonder (...) because the picture that is emerging of the whole universe and maybe how it began and maybe how it's going to end is dumbstrucking (Ibid.).

One way of summarizing Damer's vision is that the species that eventually takes over life already exists. Damer: "the formation of that being (...) is happening all the time". The only thing we need to do in order to survive is to become conscious of the fact that the "whole universe is a single conscious entity". Life - as consciousness - will survive by transcending our individual bodies and our notions of individuality.

> Outside the dome stands Erik Davis, the author of *TechGnosis* (1998), also in white dress. I had seen Davis before at Mindstates but had not spoken with him yet. After a short chat about the marvels of Burning Man and a promise to talk again soon, I make my way back across the playa, past 3 meters-long people on stilts with wings on their backs. I stop at an art-installation that has also induced many other by-passers to stop. In a spectacular performance, this installation announces yet again the coming of a new species: a woman is crawling through the narrow end of a big net, a net that is shaped in the form of a uterus. Dangling in the sky, the woman has reached, head-down, the 'birth channel' in which she is stuck, accidentally loosing her clothes on the way-out. In this atmosphere of comfort with nudity, it is not, I belief, the woman's nakedness that draws the crowd. I believe people are stopped because, like myself, they probably have not seen a birth like this before. In a powerful combination of metaphor and visual performance, the woman is 'born-again.' She is stuck and alternatively screams in panic and frustration and bursts into laughter at other times. The onlookers shout encouragements to her, and also I feel a sense of relief when the woman finally falls to the floor - her landing softened by the arms of friends who are waiting for her. The net-uterus is not granted much recovery-time: another person is already waiting to climb in.

---

[121] Damer. *A Universal Mindstate*. Speech Mindstates 2004, Oaxa, Mexico.

After the birth, I proceed, past a crashed space ship that hints at the presence of extraterrestrial life here at Burning Man. I pass yet another eerie work of art: a gigantic head on a pole - the 'Big Brother' as it is called - onto which footage of a real, moving face is projected. This part of the day is the most beautiful to me, and, as I learn, to many other 'burners.' The sun is setting and a beautiful quietness of color and sound descents on the playa. Right before the evening starts, with its explosion of sound, light and dance, Burning Man now seems to turn in on itself, in a meditative calm. This poetic interpretation of dusk-time at Burning Man is not uniquely my own. Much of the music that can be heard at this hour of day is quiet and ambient-like and for many people this is the hour to climb the two tall statues on the playa - the Man or the Temple - to gaze out over the space (fig 11). Others simply sit or lie down in the sand and watch the sky color pink, purple and orange. Even the sight of lined-up portable toilets on the horizon is pretty in this light.

The 'butterfly' whizzes past me, yet another of the many animate creatures here. The prior evening I had driven in this beautiful art-car with long butterfly wings, the colors of which can be controlled through a magic ball from within the vehicle. Its lights are off now, but it won't be long until she can shine again. When I approach my camp I discern the first signs of another electric evening being prepared: with darkness almost fully having set in now, the fluorescent light on the art cars and bikes begin to show and the electronic machinery that has been waiting all day is now geared up. My camp, Dance[122], is situated in the 'noisy corner' of Burning Man, closed in by many other 'sound camps' that throw rave parties at night. Cycling closer I can hear the beats approaching me and I can already see the moving visuals on the erected screen.

Here I meet up again with my friend Marijke - who came along from the Netherlands - with Homey, who also joined the Dance camp this year, and with some new friends I made at the camp. After a shared meal, Homey wants me to see another art-installation that he thinks is "awesome". With a little group, we walk into the night towards the bright lights of flames that occasionally shoot up into the sky. The flames come from a source that is blocked from view by a large crowd that stands in a semi-circle. As we approach through the crowd, I see two men in the center of the circle, dressed in, what seems to me, space-suits. Each of them wears a transparent, head-enclosing helmet and each of the men is attached to a machine through wires that run from their suits. The men face a computer screen that tells them which motions to make with their feet. Standing on mats, which are divided in blocks, each time the men step on the wrong block at the wrong time, or miss a particular block when they are supposed to step on it, a huge flame is spit

---

[122] At Burning Man 2005 I camped with members of the same rave collective ('Dance') that I began this chapter with.

out by the machine, fully enveloping their bodies. The men are caught up in a dangerous cybernetic alliance with digital technology, while playing the arcade game Dance Dance Revolution. Unlike the version that can be bought for use at home, this version has almost deadly results when a wrong step is made. I now understand that the suits are there to protect the men from burning (fig 12).

Then it is time for a round of dancing. We begin at our own camp, Dance. The dance floor is still quite empty and the DJ and VJ are still experimenting with sound and visuals. On the screen is an image of a fractal - a 'self-similar'[123] moving, morphing, spiraling structure. I will learn later that many of the VJ's who show their fractals at Burning Man and at other rave occasions, think of themselves as artificial life developers: to them, these morphing images are the 'genotypes' of actual creatures they create from mathematical equations on a computer.[124] Here on the open-air dance floor, under the sparkling Burning Man sky, the fractal has quite a different significance. As a hallucinogenic moving image, continuously changing form and shape, it engenders the feeling that one is both zooming 'in and out' into the same picture. Sometimes people stop their dancing and stare at the fractals, other times people dance *to* the fractal, changing their body postures in synch with the rhythmic movements of the fractal. At other times, the fractal images are relegated to the background, becoming part of a larger ambience of sound, bodies, the cool breeze, dust clouds and light.

After this warm-up at our own camp, we explore the larger nightlife of Burning Man. With a small group we move outward onto the great dark playa. Suddenly an eye that is blinking approaches us with full speed. It is Nik, a graphics designer from Santa Cruz whom I met a few weeks earlier. Nik doesn't like to be 'stuck' in one camp or one particular place, he had told me. The tiny car gives him the opportunity to 'whizz' through the night to events he likes to see. On top of the car is an image of the 'pyramid's eye' - the image on US dollar bills of an eye in pyramid - that winks. With this symbol, Nik playfully winks at the possibility that his art car is like an 'all-seeing eye', that can be anywhere and everywhere at once, just as he is anywhere and everywhere at once in his daily life as a hacker, habitually moving around in other people's computers and always paranoid that others might be breaking into his.

After a night of dancing but of relative early sleeping, my Dutch friend Marijke and I get up early to get coffee in 'Center Camp.' The people in our own camp are either still asleep, still awake, or are just going to bed. It is nice and

---

[123] 'Self-similarity' means that the whole is reflected in its parts: when zooming in on a fractal, the smaller parts have the same geometrical properties as the whole.
[124] A fractal program works according an iterative process: when the program is executed, the equation leads to a result that is consequently 'fed back' into the original equation and ran again. By altering the algorithm in such ways that the fractal adopts ever-more unexpected 'emergent' behavior.

relaxing to sit at this early hour on the long benches in Center Camp. We are facing a small open space on which a few people are dancing in 'contact-improv' style: moving slowly to the beats of acoustic musical instruments, tattooed, dreadlocked and muscled bodies, male and female, lift each other up, roll over each other on the floor and climb on each other's backs and shoulders. In the rays of sunlight falling through the roof of the tent onto the floor, we see knots of arms, legs, torsos and smiling faces.

We open our booklets to see whether we like to join a workshop that day. The amount of theme camps and villages, each offering a large plethora of workshops and lectures, is overwhelming. We read about a workshop in 'tantric masturbation for men', or 'anal probe' workshops teaching the joy of anal sex. Others offer meditation classes, or a 'Rites of Ascension' workshop, specified as a "rite of passage endowment, in a group setting, designed to enhance divine innate abilities and heighten consciousness". Other workshops mix the themes of sexuality and spirituality, offering "sacred sexual massage for women and their lovers". "Dreaming Mirrors" is the name of a workshop in which the meaning of dreams will be discussed. There is also a Salsa class, a "make your own podcast[125]" workshop, and a creation of "altered ego sock puppets" - puppets onto which you can project parts of yourself that are not acknowledged in daily life. We also read about a "sex-negotiation workshops", about "genital-photography" and a "Percussion Explosion" workshop, inviting people to "beat out the ancient rhythms of night. West-African, Cuban, Playan, etc. Feel the vibe. Join the vibe. Live the Vibe". Again we are reminded of the presence of extraterrestrial life at Burning Man: there is an "Extraterrestrial Conference" to which "all friendly aliens and people who know aliens are welcome to attend". "Spying reptillians" are not welcome though. The workshop intends to "discuss the plight of the humans and how the aliens can help save us from ourselves". A "wing-making workshop" will also be organized today, in addition to a workshop that teaches "how to get your heart's desire" through intentional living tools, and an "Authentic Movement" workshop: "be still and quietly listen for the internal impulse that moves you. Safe space to close your eyes and be witnessed in your sacred movement".

Before we are able to choose which workshop to attend, the day is already happening to us. Moving from art-piece to event to interactions with costumed huggers, we eventually decide to go look for the Spaghetti-Monster. Prior to going to BM, I had heard of Homey's roommates, who were making a costume of the Spaghetti Monster, the deity of the newly founded Pastafarian religion. According to Pastafarians, the world is created by a Flying Spaghetti Monster. With this

---

[125] A 'podcast' - contracting the terms 'webcast and Ipod' - is a media file (audio or video) that can be created by anyone who wishes to 'broadcast', to which users can subscribe and that they can automatically and periodically receive on their media players.

statement, the Pastafarians express ridicule at the fact that in the spring of 2005 the Kansas State Board of Education had decided to require the teaching of 'intelligent design', along with evolutionary theory, at the public schools of Kansas. In reply to this decision, one hacker had sent a letter to the Board in which he expressed his concern about the decision to teach Intelligent Design, because "students will only hear one theory of Intelligent Design" whereas there are "multiple theories of Intelligent Design:"

> I and many others around the world are of the strong belief that the universe was created by a Flying Spaghetti Monster. It was He who created all that we see and all that we feel. We feel strongly that the overwhelming scientific evidence pointing towards evolutionary processes is nothing but a coincidence, put in place by Him.[126]

After this letter, a new cult of religious parody was born: "Flying Spaghetti Monsterism", or "Pastafarianism". The hacker roommates of Homey had been spending entire evenings of building a Spaghetti Monster costume that they wore to many parties thrown that summer and that they would bring to Burning Man.

I didn't quite remember the name of the camp where these hackers would be this year at Burning Man, but I decided that a good place to look would be in one of the 'geek camps' that I knew. With names as 'Silicon Village', 'Burning Silicon Collective Camp', 'FusionValley' and 'SunValley', it was clear that many of the burners had come here as groups who knew each other from their jobs in 'Silicon Valley.' Many of them were also using the technological skills they used to make a living 'back home' to create art and infrastructural technologies at this event. Members of such camps had been building an internet connection for the playa, in addition to satellite phone connections and much robot art.

Instead of finding the Spaghetti Monster that day, I found Brad Templeton (1960), a board member of the Electronic Frontier Foundation and a well-known 'Silicon Valley geek'. Here at Silicon Valley, Brad is famous for his huge displays of aerial photographs of the playa. Brad shoots his pictures from (private) airplanes that start and land on a 'black rock desert' airport, and constructs from them integrated images of Burning Man from above. Brad was wearing a bracelet from the Cryonics Institute,[127] showing his affiliation with other Silicon Valley transhumanists who like to project themselves into a future with healthy, immortal bodies. The Cryonics Institute will freeze and preserve Brad's body after his death in order to 'waken' and heal it when techno-medical innovation allows so.

---

[126] http://www.venganza.org/about/open-letter/. Retrieved September 2010.

[127] The Cryonics Institute preserves the bodies of deceased people by infusing them, as their website states, with a "substance to prevent ice formation, cooled to a temperature where physical decay essentially stops" and by storing it "indefinitely in cryostasis, i.e. in liquid nitrogen (http://www.cryonics.org/. Retrieved July 2009). As the website informs furthermore: "When and if future medical technology allows, our member patients hope to be healed, rejuvenated, revived, and awakened to a greatly extended life in youthful good health, free from disease or the aging process."

104

We didn't spend much time talking with Brad because he was already on his way out, to the 'critical tits bicycle ride:' Brad was happily preparing for an afternoon of breast-staring as bare breasted, body-painted women on bikes would create a long column driving through the desert. Uninterested, Marijke and I had already jumped on a large ghost ship that floated by (fig 13). We would never find the Spaghetti Monster that day.

Repertoires of Transformation at Burning Man

> And the chaos of our age, which is so troubling to us all, is nothing unusual at all. It is the normal situation when a species prepares to leave the planet. This is the chaos at the end of history. There is no question about it. The signs are all around us. The signs that are not all around us, but that are known to the aficionados of psychedelic substances, are the transformations of consciousness that are simultaneous with the transformation of technical culture. These two are, in fact, expressions of each other. These times are the birth pangs of a new humanity (McKenna 1991: 32).

Many participants of Burning Man and of the larger rave scene know Terrence McKenna, or have, at least, heard *of* him. McKenna, who passed away in 2000, lived as a student of 'Ecology and Conservation' at UC Berkeley in the San Francisco Bay Area in the 1960s, traveled through Asia in the latter half of this decade and started traveling throughout the Amazon, with his brother, the 'ethnobotanist' Dennis McKenna, since the 1970s. Here Terrence and Dennis partook in native American rituals with the psychedelic substances ayahuasca and psilocybin, launching Terrence McKenna into decades of philosophical explorations about the nature of reality and the destiny of human kind. In the 1980s McKenna was a regular speaker at Esalen and in the early 1990s he regularly had 'spoken words' performances at raves. McKenna was a speaker at the first Mindstates conference in 1997 and in 1999 Bruce Damer hosted a 'fan gathering' for McKenna. This 'gathering' was housed in a Virtual Worlds environment, with McKenna speaking from his house in Hawaii and with 'fans' who were scattered across the world being represented as avatars.[128]

"The signs are all around us", Terrence McKenna claimed in his book *The Archaic Revival*, that "a species" is prepared to "leave the planet". If we would try and see Burning Man through the eyes of McKenna - adopting him as our 'avatar' when walking across the playa, so to speak - it is likely that he would have found these signs 'all around him' at this festival as well. However, it would depend on the particular person *animating* the avatar what kinds of 'signs' would be emphasized: Artificial Life developers would probably point to the fractals that whirl past on the screens alongside the dance floors and claim that these are forms

---

[128] Damer called this gathering: "The Virtual AllChemical Powwow"
(http://www.damer.com/projects/fan-terencem/index.html. Retrieved September 2010).

of life that will eventually replace human life. Artificial Intelligence designers, or roboticists, would more likely point to the robot giraffe and claim that this is the shape of life that will take over human life in the future. Proponents of 'Contact Improv' dancing would, more likely, instead point to the dance floors and claim that it is here that evolution is prepared by means of people transforming their bodies and extending their consciousness out into the larger environment. Yet others would point to the crashed spaceships and claim that alien forms of intelligence are already present on the earth, taking over human consciousness.[129] Then again, some would point to the 're-birth' artwork to show how transformation is done, yet others, for instance those wearing bracelets from the Cryonics Institute, to the scientific expertise that will rescue frozen bodies from their deaths. And some would point to the cybernetic alliances in which human bodies merge with machine bodies - as in the DDR art project.

However, most characteristic of the 'indeterminate' character of Burning Man would be a person who is open to all these possibilities simultaneously. Like the 'Pastafarian' hackers, 'burners' don't generally accept only one 'god' nor only one particular 'birth story' and embrace the coexistence of many versions of evolutionary development simultaneously.

Perceived in the context of the New Edge environment that gave McKenna his stage, it is thus not unambiguously clear what his prophesy - of 'a species' preparing to leave the planet - means. At a festival like Burning Man, many different kinds of species and transformational forms of being contest over the question whether human life will become extinct and a new kind of species takes over; whether humanity will itself transform into a new kind of species; or whether there is already a form of intelligence taking over human consciousness. Neither does agreement exist over the question whether this new species lives on earth, in space, in machines or in differently configured 'indeterminate' bodies.

In the following I differentiate two, what I call 'repertoires of transformation' that frame transformational intentions at Burning Man and in rave culture in general. These are two 'story lines', each of which anticipate transformation in relation to different motives, body-images and ideas about sociality. One repertoire is shaped around the notion of an ensuing apocalypse, the anticipation of the collapse of the world in both social and material sense. This repertoire imagines a need to be able to transcend physical limitations. Another repertoire is best captured by the notion of 'pronoia' - an emic term that captures

---

[129] A proponent of this vision is Daniel Pinchbeck - in a recent weblog Pinchbeck considers the possibility, proclaimed in that 'the earth is under a type of quarantine and currently ruled by an extraterrestrial race', the "reptilian." Barack Obama may be, according to Pinchbeck, a "transitional agent in some larger galactic narrative that is becoming increasingly apparent to those who question the nature of this reality" (http://www.realitysandwich.com/thoughts_norway_spiral. Retrieved November 5 2010).

the idea that positive interconnectedness can be experienced in the rave environment. This repertoire translates into the ideal of the 'expansive body' that is able to sense and 'know' this interconnection.

Each of these narratives are tied to different understandings of why transformation is necessary. These repertoires are not necessarily distinctive and don't exclude one another. Yet, for reasons of clarity, in the following I discuss them as separate trends within the Bay Area rave environment.

Narratives of Risk and Survival at Burning Man

One thing that Marijke and I were puzzled about after our first Burning Man experience was the disjunction we perceived between our sense of comfort at this festival, and the ongoing narratives of danger and risk that enveloped the festival. To begin with, each year a *Burning Man Survival Guide* is sent to all who have ordered tickets, warning that "The Desert is a Place Worlds Away from that to which most of us are accustomed, and is governed by physical laws that cannot be ignored". In addition, on the BM ticket the following joyful message is printed: "You voluntarily assume the risk of serious injury or death by attending this event". In the "after burn report" - an annual census conducted by the Burning Man organization the third most often answer given to the question "at Burning Man there is an increased risk of...", was "injury or death", following after "theft of personal property" and "law enforcement encounters".[130] Also in press publications on Burning Man, the event is pictured as a place of risk and survival. The journalist Mark Morford reinstated this narrative in an article on Burning Man in the San Francisco Chronicle: "You could have the most incredible experience imaginable. Or you could die. You know, just like life". [131]

Marijke and I did not feel that we could easily die at Burning Man. In earlier years, we had been told, there were accidents with cars driving over pedestrians and tents. Since 1996 however, the 'Department of Mutant Vehicles' (DMV) was founded as a way of limiting the number of cars on the playa, and of licensing only 'high-quality' and 'safely-mutated' vehicles here. Danger also did not seem to come from lack of drink or food - the principle of 'gifting' is held high on the playa and people continuously hand out drinks and food. Nor is it likely that people die from decomposed food - at the 'Arctica Camp' one can buy ice cubes to use in cool boxes to keep food refrigerated. Dying from a sunstroke is a possibility, yet the many carefully erected shade structures built in the hundreds of camps offer enough opportunity to hide and cool-down. Sandstorms are often listed as potential

---

[130] There were ten other possible answers, see
http://afterburn.burningman.com/07/census/census_partact.html. Retrieved September 2010
[131] Mark Morford. Burning Man defies Katrina? How can a huge, feral party in the desert possibly matter? *San Francisco Chronicle*, September 7 2005.

hazard-causes as people can bump into each other during those storms. However, for us, sandstorms offered moments of fun, during which shelter could easily be found and during which crashes with co-burners were never severe since these storms tend to seriously reduce the speed of the entire city.

Another source of danger for the burners that is often mentioned is psychological distress. As a space with plenty of encouragement to explore different 'states of mind', BM is for many people a place where strong emotions are experienced and psychological distress is an openly acknowledged and normalized condition. At BM 2008 I heard stories of a suicide that had taken place the prior year, however, many safety nets have also been built around this theme of psychological distress. As a link between the internal BM organization and the external world, it has become the task of the Emergency Services Department (ESD) to alleviate problems related to "fire, medical and psychiatric emergencies".[132] In addition, particularly the Mindstates community is active in creating 'safe spaces' where trained psychologists and therapists treat people with bad trips or psychological breakdowns (fig 14).

The narratives and real possibilities of risk and danger thus, were balanced at Burning Man by noticeable discursive and practical emphasis on physical, social and psychological safety and comfort. It was only in relation to the reaction by burners to the hazards of Hurricane Katrina that I came to understand that the emphasis placed on 'risk' and 'survival', needed to be understood as an expression of a deeper-lying sense of risk that they were training themselves against: in relation to an apocalyptic understanding that the socio-economic as well as psychological structures of the 'default society' are collapsing, burners see themselves as professional risk-takers and survivalists, preparing themselves for life in a world in which the taken-for-granted securities are stripped away.

Hurricane Katrina - Burning Man as a Boot Camp for Disaster
At the first day of Burning Man 2005, one of the deadliest hurricanes in the history of the United States, Katrina, hit New Orleans and the Mississippi Gulf Coast, taking the lives of nearly 2000 people and making even more homeless. Also in the remote Nevada desert news of the disaster dominated the 'Black Rock Radio' shows. A theme camp, 'Katrina', was quickly erected as part of an effort to inform

---

[132] On the BM website we can read: The Emergency Services Department (ESD) coordinates all professional emergency resources on the playa 24 hours a day, including requests to outside agencies via the state-of-the-art emergency dispatch center. ESD responsibilities cover all responses in the field to reports of fire, medical, or psychiatric emergencies. ESD's highly-trained professionals volunteer long hours to ensure the safety and well being of Black Rock City. ESD and LEAL (Law Enforcement Agency Liaison) together provide the primary interface between all outside health and safety agencies and the Burning Man Project, both on the playa and year-round. (http://afterburn.burningman.com/07/playa_safety/emergency.html. Retrieved November 5, 2010)

Burning Man visitors from New Orleans and to organize relief efforts. During the BM week, about thirty thousand dollars was raised and immediately after Burning Man volunteers headed out for New Orleans with food, water and the heavy machinery that had been used to build large Burning Man structures such as 'the Man' and 'the Temple.' The Burning Man volunteers, who called themselves *Burners Without Borders* (BWB) spent more than seven months in this area. Through an internet campaign, the group collected around $1 million and helped survivors in the communities of Biloxi and Pearlington to tear down their demolished homes, to clean up rubbish, to build up new structures where possible and to create art from the rubbish. The Burners Without Borders also quickly established cell-phone connections so that they could continue doing their day-jobs while working in New Orleans.

The fact that many people from New Orleans had gone to the Black Rock Desert was not the only reason that Hurricane Katrina had impact on the festival. Like every event taking place or considered at Burning Man, the hurricane had heightened significance. In the first place, 'Katrina' was significant because it reaffirmed the sense among burners that the 'conventional' world is at the verge of collapsing. Secondly, it crystallized and gave form to the self-image of 'burners' as representative of a survivalist culture.

With respect to the first point: in many of the reflections produced during and after Burning Man on 'Katrina', the disaster became part of a larger image of a world in decline. Daniel Pinchbeck, speaking in *Snowflake Village*, the Burning Man home of the Mindstates community, coupled his vision of the arrival of a "dimensional shift" to "the likely collapse of the current socioeconomic order" and on many of his later internet postings he depicted Hurricane Katrina - along with other earlier and subsequent disasters like the terrorist attacks of "9/11" and the stock market crash of 2008, as signs of this collapse.[133] Also Bruce Damer, speaking from *Snowflake Village* discussed '9/11', the Iraq war and Hurricane Katrina together as signs that humanity, in its current social and economic form is not likely to 'make it.' In the *San Francisco Bay Guardian,* the journalist and member of *Burners Without Borders*, Tom Price, counted Katrina likewise among the many other examples that signify a world in which security appears delusional. Price's article is a case in point for the way in which 'Katrina' reflected an image of the Burning Man community as a survivalist culture:

(...) social structures we were raised to depend on – stable jobs, dependable pensions, Social Security – are collapsing. And as the winds and water of Katrina have shown, the once reliable federal government should now be counted among that number. (...) It turns out that what we'd learned in the desert has very practical

---

[133] Daniel Pinchbeck's weblog can be found at:
http://www.realitysandwich.com/blog/daniel_pinchbeck

implications. Sure, there're the topical things — Burners tend to be, in general, pretty creative, self-reliant types, who can handle being in a chaotic, unstable environment. So when they started hitting the Gulf Coast they were pre-wired to know what to do: Build Shelter. Make Food. Keep Cold Things Cold and Dry Things Dry. They also understood the bedrock value of water, diesel, and serviceable tools. But more than that, all the talk about radical self-reliance, cooperative effort, practicing a gift economy, thinking and acting from a place of civic responsibility — all that hot air crap turns out to be exactly what's needed when things fall apart. Partying in the desert, it seems, was in some weird way like boot camp for a disaster.[134]

What stands out in this reflection is that the ability by burners to help out in New Orleans is not attributed to their access to machinery, to material and financial resources, to their availability of water, diesel and 'serviceable tools', but to the burners' understanding of the *'bedrock value'* of these things; of their 'ethics' of creativity, self-reliance, cooperation and 'gift-giving.' The article does not emphasize the already privileged position of the burners, showing in the facts that they were in the social position to attract lots of money; able to take many months of time-off to attend the festival and to assist with the relief-efforts, and to have access to expensive machinery and to communication technologies that enabled them to continue their day jobs while working in New Orleans. Instead what is emphasized is the 'cultural skill' of burners that are 'pre-wired' in them thanks to their 'practices' of survival in that other 'chaotic' and 'unstable environment': the Black Rock Desert.

In this understanding, the lasting significance of Burning Man is the burners ability to transcend physical disaster through the 'skills' they have acquired on the playa. This self-understanding is rather mystical in the sense that the burners' heavy reliance on material resources and patterns of consumption is made invisible: as we have seen, Burning Man relies on a very specific material culture and on a carefully organized structure. Gift-giving, the provision of shade, of particular types of music, of specific affective visual art, of particular material used for dance floors, of particular food, drinks, means of transportation, communication networks and costumes all work together in carefully orchestrated ways to create the 'Burning Man experience.' While the lasting value of Burning Man is thus attributed to its 'culture', understood in terms of 'ethics', 'values' and 'skills', Burning Man as a physical place that can only exist in the Nevada desert while relying on lots of money, materials and consumption items disappears from view.

---

[134] Price, T. (2006). Why I'm here. A burner without borders explains the attraction of life in Camp Katrina. *The San Francisco Bay Guardian*.

Pronoia, Magic and Slack: Tales of Positive Connection

> I think that there are times during raving that we sense this connectiveness, where we feel this oneness between our universe and the universes of other ravers and of the atoms and galaxies around us. Ultimately, we are all a part of the same equation, an equation that allows for unlimited possibilities ('Lee' at the 'hyperreal' website).[135]

As we saw in the celebrations of raving earlier in this chapter - in the presentation by Crystal and Spore at Mindstates and in the flyers written and celebrated by Ken - New Edge environments like Burning Man are not only transformational in response to an anticipated collapse of society. A more positive understanding of transformation can here also be observed, whereby the transformative understanding translates into an experience of positive interconnectedness.

From the many small comments that I picked up around me during Burning Man 2005 and 2008, in the statements about Burning Man on the official website and in many a 'rave manifesto' posted in flyers and on websites, I noticed that the feeling of universal benevolent interconnectedness plays a significant experience-structuring role in the context of raves. This sense of benevolent interconnectedness is expressed in many different ways. At raves and at Burning Man the term 'pronoia' powerfully expresses this sense. At the dinner party where I met Ken (see earlier in this chapter), another Dance member explained to me: "Pronoia is the pervasive sense that the whole universe conspires to give you just that what you need. Pronoia is the opposite of paranoia". Pronoia, Ken elaborated, is an essential experience of raves.

Homey, the computer programmer introduced in chapter one, who is also a regular attendee of Burning Man, employs the terms "magic" and "slack" to refer to his experience of positive interconnectedness. Magic is something that Homey says he does not 'really believe in', but that he simply cannot ignore. Magic manifests itself in Homey's life in two ways: in his experience of 'slack', which is "luck experienced by someone that seems totally random and undeserved from the point of view of official norms" and which is "things happening at the right time at the right place". [136] It also comprises his ability, already mentioned in chapter one, to see through the surface reality of people's facial expressions and physical bodies in order to know what they 'really' feel. Homey: "[it is an experience of] telepathy, feeling what people feel, feeling other peoples bodies, their pain, their joy, their emotional states"(Ibid.). Whereas magic is a force that is present in Homey's daily life, in an environment like Burning Man he feels it more strongly. "Everyone here experiences magic", Homey said to me when at Burning Man.

---

[135] http://hyperreal.org/raves/spirit/technoshamanism/Physics_and_Raving.html. Retrieved November 5 2010.
[136] Interview Dorien Zandbergen with Homey San Francisco May 2005

At Burning Man, whether captured by the term 'pronoia' or magic, people work hard to build the 'vibe' of benevolent interconnectedness. One 'mechanism' that establishes this is the 'free gift' ethos: on the playa the only things sold for money are coffee and ice, the rest is given away. Whether as individuals or as 'camps', burners are expected to actively participate in the act of gift giving. A 'gift' can be anything from a hug, to a hair wash, to a massage, to a workshop, to food and free bloody marries. One burner, who stayed in a camp that distributed bacon and bloody marries in the morning, told me how this practice of giving and receiving was strangely liberating to him:

> I grew up with the idea that as a man I have to be independent, and then all these people at Burning Man gave me all these things. I felt a lot of guilt at first, and it made me feel better to actively try and come up with things to give back. Now my attitude has become that when people give me things, I say "yes, thanks, I really deserve that.[137]

In complex and subtle psychological-cultural ways, Burning Man has grown into a place where people have become very skilled in giving precisely those services and goods that burners feel they really need at the playa. Entire camps exist that focus uniquely on providing psychological comfort and support at times of bad trips or otherwise psychologically difficult times. Other camps focus uniquely on the alleviation of the need to get clean - a difficult job in the desert. The Astral Head Wash camp, for instance, washes people's hair, another camp washes people's bodies. For each mood and each desire there are different kinds of food and drinks on offer. In 2008 each day around 5 in the morning, long rows of people could be found standing in line in front of a gigantic ketchup bottle in which people were baking and distributing french fries, a delight for people who had spent their entire night dancing. In the heat of the day, water-spraying trucks drive around cooling off people's bodies, and bike repair camps are there to help with a flat tire.

It is not difficult to experience 'pronoia' in this setting of consumption of goods and services: the entire material and organizational environment is 'attuned' to creating this experience. However, the key feature of 'pronoia' is precisely that the sense of interconnectedness is experienced as an instance that is irrespective of time and place but instead an attribute of a larger universe and of eternal principles. The term 'pronoia', in this sense, overlaps with other environmental qualifiers like 'vibe', 'energy', 'spirit' and 'groove', terms regularly used to describe positive interconnection experienced in New Edge environments. As one raver wrote in a manifesto 'The Spirit of Raving': "At the heart of a true rave there's the pulse of something intangible; a positive unifying groove, an extraordinary feeling, a Vibe that transcends description".[138] At the most intense level, this 'Vibe' entails the

---

[137] Interview Dorien Zandbergen with 'Steve', San Francisco, August 2008.
[138] http://hyperreal.org/raves/spirit/vibe.html. Retrieved November 5 2010; see also the analysis of Dutch dance events by Stengs (2007) and the discussions on rave culture by Gerard (2004), Graham

experience that an exact overlap exists between a person's individual 'consciousness' and the objective environment: in this 'state', anything that happens has higher significance, and 'coincidences' don't exist.

For instance, Marilyn, whom I camped with in 2008, told me how she kept bumping into a friend who camped across the playa at the most random places. She explained this not as coincidence but as an expression of her telepathic connection with her. In conversations that I had with burners after the event, in stories passed on to me from them also in the years that I did not attend the festival and in the many 'testimonials' and diary notes published on the Burning Man website and on private websites, heightened significance was given to seemingly coincidental, random events. Encounters that people had with strangers, experiences they had with interactive art (like crawling through a 'rebirth' net), during dance, when taking drugs or simply when walking across the playa were narrated as highly significant moments of insight necessary for continuing their paths of self-discovery and growth.

The Expansive Body

The celebration of positive interconnectedness in the rave environment is tied to a particular 'body image' that I refer to here tentatively as the 'expansive body.' This 'expansive body' is a mode of being, intuiting, sensing and experiencing that is 'expansive' in the sense that it transcends physical, personal, material and psychological barriers as a way of arriving full integrative knowledge.

At Burning Man the ideal of the expansive body is most typically evoked in the context of dance. In this setting, we can see how the experience of interconnectedness translates into body images that are 'fluid'. Such a boundary-transgressing body image was, for instance, evoked in the memories of an old-time raver *Earth Girl*, who spoke at the 'Rant and Rave' evening that was organized by Ken Goffman in September 2005.[139] Earth Girl here described a rave as:

> (...) a place that you can dance [sic] and get deeply into *feeling* because that is all what it is really about. (...) a space that can feel [sic], where I can feel, and been given permission to just play and express, to hear and to move and be surrounded by beautiful people and creativity and personal expression (...) it gave vision and (...) created a huge pathway for immense pleasure, gobs and gobs of good feeling and tons of fun and millions of miracles and magical moments and incredible friendships and depth and perception and nourishment.

When I first heard Earth Girl say this it seemed to me that she, by describing a rave as a place *that you can dance* and a space *that can feel*, accidentally misphrased

---

(2004), Fritz (1999), Hesmondhalgh (1998) and Collin (1997) for similar accounts of the non-discursive, sensorial and transcendentalist nature of raving.

[139] I also mentioned 'Earth Girl' in chapter one, when describing the deconditioning effects of raving.

what she really meant. Of course, I figured, Earth Girl meant to describe a rave as a place *where* you can dance, and *where* you can feel. However, as I realized later, this language of attributing consciousness to an environment outside the biological body, fits well with the body image that is evoked more generally in the rave environment. This body image is one in which boundaries between the individual physical body and its larger environment are blurred. Consciousness, perception and vision become attributes not of the bounded individual but of this larger environment.

A metaphor to capture the expansive body image at raves was given to me by the programmer Dexter. Dexter told me his early experiences of raving in the early 1990s. Before Dexter attended raves for the first time, he told me, he was "just an average guy". After his first rave, however, he was "hooked" and "transformed": "It just blew my mind, it was very new, I had never seen people like that, it was transformative". Among the aspects that made raves 'transformative' for Dexter was "this really intense feeling that you are one being". [140] At Burning Man, while sitting in Center Camp that morning with Marijke, drinking coffee and looking at the Contact-Improv classes, it appeared to me that this was the kind of experience that the dancers were attuning to: the improvisational form of dance called 'contact-improvisation', involving acrobatic and yogic skills, seemed designed to provoke the 'conventional' way in which experience is structured. On this floor, people were not individually inhabiting one body each, but using each other seemingly unthinkingly as extensions of themselves. Through the dust and the rays of sunlight that enveloped the dancers, it appeared to me that I was looking at a multi-headed, shape-shifting being.

Several metaphors are used in the New Edge environment to refer to the ontology of this 'expansive', boundary-transgressing body. As the opening quote to this section illustrates - in which 'Lee' described the experience of being part of one 'equation' - terms and concepts that are generally used within the natural and computational sciences serve this purpose well. With these sciences 'mediating' between the material and the immaterial, the observable and the non-observable, the virtual and the real, so do metaphors borrowed from these sciences work well to speak of the 'indeterminate' ontology of the 'rave' body image.

Within rave circles, great significance is in this sense attributed to the fact that much techno-music has a speed of 120 beats per minute (bpm). As raver Jimi Fritz writes in *Rave Culture. An Insider's Overview* (1999): "some ravers will tell you that they prefer 120 bpm because it simulates the sound of a heartbeat as heard by a fetus in the womb" (1999: 72). The physical body of the raver is thereby imagined to be directly synchronized with the electronic beats produced by the DJ. The bounded, individual physical body becomes thereby 'in tune' with a larger

---

[140] Interview Dorien Zandbergen with 'Dexter', San Francisco, December 3 2005

environment. Ken describes this as follows: "with your heartbeat going at 120 bpm you really experience conductiveness and interconnectedness".[141]

Similar language is used to refer to the transformation wrought in the context of the '5-rhythm dances.' In 2008 I had joined a camp at Burning Man that 'specialized' in this particular type of dance. The camp, called 'Rhythm Wave' had brought a dance floor to the playa onto which DJ's would play a particular sequence of particular rhythms as a way of progressively leading the dancers to a state of higher awareness. The dances took different forms depending on the DJ, yet most of them were highly interactive: that year I spent hours on the dance floor climbing onto people's shoulders, being lifted up and hurting my feet. For me, the 5-rhythm dances were highly physical and tactile,[142] yet the language that was used to speak of these dances and of their transformational effect evoked an ontology that was somewhere 'in between' the physical and the non-physical. The official description of what 5-rhythm dancing is, stated on the website of Gabrielle Roth, the originator of this type of dance, illustrates this best. Here, Roth writes:

> Energy moves in waves. Waves move in patterns. Patterns move in rhythms. A human being is just that, energy, waves, patterns, rhythms. Nothing more. Nothing less. A dance.[143]

In this description, human beings are not depicted as *dancers*, but in much more ephemeral and indeterminate terms, as a *dance*. The natural scientific and computational metaphors 'energy', 'waves' and 'pattern' - collapsing in the overarching notion of 'rhythm' - are evoked as the 'stuff' that links the physical world (human beings) to non-physical ways of being (dance). Another such 'indeterminate' qualification of the transformational value of dance can be found in the sacred quality given to 'sweat' as the form of prayer. The 5-rhythm sessions, which are given in community centers and sports clubs all over the Bay Area, are also known as 'Sweat Your Prayers' sessions. As a flyer explains:

> To sweat is to pray, to make an offering of your inner most self. Sweat is holy water, prayer beads, pearls of liquid that release your past, anointing all your parts in a baptism by fire. Sweat burns karma, purifying body and soul. The more you dance, the more you sweat. The more you sweat, the more you pray. The more you pray, the closer you come to ecstasy.[144]

Sweat is here celebrated as a connecting principle between the material reality of the body and the immaterial reality of the spirit – as a form of prayer conducted through a movement of the body it transforms the body into a different, fluid, form of 'inner most self.'

---

[141] Interview Dorien Zandbergen with 'Ken', Mountain View, California, August 17 2008.

[142] In chapter four I discuss my experiences with this camp in 2008 in more detail.

[143] http://www.gabrielleroth.com/. Retrieved November 5 2010.

[144] I found this flyer at table in the community center in the Picklewood Community Center in San Rafael during a '5-rhythm session' that I followed on August 1 2008.

Virtual Worlds

Above I argued that in the context of Burning Man two transformational repertoires are enacted. The one repertoire relates to an apocalyptic anticipation of social and material collapse, the second to a celebration of positive interconnectedness. In the context of both repertoires we saw a celebration of transformation, whereby technical and 'spiritual' tools were employed to create new kinds of species and bodies. These species and bodies moved away from social, material and physical limits and turned into beings that are 'in-between' the physical and the immaterial, the natural and the technical, the fixed and the fluid.

Although a place like Burning Man seems quite different from an informational space like Virtual Worlds, New Edgers imbue Virtual Worlds with similar transformational power as Burning Man. And similar repertoires of transformation play thereby a role. I illustrate this by taking as a starting point a group interview I conducted in a cafe in Boulder Creek with Virtual Worlds developers. In this interview, I spoke with the dancer and performer Galen Brandt, the Artificial Life developer Bruce Damer, the dancer and anthropologist Bonnie De Varco and the anthropologist and role-playing gamer Jim Funaro. Coming from a variety of different disciplinary backgrounds, these four people cooperate in the institutional framework created by the 'Contact Consortium.'

The Contact Consortium

Of the four people interviewed, I first met Bruce Damer. Damer moved to California in 1994, after having spent four years as a software developer in Prague. In California Damer played a large role in developing and popularizing Virtual Worlds and in bringing together the artists, engineers and scientists who came to imagine themselves in this period as belonging to a 'Virtual Worlds community.' Among others, Damer organized various Virtual Worlds conferences, both online and offline, and wrote a book on Virtual Worlds - Avatars! (1998). In this book, the Virtual Worlds 'community' was comprehensively represented and a CDRom attached to the book encouraged readers to log on to the several free Virtual Worlds platforms that had by then be built.[145]

In general terms, a Virtual World is an online two-or three-dimensional, text-and/or graphics based representation of a 'world' in which people and artificial life forms move about. People can be represented in this space through text or through graphic representations of themselves, called 'avatars.'[146] When a visitor of a Virtual World adopts an avatar, this 'world' is presented from the perspective

---

[145] These Virtual Worlds are Worlds Chat, The Palace, Active Worlds, WorldsAway, Online Traveler, Virtual Places, Black Sun Passport, Oz Virtual.
[146] Bruce Damer defines an avatar as 'your alter ego in Cyberspace, your body double in the virtual communities growing inside two and three dimensional virtual worlds online.'

of this graphic representation, which the user can move through a joystick or keyboard strokes. The term 'avatar' is borrowed from Hindu mythology where 'avatars' are the temporary bodies inhabited by gods while visiting Earth (Damer 1998: 399). Bruce Damer is credited with applying this term to the virtual representations of visitors in cyberspace.

A well-known contemporary Virtual Worlds platform is Second Life, built and managed by the San Franciscan corporation of the same name. The concept of 'Virtual Worlds' gained momentum as a technological ideal in the early to mid-1990s. Around this time, growing memory capacities of computer hardware made it possible to process 'heavy' three-dimensional software. In the context of artistic, academic and corporate conferences, seminars and workshops organized across the USA, Europe and elsewhere, artists, engineers, academics, magazine editors, journalists, educators, science-fiction writers and entrepreneurs were debating the potential applications of Virtual Worlds in a commercial, educational, philosophical, spiritual, and 'scientific' sense.

Damer's pioneering efforts into Virtual Worlds in the early 1990s took place at a time when he was also making himself socially and institutionally at home in the Bay Area. It was after meeting Jim Funaro (1945) that his interests in Virtual Worlds expanded.

Jim Funaro is an anthropologist interested in science fiction and in the use of Virtual Worlds to study and create 'alien cultures.' As a teacher of anthropology in the 1980s, Funaro had organized offline role-playing classes for his students. In these classes, his students would simulate 'contact with a future human society.' The name of these role-playing simulation sessions given by Funaro was 'COTI': 'Cultures of the Imagination.' COTI became the central element of a series of conferences that Funaro began organizing since 1983. As part of this series of conferences, named CONTACT, science fiction authors, artificial life developers, social scientists, natural scientists, astronomers and artists would simulate a moment of 'contact' between human and alien species as they imagined it would take place in the future. They hereby used role-playing and creative writing techniques.

Funaro first met Bruce Damer as the latter attended the 1995 CONTACT conference. After attending CONTACT, Damer proposed to move this experiment in imaginary cultures-creation online. With Jim Funaro, Damer founded the Contact Consortium as a platform from which to organize this effort. In the context of the Contact Consortium, the various different interests that had converged in the earlier CONTACT conferences were now informing various 'Special Interest Groups' (SIGs). Each of these SIG's was endowed with the exploration of Virtual Worlds from one particular angle. Examples of such SIG's are the *Avatars* SIG, the *Biota* SIG, the *Vlearn* SIG and the *Socio-Anthro* SIG. Participants and topics addressed by these SIG's overlap. In general lines the 'special interest' of each of

these SIG's can be summarized as follows: the *Avatars* SIG focuses on the development of Avatar-inhabitated Virtual Worlds. The *Biota* SIG explores the emergence of online virtual life (artificial life-forms), the *Vlearn* SIG focuses on the use of Virtual Worlds for educational purposes and the *Socio-Anthro* SIG is a special interest group particularly dedicated to exploring the overlap between anthropology/sociology and virtual worlds creation, addressing questions as to how the methods of anthropology and sociology can be used to design social interaction online, and how interactions online can help further anthropological and sociological understandings about culture-formation. The Contact Consortium organized a large plethora of conferences, workshops and seminars, in non-profit and corporate settings, in popular cultural environments as well as in academic settings, both taking place online and offline. In the context of these conferences, the four friends eventually met.

It was as part of a 1996 *Avatars* conference that Bruce Damer and Galen Brandt met, after they became a couple. Brandt attended this conference in search of inspiration for her interest in the use of Virtual Worlds for 'healing.' Galen works as a consultant and artistic leader for various 'Virtual Healing' projects, initiated by befriended artists, engineers and therapists. Some of these projects have the intention to help people with neurological disorders to 'sense' the world in a 'normal' way: an example is the Virtual Reality project of Dr. Dorothy Strickland for children with autism. Real-life situations that these children usually have difficulty dealing with - such as crossing a street - are enacted on head-mounted displays in an easy approachable cartoon-like way. As such, children with autism can familiarize themselves with such situations in a way easy accessible to them.[147] Other 'Virtual Healing' projects aim to help people with neurological disorders to make the way in which they see the world experientially available to other people. An example is DETOUR, a Virtual Reality art installation created by former psychotherapist and nature photographer Rita Addison.[148] In 1992 Addison suffered severe brain injury from a car crash and has felt "broken, invisibly, on the inside", as Galen phrases it. A head-mounted display has been designed to "make the invisible visible" for "doctors, friends [and] family" (Ibid.).

In the course of the CONTACT and Contact Consortium conferences, Bonnie de Varco befriended Bruce Damer and Galen Brandt, after which they kept each other 'in the loop' regarding new developments and directions within the manifold realm of Virtual Worlds. By the time that De Varco met Damer and Brandt, she already knew Funaro for a long time: Funaro was one of her

---

[147] For Galen's explanation of the project see: http://www.virtualgalen.com/virtualhealing/autism.htm. Retrieved August 2009; for Strickland's homepage: http://www.dotolearn.com/. Accesssed August 2009.
[148] www.virtualgalen.com/virtualhealing

anthropology teachers when, in Santa Cruz in the 1970s, De Varco studied the anthropology of 'traditional' Balinese dance culture. Through Funaro, De Varco had been involved in some of the CONTACT conferences and also developed an interested in imaginary worlds on her own. Until the mid-1990s, De Varco was the chief archivist of the 'Buckminster Fuller archives.' These archives, maintained by the University of California in Los Angeles (UCLA), comprise a collection of all the writings of the Buckminster Fuller.[149] In the early 1990s, De Varco also taught herself the skills of programming two-dimensional virtual environments as a way of "paying the bills". She quickly moved on to designing Virtual Worlds afterwards. Currently, De Varco is an "education technology consultant to non-profit, corporate and educational organizations"[150] who, like Damer and Brandt, lives in the Santa Cruz region.

As suggested by these many different backgrounds and the diversity of interests in Virtual Worlds manifested by this group, we should not think of 'Virtual Worlds' as one particular, clearly defined 'tool.' Instead, it is better to think of Virtual Worlds in similar terms as we can think of 'the internet.' As it is the case with the internet, under the banner of 'Virtual Worlds' many different kinds of practices and forms of creational and communicational interaction have been shaped. The New Edge understanding of Virtual Worlds is characterized by the fact that, in a similar vain as Burning Man, ritualistic significance is attributed to these worlds. They are zones where gnostic transformation takes place.

As I did in my discussion on rave culture, in the following I distinguish two particular 'repertoires of transformation' that shape the New Edge understanding of Virtual Worlds, as represented by these four developers. I distinguish an apocalyptic theme that proposes transformation in reaction to anticipated material collapse, and a theme to which the transformational ideal of the expansive body is central. As part of my discussion of these two repertoires, we will see how in the context of Virtual Worlds, modes of being are made to emerge that are similarly 'liminal' and ontologically ambiguous to those that are 'molted' in offline rave environments like Burning Man.

Apocalyptic Visions

Bruce Damer summarizes his interest in Artificial Life as a way to "study the basic rules of life by creating life".[151] Damer's *Biota SIG*, founded in 1996, is entirely

---

[149] In chapter one I mentioned Buckminster Fuller as an inspirational figure for the Whole Earth Catalog.
[150] http://members.cruzio.com/~devarco/portfolio.htm#bucky
[151] Group interview with Bruce Damer, Galen Brandt, Jim Funaro and Bonnie de Varco, Boulder Creek, California, January 2006.

dedicated to this simultaneous creation and study of 'life'. On the website of this SIG, Damer explains:

> Biota.org was created in 1996 to promote and assist in the engineering of artificial life: complete, biologically-inspired, synthetic ecosystems and organisms. This involved the creation and deployment of digital tools and environments for simulation, research, and learning about living systems both natural and artificial. (…) Biota.org welcomes members from all scientific disciplines including evolutionary science, microbiology, medicine, computer science, robotics, nano-technology, palaeontology, social science, and artificial intelligence. Biota also encourages artists, technologists, philosophers, and educators to join in and add their input to the developing body of experimental work. [152]

Damer refers to the 'Artificial Life' that this interdisciplinary field of researchers creates and studies as "Digital Biota":

> Digital Biota (also called cyber-biota) are a class of self-replicating autonomous software objects which can be embodied by (benevolent) computer viruses and worms, artificial life programs, cellular automata, genetic algorithms, and general adaptive networks. Once released they live or die by their own decisions as they interact with their environment. They are usually capable of reproduction - if they also have the ability to mutate and be affected by the force of natural selection to some degree then they can evolve.[153]

Damer furthermore refers to the interdisciplinary field of research that creates Digital Biota as "Cyberbiology".[154]

The ultimate anticipation of the 'Digital Biota SIG', as presented on the website, is that of the coming of a 'Cambrian Explosion' of 'life' in cyberspace:

> We speculate that some time in this new century Digital Biota may undergo a Cambrian Explosion of diversification within the novel ecosystem of the planet's computer networks.[155]

For Damer, his compliance in this 'Cambrian explosion' has significance beyond the sheer 'fun' and 'fascination' that these worlds offer for him. In the context of his presentations at Mindstates and Burning Man, Damer anticipates a future in which 'life' will have to find different bodies and planets in order to survive. Damer anticipates a future of life that can be thought of as post-biological. His creation of artificial life forms that can somehow facilitate evolution in cyberspace, is serious business: as he told me, he was drawn to computer science and particularly to the simulation of lunar landings, because he wants to think about "the exit points of

---

[152] http://www.biota.org/. Retrieved November 11 2010.

[153] http://www.biota.org/about/. Retrieved November 11 2010.

[154] Group interview with Bruce Damer, Galen Brandt, Jim Funaro and Bonnie de Varco, Boulder Creek, California, January 2006.

[155] http://www.biota.org/about/. Retrieved November 11 2010.

120

humanity when they run out of resources". "I would like to write that one", Damer adds, "create that code:" [156]

> There is going to be life, in the air or water again. The chance of life to progress further is very narrow, very small. Human beings were the mechanisms by which life could survive in a different medium. This new life is pure information. Their info can be packaged up and transmitted on a laser beam and transported somewhere else. A piece of the algorithms that transmit life, can be shot into space, without encumbrance, [it can] live in another system, we can decide to call it life. Our own bodies won't last long up there. With intention we can have a life form that can live in space. It is not us, we are not going to be able to do this (Ibid.).

In this sense, Damer's transformational intention with Artificial Life comes down to a vision of salvation in which immaterial, technological and disembodied intelligence escapes and survives material decay and destruction. As we also saw in Damer's speech at Burning Man, his ultimate dream is that the forms of life that survive will in the future eventually become "self-conscious". In a series of speeches, the vision that Damer has been fine-tuning in the past few years, is that of a future form of life - Artificial Life like or otherwise - that will become aware of its own divinity and will realize that it is part of a larger conscious entity. [157]

However, Damer himself resists easy characterizations of his vision as transcendental or 'post-biological.' Damer, for instance, juxtaposes his interest in Artificial Life against that of "all those software engineers" who think that life is easy to replicate. [158] Speaking about the Digital Biota SIG, Damer emphasizes that the purpose of this SIG was to replicate life "that might have looked like chemical life in the oceans". "That is a big leap", he adds:

> (...) the properties of molecules, are like little children. (...) Down there everything is wiggly, everything is chaotic. There is only one mechanism that can live in such chaos, that is ordinary chemical biology, that has harnessed that wiggling, and that is done with the most amazing bunch of technology, there is no gear in there, there is not a rigid structure in there (Ibid.).

Damer here juxtaposes his understanding of Artificial Life against those 'nanotechnologists' who, he believes, "live in science-fiction" because they believe that they can easily harness life in digital form. As a way of making this point to the Digital Biota team, Damer took them to an archeological site where he wanted them to marvel about the wonders of nature. Damer took some of the team members to the fossil fields in Burgess Shale, in the Canadian Rockies, to get them "awestruck". [159]

---

[156] Interview Dorien Zandbergen with Bruce Damer, Santa Cruz, California, September 2005.
[157] From Damer. *A Universal Mindstate*. Speech Mindstates 2004, Oaxa. Mexico; Damer sketched this vision also in our interview in September 2005, Santa Cruz, California.
[158] Interview Dorien Zandbergen with Bruce Damer, Santa Cruz, California, September 2005.
[159] Group interview with Bruce Damer, Galen Brandt, Jim Funaro and Bonnie de Varco, Boulder Creek, California, January 2006.

As Funaro and Damer agree, both their projects are similar in the sense that they both study virtual life by creating it. Where Damer creates Artificial Life forms, and 'studies' them by creating them, does Funaro study 'culture' by creating 'culture.' This is how Funaro formulates the purpose of the 'CONTACT simulation games' on the COTI website:

> The technique derives from my teaching experience that synthesis -- putting things together -- can be just as powerful a learning device as analysis -- taking things apart. In terms of practice, one of the best ways to understand how something works is to try to build it. In the class, Anthropology for the Future, students would create cultures, both to see how they work and to explore the dynamics of intercultural contact, which is a central concern in our discipline.[160]

In his study of culture, Funaro is informed by an apocalyptic theme and extraterrestrial framework that is similar to Damer's. Funaro's role playing games are cast in a future where humans have been forced to leave the earth and to make contact with alien species. One workshop description describes the condition of these future humans:

> The humans were refugees from a destroyed Earth. The colony had been traveling in space in search of a new home for many generations, during which time they had not only developed a unique, self-contained culture but had also evolved biologically. The techno-ecology of their star ship included many sub-environments ranging down to zero g; these conditions had selected for linear bodies, elongated limbs and digits, and prehensile tails (which our astronauts and cosmonauts might find useful) (Ibid.).

The purpose of the simulation games is to see whether the "culture" of this future human species "works" well enough when it comes into contact with alien life.

Funaro's main reference point for deciding whether a 'culture works' is that it helps species to survive. He hereby employs an evolutionistic perspective in which survival, in older times, depended on biological and physical conditions, whereas survival, in the future, depends on 'non-biological' conditions. This evolutionary perspective is implicit in the design of the CONTACT workshops. The temporal dimension of the workshop itself parallels an imaginary evolutionary time-line that first depends on biology and then on 'culture': in the first hours (or days) of the workshop, the teams imagine the historical evolution of two types of species. In the final part of the workshop, the teams will 'enact' a future encounter between these species. In the first part of the workshop, teams talk about physical structures and biological evolution, the second part of the workshop is exclusively about behavior and communication – also defined as 'culture' by Funaro.

Funaro, like Damer, seems to celebrate in his games a future transcendence of biology and matter through the immaterial form of 'culture.' He endorses an understanding of culture as 'meta-biology':

---

[160] http://www.contact-conference.com/archive/history.html. Retrieved November 11 2010.

(...) it is everything the human being uses that brings us beyond the corporeal. (…) it is a particular kind of adaptation where you use things that are external to your body.[161]

At the same time, however, Funaro's conceptual framework also resists the dichotomous notion that 'culture' and 'biology' are oppositional. He works with a framework that may be thought of as sociobiological because it celebrates 'culture' as emanating from very particular biological and material conditions. One question that guides CONTACT and that interests Funaro in particular is to study the point at which 'culture' emerges out of physical and geological conditions. A fragment from the 'Boulder Creek interview':

Galen: what then would make it culture? At what point does culture emerge?
Jim: that is a wonderful question because anthropologists aren't sure about it either, they have been arguing about that for over a hundred years (...).[162]

Both Galen and Jim thus presume that 'culture' is something that 'emerges' from an organic-biological substrate.

Funaro's conceptual understanding of culture is thus ontologically ambiguous in the sense that culture is considered emergent biology *and* as having liberated itself from the bio-organic substrate.

A Cosmic-Religious Sense

The celebration of 'positive interconnectedness', celebrated in the setting of the rave environment as 'pronoia' and magic, is a significant component that also structures the transformational aspirations of the Virtual Worlds enthusiasts Galen Brandt and Bonnie De Varco.

De Varco is currently a designer and implementer of educational Virtual Worlds for a variety of institutes, among which the University of Santa Cruz. In addition, she is an active contributor to the Vlearn SIG, a branch of the Contact Consortium. In the virtual learning environments designed by De Varco, students can, for instance, project themselves into a virtual ecosphere by adopting the shape of a molecule; thereby studying this particular 'ecosystem' from the 'inside-out', in an 'experiential way.'

In an interview I had with De Varco prior to our second encounter in the Boulder Creek café she had explained that, according to her, Virtual Worlds give the user a heightened understanding of the true nature of reality. De Varco compares the change of perspective and experience people can have in Virtual Worlds, to the change of perspective that artists and scientists developed during the Renaissance by going from two-dimensional ways of viewing to three-dimensional

---

[161] Group interview with Bruce Damer, Galen Brandt, Jim Funaro and Bonnie de Varco, Boulder Creek, California, January 2006.
[162] Group interview with Bruce Damer, Galen Brandt, Jim Funaro and Bonnie de Varco, Boulder Creek, California, January 2006.

ones. Virtual Worlds, De Varco told me, "take us to the next dimension" and help people to "get used to a part of reality that we just don't get yet". [163] De Varco thinks of her Virtual Worlds as giving both 'scientific' and 'spiritual' insight. She is thereby inspired by Buckminster Fuller, whom she admires greatly:

> 'Bucky'spoke of a cosmic-religious sense that scientists feel. [through science] you are exploring that powerful thing (…) you know that the work you are doing aligns you with god in a deeper way (Ibid.).

Part of the 'cosmic-religious' sense of being an avatar in a Virtual World, De Varco explained, comes from the fact that you "become less attached to the body". Through Virtual Worlds, moreover, you learn to understand that reality is "ephemeral". [164]

De Varco recalls a 'ceremony' that was held in the context of the 'VLearn 3D conference', organized by her in 2002. After a day of presentations on recent innovations in the realm of educational virtual worlds, De Varco co-organized a closing ceremony during which attendees would enter a Virtual World themselves. This particular Virtual Worlds was a 'Virtual Solar System.' In this world, users could adopt various molecular shapes as avatars and use them to 'fly around' the solar system. On the website, the ceremony was announced:

> Fly from the past to the future, from micro to macro, as your molecular avatars dance among the megaliths of the past and fly into the surprisingly musical order of the planetary orbits of our solar system. Watch the virtual cosmos unfold as the day comes to a close.[165]

De Varco recalls about this ceremony:

> Everybody was profoundly influenced by wanting to create a visceral type of experience. We were all incredibly amazed at it. How it became much larger than any of us imagined it would be. There was something about being molecules and shooting up into the sky and dancing, and walk through each other (...) I thought it evoked something that was very unique (…) where you really are experiencing something larger than yourself of a spiritual nature. [166]

Some of the metaphors used by de Varco to speak about the ontology that is revealed in Virtual Worlds, suggest that she celebrates the disappearance of the physical body and a world that is ontologically immaterial. The 'spiritual' and 'visceral' type of experience sought after by her only seems to become possible through a 'detachment' from the body and through becoming fluid, transparent and differently shaped. Simultaneously De Varco locates the transformation that occurs in these places in the human physical body:

---

[163] Interview Dorien Zandbergen with Bonnie de Varco, Santa Cruz, California, January 4, 2006.
[164] Interview Dorien Zandbergen with Bonnie de Varco, Santa Cruz, California, January 4, 2006.
[165] http://www.vlearn3d.org/conference2002/abstracts.html. Retrieved September 2010.
[166] Group interview with Bruce Damer, Galen Brandt, Jim Funaro and Bonnie de Varco, Boulder Creek, California, January 2006.

(...) part of the immersive experience in the virtual world (...) [is that you] engage the whole body. [167]

By 'engaging the whole body', De Varco means that the physical body, through Virtual Worlds, is triggered in profoundly new ways, so that it becomes aware of its 'full nature:'

(...) the more you are immersed in an environment, if it is creative, you can experience many worlds, in the universe you can experience multiple identities, (...) you can experience all kinds of experiences (...) What we have all been doing is to make people realize their full nature (Ibid.).

To realize your 'full nature' is thus to become aware of many different identities and forms of experience that are available to humans but suppressed in every day life. De Varco does not, in the first place, blame the physicality of the human body for this suppression of full understanding, but a wrong body *image*: to realize your full nature is to become aware that 'consciousness' does not only depend on the ratio, but that it is 'distributed' throughout the body.

De Varco introduces the term "distributed consciousness" to talk about the place of consciousness in the human body.[168] In the conventional understanding of the body, De Varco says, consciousness resides in the human brain and the body is subservient to the brain. If you think of the body as consisting of "distributed architecture", she explains, you don't imbue a particular hierarchy on the senses and on particular modes of perception.

At the Boulder Creek café Galen, Bonnie, Funaro and Damer all struggle for a while trying to find words for describing the ontology of this 'non-hierarchical' body that is neither merely physical nor merely spiritual. Galen tries the notion of "cellular memory" to define the point in her body where spiritual revelation and physical reality converge. Bonnie finds this term very useful as well. Funaro tries: "you mean, the physical part of consciousness?" [169] Bonnie: "exactly, it is like a bio-spiritual thing, I call it bio-spiritual". By inviting people to become "bio-spiritual beings", Virtual Worlds are celebrated by designers like Bonnie as places that facilitate a "deeper way of being human" (Ibid.).

Molting Rituals for the New Species

My explorations of the ritual quality of raves and Virtual Worlds for New Edgers have emphasized two different repertoires of transformation taking place here: in the one repertoire the human body is transformed in the present, in the other collective future survival – as 'culture' or as 'species'- is anticipated. In the context

---

[167] Ibid.

[168] De Varco says she borrows this term from the nanotechnologist and computer security specialist Ralph Merkle.

[169] Group interview with Bruce Damer, Galen Brandt, Jim Funaro and Bonnie de Varco, Boulder Creek, California, January 2006.

of both transformational repertoires, familiar ontological dichotomies are dispensed with. We have seen these bodies and species, for instance, imagined as moving away from a biological and material form into a 'post-biological', 'meta-biological' or 'informational' form. In addition, we have also seen that these transformational repertoires are informed by attempts to transcend such dichotomies altogether. The use of terms like 'biospiritual', 'cyberbiological' and 'bodies of memory' illustrate this. So does also the simultaneous celebration by Damer of 'wiggly organic life' and of artificial life that is shot up into space through a laser beam; as well as does Funaro's notion that culture is biologically shaped and transcendent of biology.

If raves, Virtual Worlds and Burning Man are 'New Edge molting rituals' they are so in such a sense that the modes of being that are here 'molted' don't easily fit into the ontological and social schemes of everyday life. These modes of being fit the self-ascribed definition of these spaces as 'liminal.' If we recall the celebration by Damer of liminality as a position of empowerment, indeterminate modes of being are ultimately empowering from the New Edge perspective. These cyberbiological, biospiritual bodies and postbiological, skillful species are empowered precisely because of their status beyond and outside conventional material, physical and social categories. In this modality, they can perceive, know and sense beyond social, physical, and material boundaries while also drawing their power from social, physical and material existence.

2.3. New Edge Transformation in Historical Perspective

In the previous sections I discussed how, from the New Edge perspective, the transformed bodies and modes of consciousness that are forged as part of practices such as dance, role-playing and technological creation, are believed to be correlates of gnostic insight. From the New Edge perspective, in other words, the indeterminate bodies and modes of consciousness mediate the higher and fuller form of understanding that is central to the gnostic quest. In this section I address the question where these bodies and forms of consciousness come from in anthropological sense. What is the historical context in which we should understand their emergence? And what is the role played by 'technology' in fostering these knowing beings? In this section I offer an integrative account of the relationship between the New Edge expansive body, the New Edge evolution of cultures and species and the role thereby assumed by technology. I do so by placing New Edge transformation both in a historical and contemporary larger context. I begin with identifying the 'expansive body' I have thus far talked about, as a 'sensorium.'

The Sensorium

In the introduction to the *The Sixth Sense Reader* (2009), editor David Howes describes the 'sensorium' as a concept that first emerged in the early modern period and that, since then, has been used interchangeably with the notion of the "sixth-sense": "Used interchangeably with the words *brain* and *mind* in the early modern period", Howes writes, "the *sensorium* straddles the divide between mind and body, cognition and sensation" (Howes 2009: 1). The term "sensorium", according to Howes, "foreshadowed the attempt in the late modern period to overcome the classic Western split between mind and body through the forging of such concepts as 'the mindful body' and 'embodied mind'" (Scheper-Hughes and Lock 1987 and Varela, Thompson, and Rosch 1992 in Howes 2009: 1). In this late modern period, the concept of the sensorium was not only used to refer to the "seat of sensation in the brain of man and other animals' (2009: 1), but advanced an epistemology pertaining to account for the 'totality of percipience" (2009: 2).

In their edited volume *Sensorium* (2006) Caroline Jones and Bill Arning define the sensorium as "the subject's way of coordinating all of the body's perceptual and proprioceptive signals as well as the changing sensory envelope of the self" (2006: 8). Jones and Arning trace the history of this body image to the revolutionary aesthetic movements such as the Dadaists in the 1910s and 20s and the Surrealists in the '30s. The scholars also name the 1960s "sensorial environments" – Happenings and Environments – as occasions in which the idea of the sensorium played a large role. According to Jones and Arning, the artists who endorsed this body image did so in a critique of "modernist sensory segmentation" (2006: 19).

In the previous chapter I argued that the genealogy of the contemporary New Edge can be traced back in significant extent to the 'art happenings' of the 1960s and particularly to those artists for whom immersive environments offered the opportunity to engender higher perception. Given this genealogy, it is logical to assume that the New Edge celebration of what I called the 'expansive body' is synonymous with the notion of the 'sensorium', as identified by the aforementioned scholars. However, as discussed by Howes and Jones & Arning, technology does not play an obvious, explicit role in the formation of the 'sensorium.' Before arguing how, in the context of New Edge, technology is 'naturalized' as part of the sensorium, I will assess how this body has emerged in the recent history of gnostic spirituality in the Bay Area.

The Sensorium and Synchronicity

A sensorium is a body that facilitates a form of perception that is considered 'higher' and more 'complete' compared to the perception generated by the 'limited' five senses. The creation of the sensorium is thus accompanied by a critique of 'conventional' perception, and is informed by the understanding that 'reality' as it truly is, is more 'encompassing' than the reality we are presented with in the course of everyday life. A sensorium is thereby an ideal body-image: it is an image of a body that becomes 'god-like' in its potential to know the ultimate truth, much in the vain of the all-knowing, all-sensing, expansive form of being/body described in the classical esoteric text the *Corpus Hermeticum* with which I opened this chapter. The sensorium is, in other words, a manifestation, or 'embodiment' of gnostic awareness.

We have already seen various different environments in which all these elements come together thereby generating the ideal-body image of the sensorium. Techniques for creating this sensorium differ. In the Gnostic Sanctuary, Tau Rosamonde urged us to treat all our senses 'as one', thereby enabling ourselves to 'go beyond the senses' and to understand 'the beloveth' – the Divine principle Sophia – in experiential way. In the context of 5-rhythm dancing, a new body image is evoked that is 'fluid', environmentally expansive and intuitively aware of the 'unity' of all that exists. In Virtual Worlds the imaginative 'immersion' in three-dimensional representations of the universe enables people to fully grasp their relation to the rest of the world and to experience that they form a larger whole with this universe.

In all such 'molting rituals for the sensorium' the ontological reality that is made available to the sensorium is phrased in holistic terms[170]: seeing reality through the perspective of the sensorium does not imply that one becomes purely 'spiritual' as opposed to physically-embodied; or purely 'sensorial' as opposed to rational. Instead, the sensorium as it is constituted in the New Edge molting rituals embodies an awareness of the inherent interconnected nature of all that exists – matter, spirit, rational knowledge and experiential knowledge all fuse and generate one, integrative image of Reality. The historical legacy of this particular type of sensorium can be traced back, in part, to the theories on synchronicity as developed by the German psychotherapist Carl Gustav Jung, and the way in which these theories informed the gnostic practices and future visions fostered within the various institutions and groups that I have introduced as the Californian 'counterculture.' Within this countercultural setting, Jung's writings on

---

[170] In the *Gnostic Eucharist* distributed during the ordination ritual I attended in August 2008, it is explicitly stated : "we are no dualists."

128

synchronicity played a significant role in validating and informing practices that pertained to the exploration of 'cosmological unity.'

In his collection of essays *Synchronicity: An Acausal connecting principle* (published in the collected works of Jung *The Structure and Dynamics of the Psyche* 1960), Jung defined 'synchronicity' as:

> (...) the simultaneous occurrence of a certain psychic state with one or more external events which appear as meaningful parallels to the momentary subjective state - and, in certain cases, vice versa (Jung 1960: 441).

With his theory of synchronicity Jung, along with a variety of contemporaneous mystics and natural scientists, questioned the units of time and space as the sole frameworks in which events in the world should be accounted for. His theory of synchronicity postulated the existence of another mechanism that connected things to each other, a mechanism that could only be observed intuitively and that connected future and past events and geographically distinct places to each other. Jung's interest in synchronicity related to his interest in other forms of perceptual activity that are not necessarily dependent on the five senses. Among these forms of perception are intuition, or "mantic perception" (1960: 450), knowledge of archetypes, Extra-Sensorial-Perception (ESP) and Eastern revelatory practices such as the I-Ching. Jung also postulated the possibility of the existence of a form of consciousness that is unrelated to the organic human being (1960: 509).

According to Esalen historian Jeffrey Kripal, the ontological and epistemological principle of synchronicity characterized the cultural climate at Esalen. The co-founder of Esalen, Michael Murphy, for instance "immediately read as synchronistic" (Kripal 2007: 14) a severe car accident he had on the very day that he broke his vow of celibacy. An implicit acceptance of synchronicity also resided in the understanding, which permeated the workshops and seminars at the institute, that the world is a "gestalt": a "meaningful whole that is co-created by a subject and an environment within a particular moment of awareness" (Ibid.). In his *The Electric Kool-Aid Acid Tests* (1968) Tom Wolfe claims that "synchronicity" also played a large role among the Merry Pranksters. The Pranksters reveled in "intersubjective experiences" like "shared dreams", instances of "mind-reading" and "future-prediction".[171] Experiences such as these were proof to the Pranksters that they were more and more "tuned", or "synched in" with one

---

[171] Wolfe writes about how one of the Pranksters, who had not been at La Honda for a while, returned to La Honda telling Kesey about some "dream wars" he had been having with Kesey. In these dreams he was fighting deadly combats with Kesey. Kesey however, needn't have been told: he had been having the very same dreams. Another scene in the book tells about a bus trip taken by the Pranksters in South Dakota. No route had in advance been agreed on. The driver, Sandy, drove randomly for 191 miles. Wolfe: "Then he looked up at the map and precisely those 191 miles were marked in red (...)." One of the women in the bus had drawn that line intuitively before the start of the journey that day (Wolfe 1968: 100; 114).

another and with the larger universe. The Pranksters referred to this mysterious "connective principle" as an "Unspoken Thing". Although an "Unspoken Thing" for the Pranksters, Wolfe identified the principle that occupied the everyday life of the Pranksters as "synchronicity". "The Pranksters never talked about synchronicity by name - they called *nothing* by name - but they were more and more attuned to the principle", Wolfe wrote (Wolfe 1968: 129).

We have seen various signs of the ongoing currency of the theme of synchronicity in the contemporary New Edge environment: in the rave environment these can be observed in the use of the terms 'pronoia' and 'magic' to express the sense of being part of a benevolent universe; in the celebration of significant events at Burning Man as 'non-coincidental' and in the normalization at raves of multi-sensorial and extra-sensorial forms of awareness and contact. The Burning Man ritual is designed to 'attune' people's awareness towards the synchronistic patterns of reality. The Virtual Worlds rituals do the same: in Bonnie De Varco's 'Virtual Solar System', for instance, people become attuned to the understanding that the individual cells of their bodies resonate with the stars and the planets of the larger universe – it opens up a 'fourth dimension' in which things are connected across time and place. The imaginary bodies that are created in the rave environment as well as in Virtual Worlds – composed of 'stuff' that reveal the 'oneness' of the world – like 'cellular memory', 'patterns', 'sweat', 'equations' – are bodies that are 'in tune' with the synchronistic dimensions of reality. The sensoriums here evolving, in other words, are bodies that are ultimately aware, composed of the 'totality of percipience'.

The Sensorium and Species-Evolution
In the concept of the sensorium, we can say, gnostic understanding is embodied in the present. The sensorium can also be projected onto the future, where future species will be gnostically transformed by having obtained total awareness. The seminars and workshops at Esalen in the 1960s fulfilled both purposes at once: they made people differently aware of their bodies in the present and functioned simultaneously as a pathway for the formation of a new species.

An example of this dual function can be found in the so-called Rolfing sessions given at Esalen by Ida Rolf. In these sessions, Rolf sought to "physically re-educate" people by "reorganizing" the alignment of their bodies through a combination of hatha yogic and ostheopatic techniques. Rolf saw her work as an act of "self-evolution", actively bringing into being a physically and spiritually higher evolved species. As she put it:

> It is possible that we are seeing here the first conscious attempt at evolution made by
> any species in modern times (Rolf in Kripal 2007: 241).

The ontological status of the sensorium as well as of the 'new species', as imagined in the context of such practices, is 'indeterminate': it is 'holistic' and 'integrative'

in the sense that it combines and fuses all the perceptive registers of humans. Another example of this holism is the vision of the Indian-British mystic Sri Aurobindo (1872-1950), whose teachings greatly influenced the founders of Esalen. Aurobindo envisioned a future in which humans will have evolved into a kind of "Superman": "the Superman", Aurobindo stated, is a "diversely gifted race of "gnostic beings" or "cosmic individuals" who consciously embody a full integration of Matter, Mind, and Spirit" (Kripal 2007: 66).

Like in the contemporary setting of Burning Man, in the 1960s such an anticipation of future salvation took place in a (counter)cultural climate that perceived the conventional society to be in crisis. In this setting, the 'gnostic beings' - having integrated matter, mind and spirit - were the idealized inhabitants of a post-crisis future. Today, in the setting of the Contact role-playing games, in Damer's Artificial Life forms and in the survivalist tendencies of Burning Man, we can see the continued idealization of new forms and new modes of being that are able to overcome the perceived crisis of today. And in these settings, burners, artificial forms of life, role-playing gamers and dancers are themselves seeking to embody this future and to 'live' the ideal of full integration of matter, mind and spirit. In the combination of their acts and fantasies we can discern what this integration has come to mean today. It involves a schizophrenic embrace both of material expertise and physical exercise on the one hand, and, on the other, the acceptance of the notion that these physical conditions are transcended. In all three scenario's, the evolving species are strongly biological and material: at Burning Man, the muscled burners are well-versed in construction building, in so-called 'hands-on' creation and in 'combating' the heat and storms of the desert; Funaro's species have succeeded in creating spaceships, in harnessing the particular biological conditions of their planets; and Damer's Artificial Life forms have succeeded in resembling 'real', biological and chemical, 'chaotic and wiggly' forms of life. Simultaneously, as 'culture', through their 'skills' and through their informational bodies these 'species' have become post-biological, meta-physical and entirely 'in tune' with the divine powers of the universe.

The Sensorium and Technology

Burning Man 2005. Marijke, Maya and I sit on the fence in front of the Dance camp to 'greet' newcomers and to show them their assigned camping spots. Since most of the people have already arrived, we spend our entire shifts talking. Maya tells us that she used to be what she calls a 'New Age traveler' - traveling the world in search of spiritual growth and authentic forms of living. Maya loved music, but not electronic music and she was "against technology". When she returned to San Francisco in the early 1990s, the rave scene was in full swing. Here she discovered that the 'ravers' were just like her, and that electronic music is, as she puts it, "actually quite natural".

As this example illustrates, it is not easy to answer the question what role is played by 'technology' in the ritualistic New Edge environments. 'New Edgers' like Maya appear ready to embrace electronic technologies as 'natural.' For Maya these technologies give access to 'authentic reality' in the same way as her former 'anti-high-tech' lifestyle permitted her to. Instead of holding on to a prior dichotomy she apparently maintained between a 'spiritual lifestyle' and the use of 'technology', Maya is now willing to embrace electronic music as one 'technique' among others for obtaining higher understanding.

At the same time, Maya is now part of a 'New Edge' cultural environment in which it is common practice to juxtapose 'high-tech spirituality' against 'non-or anti-technological forms of spiritual practice.' This tendency to take distance from assumed non-technological spiritual seekers can be illustrated with the first editorial of Mondo 2000 in which the editors juxtapose their own 'high-tech spirituality' against the 'anti-technological', 'back-to-the-land' hippies of the 1960s. The editorial of the first edition of Mondo 2000 read:

> Back in the sixties, Carly Simon's brother wrote a book called *What to Do Until the Apocalypse Comes*. It was about going back to the land, growing tubers and soybeans, reading by oil lamps. Finite possibilities and small is beautiful. It was *boring*![172]

In his book *The Archaic Revival* (1991) the previously mentioned Terrence McKenna, who is another New Edge spokesperson often quoted in Mondo 2000, rejects 'New Age' because of its alleged fear for the 'real experience.' McKenna understands New Age as a spiritual current that avoids "powerful techniques" like psychedelics (1991: 12) and that 'avoids' real spiritual awareness by employing techniques like "rebirthing, Rolfing, yoga, natural diets and mantra chanting" (1991: 246).

A similar distinction was upheld in the 1960s by the Merry Pranksters. The Pranksters juxtaposed their high-tech practices against the 'non-technological' spirituality of the 'Learyites' - the followers of Timothy Leary. As Tom Wolfe described it, the Pranksters accused the 'Learyites' of having "turned *back* (...) ducked back into the romantic past, copped out of the American trip" (Wolfe 1968: 103).

In such forms of self-reflection, an image is established of a 'New Edge' cultural environment that is capable of gnostic understanding, not by turning to 'the past', 'nature', 'dogmatic culture' and the 'body' but instead by turning *away* from this all through technology, the future, 'mutation', and techniques that are 'real', powerful and that actually 'work'. At the same time, Maya's remark, as well the eclecticism manifested in environments like Mindstates suggest that no real distinctions are upheld between 'high-tech' and other techniques for reaching

---

[172] Mondo 2000 issue 7 Fall 1989: 11

132

gnosis. Coiner of the term 'Homo Cyber' Lorenzo Hagerty postulates that "there is simply no right way" to get into a state of higher consciousness:

> Some people use chemicals. Others use plants. Some [employ] deep meditation practices, and others are skilled enough to use trance dance or yoga to launch their minds into the alternate state of consciousness (...) Before long it will be common to [use] virtual reality devices. There simply is no right way (...)".[173]

Within the larger New Edge cultural environment, New Edgers argue among each other what role technology exactly plays in the anticipated transformation. Gary, for instance, believes in Kurzweil's image of the 'singularity' and anticipates it as a "genetic permutation of a small group of people (…) who have the ability to interact in a certain way with information, who will develop into a new species".[174] This 'information' that Gary speaks about, to be sure, is information made available by technology. In reply to Gary's remark, his friend, who is closely affiliated with Mindstates and who calls himself 'Earth', remarked that also he believes a large process of evolutionary transformation is currently occurring. However, he believes that this transformation is not merely 'technological' but is expressive of larger natural patterns. Instead of thinking of the 'new species' as a form of being that results from high-tech, 'Earth' thinks of 'cyberspace' as itself an expression of a larger process of spiritual evolution under way. In the way that Gary and Earth thus juxtapose their visions of the singularity, familiar dichotomies between 'technology' and 'nature' are evoked.

In order to illustrate how both Gary's and Earth's understandings about the relationship between 'technology' and 'higher understanding' are present within the cultural environment of New Edge, I now compare two recent visions on the sensorium expressed in a 'technological' context. The first example is taken from cyberpunk science fiction, the second from an observation made by Douglas Rushkoff in his book *Cyberia* (1994).

The genre of cyberpunk arose in the early 1980s and was set, according to cyberpunk scholar Andrew Butler, "in a near future, dominated by high-technology including computers, computer networks and human/machine hybrids" (Butler 2000: 9).[175] Cyberpunk writer Rudy Rucker defines the genre as being "ABOUT

---

[173] *Psychedelic Thinking and the Dawn of Homo Cyber* presented by Lorenzo Hagerty on May 27 2001 at the Mindstates conference:
http://www.matrixmasters.com/speaking/mindstates/mssun01/hc01/hc01.html. Retrieved September 29 2010.
[174] Conversation with Gary and 'Earth', San Francisco August 12 2008.
[175] According to Butler: "The technology provided the *cyber* part of the label; the street life of the stories and novels offered the *punk* part." The most visible of cyberpunk novels, Butler writes, was William Gibson's *Neuromancer* (1984), which depicted a "near-future world dominated by computer networks and Japanese corporations." It was editor and critic Gardner Dorzois who first linked Gibson with Bruce Sterling, Rudy Rucker, John Shirley, and Lewis Shiner as authors of "cyberpunk fiction".

the fusion of humans and machines [and about] the massive human/computer symbiosis developing" (Rucker 1993: 9). The cyberpunk vision of Vernor Vinge, described in his book *True Names* (1999) gives an idea of how such a fusion can be imagined. The larger part of the story takes place in an informational space - "The Other Plane", a space modeled on the internet - in which the protagonist heroes "Mr. Slippery and Erythrina" are immersed. Mr. Slippery and Erythrina are among the few people who have the skills, courage and tools to enter the Other Plane. The Other Plane is swamped, just like the internet, with fast-moving data that needs to be interpreted quickly and accurately in order to survive: "noise" needs to be distinguished from "signal", and "true" information needs to be distinguished from "false" information. By using their subconsciousness (1999: 251) and their intuition (1999: 294) the two cyberpunks manage to find their way through the Other Plane. At one point, they are so completely 'at home' in this realm, that they obtain god-like vision and power and experience themselves as a new species:

> Mr. Slippery looked around him, using all his millions of perceptors. The Earth floated serene. Viewed in the visible, it looked like a thousand pictures he had seen as a human. But in the ultraviolet, he could follow its hydrogen aura out many thousands of kilometers. And the high-energy detectors on satellites at all levels perceived the radiation belts in thousands of energy levels, oscillating in the solar wind. Across the oceans of the world, he could feel the warmth of the currents, see just how fast they were moving. And all the while, he monitored the millions of tiny voices that were now coming back to life as he and Erythrina carefully set the human race's communication system back on its feet and gently prodded it into function. Every ship in the seas, every aircraft now making for safe landing, everyone of the loans, the payments, the meals of an entire race registered clearly on some part of his consciousness. With perception came power; almost everything he saw, he could alter, destroy, or enhance. By the analogical rules of the covens, there was only one valid word for themselves in their present state: they were gods (300, 301).

This fragment manifests one understanding of how the sensorium comes into being: in this case, the sensorium – the expansive, all-knowing, all-sensing, all-understanding body that the protagonists inhabit - is entirely composed of high-technological equipment. This body cannot be imagined outside the context of cyberspace and the protagonists owe their divine perception and power to the extraordinary skill they have with information technology.

A reverse logic informs another high-technological image of the sensorium that had currency in the rave environment of the early 1990s. This image features, for instance, in the book *Cyberia* (1994) written by the Californian culture critic Douglas Rushkoff. In this book, Rushkoff observed that attendees of rave parties in the late 1980s and early 1990s began referring to the internet as the "hardwiring of Gaia". In the 1970s, spiritual seekers used the term "Gaia" to refer to the collective consciousness they believed was ensuing. This term had been coined by the biochemist James Lovelock in the 1960s, who developed the idea that the earth is a

134

self-organizing system in which all living matter functions as a single organism. In the following decades, this assumption became incorporated in the worldview of spiritual seekers as the idea that the earth actually *is* a living organism with a higher consciousness. In the early 1990s, as Rushkoff observed, spiritual seekers in turn conceptualized the Internet as the "final stage in the development of Gaia, the living being that is the Earth, for which humans serve as neurons" (1994: 5).

In Vernor Vinge's *True Names* gnostic perception is facilitated by technology; in the second image of the internet as the final stage in the development of Gaia, technology is depicted as itself a natural outgrowth of an already occurring process of transformation – known in an earlier manifestation as 'Gaia'. Although in both examples the image of the sensorium is sketched in close interaction with 'technology', a very different quality is thus given to the 'relation' between 'technology' and 'nature', between high-tech mediated understanding and gnostic understanding. In the larger cultural environment of New Edge, it is left indeterminate what this relationship exactly entails. In a cultural environment like Burning Man, the co-presence of robots and 5-rhythm dancing, of fractals and yoga, of spacecrafts and tantric sex, of acoustic music and electronic music can be explained in a variety of way: the robots can be seen as sensoriums that 'harness' gnostic understanding in a better way compared to the yoga practitioners, or these instances of transformation may all be seen as expressive of the same 'gnostic drift'; electronic music may be seen as more efficient in launching people into an altered state of mind, or it may seem as "actually quite natural", to use Maya's words.

Conclusion

In this chapter I challenged current theories that recognize the affinity between information technology and spirituality to reside predominantly in the former's immaterial nature and the gnostic longing for disembodied salvation. I argued that New Age gnosis and information technology converge not centrally in the fantasy of disembodied salvation, but in the broader notion of transformational knowledge.

In a comparison between Virtual Worlds and the rave cultural environment, with Burning Man as its epic example, I studied various transformational fantasies and practices of New Edge. These fantasies begin with the fact that raves, Burning Man and Virtual Worlds are imagined as ritualistic environments where one is in a permanent liminal state. The bodies and species that are shaped in these New Edge 'molting rituals' derive their empowerment from the fact that they are permanently malleable. They transcend material, social and physical limitations by being transitional. They are always 'in-between' the physical and the non-physical, the material and the immaterial, the technical and the biological.

Instead of becoming 'immaterial', or fully 'spiritual', these bodies and species are thus predominantly holistic. As such, they can be regarded as contemporary manifestations of the transformational ideals of the 1960s Human Potential Movement. The anticipation of humans evolving into a "diversely gifted race of "gnostic beings" or "cosmic individuals" who consciously embody a full integration of Matter, Mind, and Spirit" (Kripal 2007: 66) still informs the transformational ideals of New Edge. And as the 'Happenings' of the 1960s and the contemporary New Edge infatuation with raves and Virtual Worlds show, both in the 1960s and today these gnostic beings emerged also in relation to high-tech and shaped particular interpretations of high-tech.