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An Ever-Compromised Utopia : Virtual Reality in Thomas Pynchon's Bleeding Edge

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**New Perspectives on Dystopian Fiction
in Literature and Other Media**

Edited by
Saija Isomaa, Jyrki Korpua and Jouni Teittinen

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6.

AN EVER-COMPROMISED UTOPIA: VIRTUAL REALITY IN THOMAS PYNCHON'S *BLEEDING EDGE*

ESKO SUORANTA

Dystopian writing is currently often invoked to describe the strange features of the Western political and social climate, explicate the fabula of a post-truth era, and explain the cruel irrationalities of our global polis. For instance, Margaret Atwood's classic *The Handmaid's Tale*, Jack Womack's underrated *Random Acts of Senseless Violence*, and the canonical works of Orwell and Huxley (not to mention popular young adult fiction, like Suzanne Collins's *Hunger Games*) seem to crowd columns, blogs, and tweets (see, e.g. Alter 2017 or Hogan 2017). While such novels are often mentioned owing to their prescient or close analysis of future dystopian conditions that resemble our own, another avenue of approach is also available to study such conditions. Adapting the idiom of dystopia to novels that do not immediately register or are not marketed as dystopian fiction yields results that uncover the tendencies of our time, which can lead to outcomes characterized as dystopian. Rather than imagine what the world after the deluge might look like, some works of contemporary fiction present dystopian trends and latent phenomena in today's Western culture. Such fiction shows that the contemporary world is in fact characterized by competing tendencies with both dystopian and utopian overtones.

Bleeding Edge (2013, hereafter BE), the latest novel to date by Thomas Pynchon, is typical of the author's work: it is complex, extremely well-researched, and ambiguous. Rather than a portrayal of a future dystopian society, it is a near-historical, postmodern sleuth story. Despite such a categorization, analysing *Bleeding Edge* with the toolkit of dystopia studies sheds light on Pynchon's attitude towards technological development and the opposing forces of democratization and coercion within it. My claim is that Pynchon uses fictional virtual reality to highlight the dystopian and utopian potentials of the Internet in the 2010s. For Pynchon, the virtual is able to challenge some of the dystopian tendencies inherent in the late capitalist world system of commercialization and control.

In portraying the (mis)adventures of Maxine Tarnow, a de-certified fraud-examiner and mother of two, *Bleeding Edge* investigates real and imagined conspiracies around the transformation of the Internet into Web 2.0 as well as events surrounding the terror attacks of September 11, 2001. In my analysis of the novel, I focus on Pynchon's depiction of DeepArcher, a kind of proto-virtual reality, the bleeding edge technology of the novel's early twenty-first century.¹

In the course of the novel, which spans the spring of 2001 to the spring of 2002 and is set mostly in New York, the virtual world of DeepArcher goes through a series of developments not unlike many real-world software projects. It starts out as the venture of two developers, Jason and Lucas. It is intended to offer a virtual escape and departure for an exclusive in-the-know user base as a utopian online haven. As it showcases technical innovations in interconnectedness, mutability, and anonymization, DeepArcher soon becomes compromised as powers bent on control and commodification realize its significance. A backdoor is installed to allow unauthorized access and all sorts of consumerist attempts emerge to capitalize on its uniqueness. Because of the breach and the monetary potential for selling the source code to the highest bidder, Jason and Lucas face a dilemma. Selling out would make them very rich indeed, but then their utopia would be out of their control and most likely turned into something other than they envisioned. At the same time, they cannot keep the commodifying forces out of the system. Finally, they decide to relinquish control and release the source code, thus placing the struggle over DeepArcher's control into the hands of its users, who all are bestowed with the power to change it to their liking by manipulating the code.

Pynchon has been dubbed many things. He has often been termed the paragon postmodern novelist, for his works are treasure troves of ontological uncertainties, cognitive mappings, and intertextual elements, to name just a few features often associated with postmodern fiction. Darko Suvin (1991, 359) locates him "on the margins of SF and 'high lit'" and sees him as a precursor to cyberpunk authors like William Gibson. Furthermore, Pynchon's works have been called "historiographic metafiction" and "metafictional romance" (McHale 2012, 124), instances of encyclopaedic Menippean satire (Coward 2012, 90), and even examples of "*the maximalist*

¹ Bleeding edge technology is technology at its most advanced but experimental stage. It carries the risk of unreliability and unforeseen consequences. Pynchon takes the phrase metaphorically, of course, with the virtual and real bleeding at their edges into one another throughout the novel.

novel” (Ercolino 2014, xi, emphasis original). Such interpretive approaches often collide. For Amy J. Elias (2012, 124), Pynchon’s notion of “polyvocal history” advocates “paranoia as a form of cognitive mapping” where “a notion of history as ‘event’ leads him to construct history as sublime or ‘subjunctive’ history”.

To chart the utopian and dystopian waters of *Bleeding Edge*, I follow Keith M. Booker’s articulation of the distinction between classical dystopia and critical dystopia. The former “focuses on critique of whatever social or political practices are examined in the text”, while the latter critiques “certain negative practices or institutions” but still “retains a strong utopian dimension, emphasizing that there are alternatives to the dystopian conditions being portrayed” (Booker 2013, 7). For Tom Moylan, classical dystopias are “not *anti*-utopian”, that is, they do not “refuse the possibility of radical social transformation”. However, their emphasis is not on alternatives to dystopian conditions, but on “projecting the nightmare society” as a means to obliquely conjure up utopian values (Moylan 2000, 133). This understanding of dystopia is further supplemented by Raffaella Baccolini’s observation that “critical dystopias reject the conservative dystopian tendency to settle for the anti-utopian closure invited by the historical situation by setting up ‘open endings’ that resist closure and maintain ‘the utopian impulse *within* the work’ [...] ‘by rejecting the traditional subjugation of the individual at the end of the novel, the critical dystopia opens a space of contestation and opposition” (“Gender and Genre” 18; qt. in Moylan 2000, 189, emphasis original).²

Such an understanding of critical dystopia as harbouring a utopian strain and resisting reduction and single-truth closure helps bring out nuances in *Bleeding Edge* that have been overlooked by accounts where the novel and its view of technology have been cast in a straightforwardly dystopian light.³ I argue against Siegel’s (2016) interpretation of Pynchon’s take on the virtual as being just another realm of capitalist and governmental schemes of control. Pynchon does engage the cyberpunk

² Note on ellipses: Authorial omissions are marked as “[...]”, while Pynchon’s stylized ellipses are marked “...” to distinguish the two.

³ See Siegel (2016), discussed at length below, but also Cowart (2013, np.) who sees the novel as “[ending up] merely validating the etymology of Utopia (‘no place’)” when “commercial interests begin turning up” in the virtual reality of DeepArcher. See also Collado-Rodríguez (2016, 240) for whom “people are trapped by new and sophisticated bleeding-edge technologies that [...] offer a false and enslaving refuge against the terrors of the physical world”.

discourse between utopian escape and dystopian anxiety that arises from the collation of the virtual and the real and presents postmodern challenges to the cognitive mapping it engenders, but the way DeepArcher develops in the novel does not lead to dystopian outcomes. Rather than signalling a mere warning against the role of technology in society, Pynchon proposes that the democratization of those technologies can defer oppression and give purchase to polyvocal meaning-making in the contemporary world of online and offline difference. Thus, *Bleeding Edge* is no straightforward dystopia, and Pynchon's commitment to a polyvocal understanding of history and his depiction of the continuous struggle over transformative technology reveals the utopian impulse within the novel.

Lost in cyberspace: Utopian escape or dystopian disenfranchisement?

As noted by Suvin (1991, 359), Pynchon straddles genre and literary fiction, being a mainstream favourite for science fiction readers and scholars alike, especially due to *Gravity's Rainbow* (1973). Several of his novels engage with questions of science and technology and, as Inger H. Dalsgaard (2012, 158) notes, "combine an exploration of limits of narrative structure with thematic approaches and (implicit) social commentary and critique", which could also be applied to many key works of science fiction.

It is thus not surprising that *Bleeding Edge* finds important intertexts in cyberpunk fiction, especially due to its poetics of virtual space. One of the central innovations in cyberpunk is its way of narrating information networks in spatial terms so that a network of computers becomes another urban space, simultaneously an inner and outer space where the body does not constrain the mind by spatiality or sensory ability. While such an image of cyberspace continues to inform imaginations and designs of virtual realities, the spatial constraints are very much still in place.

What Pynchon does with DeepArcher in *Bleeding Edge* is to engage the cyberspace motif to describe a low-latency, clunky experience of using computers at the turn of the millennium. To give the era some context, 2001 was the year Windows XP was launched and 2002 saw the release of *Final Fantasy XI Online*. The fact that Pynchon has done his homework is clearly evident in his description of DeepArcher's origins, which references fairly specific items of IT history, especially when describing the anonymization technology behind the system:

DeepArcher's roots reach back to an anonymous remailer, developed from Finnish technology from the penet.fi days [that] pass[es] data packets from one node to the next with only enough information to tell each link in the chain where the next one is, no more. DeepArcher goes a step further and forgets where it's been, immediately, forever. (BE, 78)

Against this historical, material, and, in a sense, realistic background, a stark contrast emerges when DeepArcher is depicted in action:

[T]here is no main page, no music score, only a sound ambience, [...] and the smoothly cross-dawning image of an interior whose detail, for a moment breathtakingly, [...] flar[es] beyond the basic videogame brown of the time into the full color spectrum of very early morning, polygons finely smoothed to all but continuous curves, the rendering, modeling, and shadows, blending and blur, handled elegantly, even with ... could you call it genius? [...] A framed lucid dream, it approaches, and wraps Maxine, and strangely without panic she submits. (BE 75)

This passage captures the novelty and sublimity of highly advanced computer technology, especially when its level of advancement can be seen in the system's graphic representation. The technical jargon of polygons and rendering draws attention to the building blocks of immersive virtual spaces, but the last sentence hints at the transcendent feature of online worlds, that is, their all-encompassing, dream-like nature that is very easy to accept and enter.

The name DeepArcher puns on "departure" (BE 36) which implies the utopian potential of online worlds of solace. On the other hand, its depiction as a virtual space with cyberpunk techniques harks back to dystopian imaginings of disembodied and disenfranchised online minds. The cyberpunk features come to the fore during Maxine's excursion into the virtual. Here Pynchon starts to collate the narration of online events into those offline, with online fictional space behaving in exactly the same way his offline fictional spaces do:

The signs say DEEPARCHER LOUNGE. [...]

"Nice to meet you, Maxine. Going to be with us for a while?"

"Don't know. Who told you my name?"

"Go ahead, explore around, use the cursor, click anywhere you like."

If it's a travel connection that Maxine is supposed to be making, she keeps missing it.

"Departure" keeps being postponed. [...]

"It's all right," dialogue boxes assure her, "it's part of the experience, part of getting constructively lost." (BE 75–76)

And later outside DeepArcher but at another part of the deep web:⁴

A brief tapdance on the keyboard and they're in. [...] The ghosts here are more visible. Strata of tobacco smoke hang unstirred in the windowless space. Scope wizards attend radar displays. Virtual underlings pass in and out with clipboards and coffee. The officer on duty, a bird colonel, regards them as if about to ask for a password. (BE 242)

In the former passage, Maxine's focalization, the dialogue form, and the deictic marker "here" have us read what is supposed to be a 2001 computing experience in the same way as an encounter in cyberspace or the tangible world. In the latter, a wealth of real-world detail merged with the fantastic is used to describe what is essentially an online databank. In fact, Jason Siegel notes a difference between *Bleeding Edge* and *Neuromancer* (1984), the epitome of cyberpunk novels. For him, *Neuromancer* separates the real world and virtual reality despite challenging "the ontological primacy" of "meatspace", while *Bleeding Edge* finds that they are becoming inseparable, that "meatspace is cyberspace" (Siegel 2016, 10). This collation results in confusion and a feeling of dread, which leads to Maxine getting lost in an unmappable and possibly hostile environment: "She's lost. There is no map. It isn't like being lost in any of the romantic tourist destinations back in meatspace. Serendipities here are unlikely to be in the cards, only a feeling she recognizes from dreams, a sense of something not necessarily pleasant just about to happen." (BE 77)

According to the analysis of Darko Suvin (1991, 358), "a viable this-worldly, collective and public, utopianism simply is not within the horizon of the cyberpunk structure of feeling". Even the oft evoked mirrorshades, a symbol of cool rebellion, signal only "a minor degree of effective withdrawal and a large degree of psychological illusion of withdrawal in the wearer" rather than providing an escape from the dystopian societies of cyberpunk fiction (ibid.). It would then seem that the escapist promise of cyberspace would stand in the way of concrete action towards creating utopia. Maxine's experiences, however, give rise to a (sensible) paranoid reaction to the technological sublime she faces as she gets lost in cyberspace, not a feeling of removed and hollow coolness.

Furthermore, the ontological collapse of meatspace and cyberspace plus the direct reference to Maxine being lost without a map connect her

⁴ Without going into too many details of Internet architecture, it is worthwhile to note that DeepArcher is situated in what is called the deep web, that is, the part of the web that is not indexed by search engines.

experience with Brian McHale's and Fredric Jameson's analyses of the effect of late capitalist postmodernity on subjects. McHale summarizes Jameson's notion of the postmodern condition as a challenge to cognitive mapping, that is, to "the postmodern subject's capacity to know where, literally and figuratively, she or he is located in the space of late capitalism" (McHale 2012, 109).

In this way, the anti-utopianism detectable in cyberpunk fiction is joined with a postmodern sense of confusion that in turn leads to Maxine's feelings of anxiety. Jameson (1991, 38) suggests that paranoid fiction could offer a partial answer to the problem of cognitive mapping, which is "a degraded attempt – through the figuration of advanced technology – to think the impossible totality of the contemporary world system" that has emerged in cyberpunk fiction. Pynchon, of course, is a long-time believer in the power of paranoia for trying to understand some of the contemporary world's complexity. Maxine, like Oedipa Maas in *The Crying of Lot 49*, is very much a specimen of the paranoid sensibility, venturing as far as saying "paranoia's the garlic in life's kitchen, right, you can never have too much" (BE 11).

The ontological collapse also has effects on Maxine's experience in meatspace. Later in the novel, the virtual seems to creep into the everyday as Maxine sees DeepArcher phenomena around her on the streets of New York, which denotes "ontological confusion about the difference between real life and virtual reality" (Siegel 2016, 13):

Increasingly she's finding it harder to tell the real NYC from translations like Zigotisopolis ... as if she keeps getting caught in a vortex taking her each time farther into the virtual world. Certainly unforeseen in the original business plan, there arises now a possibility that DeepArcher is about to overflow out into the perilous gulf between screen and face. (BE 429)

This confused feeling when facing the effects of the virtual on the material world echoes the rocket in *Gravity's Rainbow*, which according to Joseph Tabbi (1995, 75) "provides a sublime uplift *as text*, a disembodied web of information that floats above nature's gravity and belies its potential for causing real, material destruction" (emphasis original). In the case of DeepArcher, destruction might look rather different than in *Gravity's Rainbow*, but like "the belief that we can substitute for nature an image of our own complexity" brought on by the rocket, the virtual inspires a similar "new kind of dread and anxiety in the presence of vast technological systems" (ibid.).

The anti-utopianism resonating from *Bleeding Edge*'s cyberpunk intertexts, the challenges virtuality creates for cognitive mapping, and its totalizing effect that harbours the potential for destruction all seem to point to interpretations that would locate the novel in a more or less dystopian genre without much hopeful utopianism. The concepts of postmodern and cyberpunk fiction clearly influence *Bleeding Edge* and have us anticipate a story that allegorically warns against the dystopian situation it depicts or, alternatively, leads to confusion over the possibility of even semi-permanent values. As the case is one of Pynchon's, however, there is more to the story than is evident on the surface.

***Bleeding Edge* as a critical dystopia with a utopian strain**

So where, then, is DeepArcher's and *Bleeding Edge*'s utopian impulse so as to justify its interpretation as a critical dystopia? So far in my analysis, virtual reality has appeared more like another facet of postmodern late capitalism and its dystopian elements; it is simultaneously fascinating and terrifying. The utopian impulse could be located in Justin and Lucas's original vision of DeepArcher as a "grand-scale motel for the afflicted, a destination reachable only by virtual midnight express", a combination of "a California that had never existed, safe, sunny all the time" and a place "a little darker, where it rains a lot and great silences sweep like wind, holding inside them the forces of destruction" (BE 74). Furthermore, the connections Maxine makes between meatspace and cyberspace offer a more complete view of DeepArcher as a utopian project in constant danger. Thus, the way Pynchon resolves the conflicts between the safe and sunny solace and the forces of destruction brings out another level of his virtual utopianism.

Maxine, on a nightly motorboat excursion, observes the Island of Meadows, a nature reserve next to the defunct Fresh Kills landfill, and connects DeepArcher and the projects to commodify the virtual reality to similar tendencies relating to actual landscapes and real estate in New York:

The little island reminds her of something, and it takes her a minute to see what. As if you could reach into the looming and prophetic landfill, that perfect negative of the city in its seething foul incoherence, and find a set of invisible links to click on and be crossfaded at last to unexpected refuge, a piece of the ancient estuary exempt from what happened, what has gone on happening, to the rest of it. Like the Island of Meadows, DeepArcher also has developers after it. Whatever migratory visitors are still down

there trusting in its inviolability will some morning all too soon be rudely surprised by the whispering descent of corporate Web crawlers itching to index and corrupt another patch of sanctuary for their own far-from-selfless ends. (BE 167)

The real New York stands for virtual reality and vice versa, the landfill a negative of New York City, the island a stand-in for DeepArcher, both virgin lands to be cultivated and colonized. They could both be a refuge or sanctuary, untouched landscapes with the potential for choice, safe from trespassers and indexers with reductionist agendas – and thus with utopian potential.

This pristine virtual utopia becomes compromised when DeepArcher is penetrated through a backdoor and the powers of the market are let loose:

She can't help but noticing this time how different the place is. What was once a train depot is now a Jetsons-era spaceport with all wacky angles, jagged towers in the distance, lenticular enclosures up on stilts, saucer traffic coming and going up in the neon sky. Yuppified duty-free shops, some for offshore brands she doesn't recognize even the font they're written in. Advertising everywhere. On walls, on the clothing and skins of crowd extras, as pop-ups out of the Invisible and into your face. (BE 354)

The dystopian late capitalist impulses appear as futuristic excess and seeming complexity at the service of the market. The wealth of brands might not be specifically recognizable, but its very brandedness and commercial nature is immediately obvious. The alternate world of escape and solace that held a utopian potential due to its untouched nature is reduced to closure, as a single-purpose, single-truth dystopian system. Siegel sees this moment as pivotal in DeepArcher's development. He reads it as proof that the virtual world "represents the way in which late capitalism has neutralized the Internet's potential to increase freedom" (Siegel 2016, 18). For him, the backdoor "opens the floodgates and allows anyone to access the site", but this is not "a democratizing turn of events [...] it defeats the purpose of the online refuge and violates the spirit in which it was conceived" (ibid., 19).

This interpretation is problematic for two reasons. First, the teleological view of DeepArcher grants primacy to the original spirit behind its creation, which is in focus in the novel's descriptions of its refuge and solace. However, the guardians of this spirit, that is, its creators Justin and Lucas, have re-evaluated their initial plans, as becomes clear in Lucas's reply to Maxine's queries about the effect of the backdoor: "Downside of being proprietary, always guarantees a backdoor sooner or later. [...] We're good,

fact we were never comfortable with that old model anyway” (BE 356). To be sure, their vision may have been subverted, but the authors have in fact moved on and confess that maybe the original vision was not the best of all possible virtual worlds.

Second and more importantly, DeepArcher ultimately becomes something else entirely than a mere escapist fantasy. In order to unpack its development, we should understand how resistance works in a critical dystopia. Baccolini and Moylan outline the strategy of resistance to dystopian conditions as follows: “the process of taking control over the means of language, representation, memory, and interpellation is a crucial weapon and strategy in moving dystopian resistance from an initial consciousness to an action that leads to a climactic event that attempts to change the society” (Baccolini & Moylan 2003, 6). As such, *Bleeding Edge* can be seen as engaging in self-reflexive “genre blurring” that critical dystopias (and Pynchon’s novels, one might add) take part in to “expand [their] creative potential for critical expression” and to recognize “the importance of difference, multiplicity, and complexity” in order to build up “resistance to a hegemonic ideology” (ibid., 7–8). The multiple means of language, representation, memory, and interpellation are exactly what are at stake in the utopian/dystopian struggle surrounding DeepArcher. Who gets to dictate the overall meaning and significance of the virtual and what will they make of it? Just as the utopian image of the Island of Meadows suggests open-endedness, possibility, and choice, the late capitalist space mall signals reduction, a single-purpose choice, in the sense of consumer choice only.

Baccolini and Moylan’s strategy of taking over the means of meaning-making could appear as a fruitful approach to the threat to Justin and Lucas’s utopian haven, since all they would need is a climactic event, a revolution of sorts to seize the means of ideological production. Pynchon clearly sees the importance of meaning-making, but the strategy of resistance his characters opt for is different. Rather than seize control of the means of representation in a virtual revolution against capital, Justin and Lucas relinquish control over their creation and DeepArcher is released as open source. Siegel interprets this move as further proof that Justin and Lucas’s utopian project fails and that Pynchon is showing virtuality as a tool for late capitalist drives and control by governments and corporations. According to him, releasing DeepArcher as open source is what makes it “commercialized, gentrified, yuppified, and opened up to global consumer capitalism” (Siegel 2016, 19). Certainly, (virtual) society might not be changed as such as Baccolini and Moylan would have it, nor does

DeepArcher regain its status as a place of solace for the chosen few, and the dystopian late capitalist forces are not thwarted once and for all.

Nevertheless, Siegel's view seems to hinge on a misreading of chapter 33 of the novel (an excerpt from which is given above), where it is in fact the penetration via the backdoor of the system that has brought on the commodification of the place, not the subsequent choice to release the code as open source. Further on in this chapter, having seen the effects of the backdoor that have accumulated over a period of weeks since September 11, Maxine converses with Lucas within DeepArcher. She learns that the release as open source has just occurred. In this way, it could not have brought on the complete transformation of the virtual world into a virtual mall.

DeepArcher goes through three separate stages of development in the course of the novel. It starts out as an oasis of supposed solace, then becomes a commercialized travesty of its former self, before finally turning into an open-ended virtual reality that resists closure. The implications of this final move are revealed much later than at the moment when Lucas informs Maxine that they have "[j]ust sent the tarball out" (BE 356), and it becomes clear that the late capitalist virtual dystopia has been transformed into something new:

Since it went open source and welcomed in half the planet, none of them who they say they are, [...] anybody is likely to be wandering around the site, herds of tourist-idle, cop-curious, the end of life below the spiders as we've known it, ROM hackers, homebrewers, RPG heretics, continually unwriting and overwriting, disallowing, deprecating, newly defining an ever-growing inventory of contributions to graphics, instructions, encryption, escape ... the word is out, and it seems they've been waiting for years, such is the what's called pent-up demand. Maxine is able to settle in among the throngs, invisible and at ease. (BE 426)

The list of various new DeepArcher users and their activities indicates that the virtual reality has become a playground for online makers of meaning rather than a tug-of-war between the forces of commodification and surveillance. In the open source world, there is no centre of dystopian or capitalist power to dictate the rules or purpose for DeepArcher, and meaning-making becomes a decentralized effort of a multitude of users. Even Maxine's feelings of anxiety have dissipated and she becomes another contributor to the multitudinous totality of DeepArcher. This brings into focus one of the ambiguities of the novel's title, as the bleeding edge technology of DeepArcher becomes, in a sense, stabilized. Harboring potential for both transformative innovation and destruction through

unreliability, its ultimate significance lies not in commercial applications or technological inventiveness, but rather in the fact that DeepArcher becomes a platform for a multitude of voices and avenues of continuous creation. The stabilization of the edge's bleeding is not closure, but openness for new takes on the utopian/dystopian potentials inherent in potentially transformative technology.

As their own means of representation, memory, and interpellation have been compromised by dystopian late capitalist impulses, Lucas and Justin choose to disseminate their already tenuous power entirely to the online masses. They let go of their own utopian project, a move that seems to remain as the only way to serve their ideals of freedom, escape, and departure. An example of this can be seen in Zigotisopolis, a virtual city within DeepArcher created by Maxine's children Ziggy and Otis. It is "a version of NYC as it was before 11 September 2001 [...] their more merciful [...] not-yet-corrupted screenscape" in which the boys are "at home already" (BE 428–429). Even if the utopia is not achieved as Lucas and Justin originally wanted to see it, the utopian potential is salvaged. Going open source leads to a myriad of ways for a plurality of people to craft meaning in and with DeepArcher, not to a closed, totalitarian system of consumerist value exchange populated only by advertisers, consumers, and surveillance.

Engineering the twenty-first century

It seems to me that in *Bleeding Edge*, the climactic event that would effect change in society does not really occur. Even September 11 merely reinforces the paranoid sensibilities in Pynchon's characters, and the changes that are brought on by the attacks do not lead to a brighter tomorrow. This is in line with the observation that Pynchon has, after *Gravity's Rainbow*, replaced "the overwhelming dread of the one great unimaginable event [...] with a series of distractions, minor shocks, and endless stimulations of consumer desire" (Tabbi 1995, 76). The novel defers conclusion and closure, especially as DeepArcher's opening seems like an anti-climax, and the conspiracies around it, including the World Trade Center attacks, are not fully uncovered either despite Maxine's investigations.

DeepArcher's pristine nature is partially restored when its code is released, the playing field becomes levelled, and the power over representation is relocated and disseminated. In this way, DeepArcher (and

our contemporary Internet) appears as a machine to create meaning by a multitude of voices, which fits Pynchon's view of polyvocal history. The virtual thus remains ripe for resistance against dystopian impulses, even if the utopian potential might never see complete fulfilment or even stability. The utopia remains ever compromised, but as such, non-finite and kept open to the possibility of change. In terms of Maxine's observations on the commonalities of the Island of Meadows and DeepArcher, it is interesting to note that her prophetic vision of them succumbing to developers does not come true in either case. DeepArcher is not reduced to a commercial online property and, just as in the novel, to this day the actual Island of Meadows remains a patch of preserved marshland next to Staten Island and the defunct Fresh Kills landfill.

Finally, the novel's ending may court controversial interpretations. Just as at the beginning of the novel, Maxine is about to see her children to school, but this time, they go on their own. Siegel (2016, 23) interprets the ending as one of heightened fear, since physical danger has been accompanied with virtual threats. An alternative reading would suggest that Maxine and her children Ziggy and Otis are thus compared to Justin and Lucas and their brainchild, DeepArcher. Maxine remembers her sons' home in the virtual:

[S]he flashes back to not so long ago down in DeepArcher, down in their virtual hometown of Zigotopolis, both of them standing just like this, folded in just this precarious light, ready to step out into their peaceable city, still safe from the spiders and bots that one day too soon will be coming for it, to claim-jump it in the name of the indexed world. (BE 476)

While the threat of the reductionist forces is there in the virtual world, like the threat of actual predators is present in the actual world, Maxine gives in to the maturation of her children and lets go of her need for control. By doing so, a more democratic, independent, and meaningful existence is possible for Maxine's biological progeny and Justin and Lucas's virtual progeny. Of course, the world has not become any less dangerous to Ziggy and Otis – quite the contrary – but all the different warnings and revelations about her world lead Maxine to realize the value of choosing freedom over security. Again, the bleeding edge keeps bleeding, still with risks arising from its unpredictability, but at the same time open to the creation of meaning, resisting closure.

Importantly, Ziggy and Otis are early adopters of technologies like DeepArcher, not only as passive users, but as active makers of meaning and negotiators of representation, as their collaborative virtual home

Zigotopolis shows. They are the makers of polyvocal history, one that is increasingly often written in code and exists primarily in the virtual. Their millennial technological fluency gives them an edge in the ongoing negotiation over online control and agency. Where Siegel (2016, 23) finds a partial solution to the “posthuman condition” of *Bleeding Edge* in the way several relationships are resolved in positive ways (Maxine’s ex-husband is reunited with his family, two hacker characters move in together, and an estranged mother patches things up with her daughter), this partial solution must be supplemented by Pynchon’s take on the struggles surrounding DeepArcher. Not only is familial collectivity needed to create units that resist the dystopian impulses of commercialization and control, but democratic meaning-making is necessary as an arena of enacting that resistance. It seems that, to Pynchon, the place to find such meaning-making might be the virtual.

Analysing Pynchon’s *Gravity’s Rainbow*, Inger H. Dalsgaard (2012, 162) sees the “engineering of the rocket [as] a story about the engineering of the kind of postwar world we have inhabited since 1945”. In *Bleeding Edge*, Pynchon performs a similar operation as regards the post-9/11 world through the engineering of DeepArcher. His choice to bring the struggle between utopian and dystopian powers into an ongoing state reminds his readers that the Internet, or any other aspect of our technocultural society, is not a fixed entity with a singular destiny. Rather, he draws our attention to the idea that Baccolini and Moylan (2003, 5) also articulate in their depiction of the importance of the constant renegotiation of meaning: “The material force of the economy and the state apparatus controls the social order and keeps it running; but discursive power, exercised in the reproduction of meaning and the interpellation of subjects, is a complementary and necessary force”. While Pynchon seems pessimistic about dismantling or overthrowing state and capital, he puts his faith in the possibility of freedom and democracy through successful meaning-making. As Tabbi (1995, 77) points out, even if radical freedom eludes his characters, it is of continuing concern to Pynchon.

Where then to situate *Bleeding Edge* with regards to the terminology of dystopia studies? One option could be Suvin’s *fallible dystopia*, which arises out of “both the shock of Post-Fordism and its imaginative mastering” (Suvin 2003, 196). He detects in some science fiction texts a dystopian society of textual action, either as directly extrapolative or more subtly analogous versions of the writer’s reality. In a fallible dystopia, the world is “resistible and changeable, by our hero/ine, often with great difficulty” (ibid.). Such characterizations could be applied to *Bleeding Edge*, but

a fuller picture might emerge by borrowing Lyman Tower Sargent's conclusion arising from his notion of *flawed eutopia*. Despite being flawed, eutopia must be committed to "knowing that it is not perfect [...] because [...] we have the opportunity [...] of landing there and then setting off after another" (Sargent 2003, 230). This casts Pynchon, somewhat surprisingly, in relation to Isaac Asimov, whom Jari Käkälä (2016, 222) sees as an author who "creates a world that [...] can never reach [...] a [...] lasting utopian state" and that "can, and must, constantly adjust its course on an endless journey toward utopia". While Käkälä makes it very clear that Asimov does not write in the critical mode, and that Pynchon certainly is no Asimov, the apparent incompleteness in the struggle toward utopia is something the two authors share. Where Asimov "steers [...] away from open-ended plurality of critical utopia" (Käkälä 2016, 219), plurality is exactly what Pynchon seems to suggest as the only possible course for the flawed eutopian project Sargent describes. Asimov's universe progresses at the hands of his galactic engineers without regard to its constituents and "irons out all difference" (ibid.), while Pynchon comes to the fore as a social critic who attempts to contain the multitudes of societal life, finding possibilities in that very difference.

In this sense, Pynchon's dynamics in *Bleeding Edge* might not adhere to Suvin's or Sargent's terminology. To me, through the application of the vernacular of critical dystopia, the novel might be best characterized as an ever-compromised utopia, in which the difficulty of change, of maintaining plurality, is great and demands the sacrifice of control without the guarantee that a dystopian project is defeated or a utopian one reached.⁵ Its utopianism is not in the vein of the no place, but rather very much anchored in the here and now of contemporary society, resulting in its ever-compromised nature. Despite these complications and the relinquishing of centralized control, Pynchon seems to imply that what is important to maintain is the possibility of freedom so as not to halt the progression from one flawed utopia to another.

⁵ While the study of a single novel is not enough to show that "ever-compromised utopia" is on par with terms like "critical dystopia" or "classical dystopia", it might open an avenue of approach to other works similar to *Bleeding Edge* that are not necessarily categorized into the dystopian or utopian genres. Novels benefiting from a similar analysis would include William Gibson's contemporary Bigend Trilogy (2003–2010), in which characters are not invested in overthrowing the oppressive structures of their world, but still manage to find forms of resistance and agency within them (for more on power and agency in the Bigend Trilogy, see Suoranta 2014).

Conclusion

While *Bleeding Edge* is not straightforwardly representative of contemporary dystopian fiction as such, analysing it with the tools of critical dystopia and related concepts offers a fuller understanding of its approach to virtual reality and, by extension, to technological development in the post-9/11 world. From this approach, it becomes clear that Pynchon's themes of paranoia, polyvocal history, and highly referential intertextuality gain a new area of application in the near-historical account of *Bleeding Edge*. Like with the rocket in *Gravity's Rainbow* or the founding moments of the American republic in *Mason and Dixon*, Pynchon has turned his authorial gaze onto another historical watershed after which everything is and is not different.

Invoking science fictional images of cyberspace, Pynchon brings forth both the possibility of utopian escape and dystopian disconnectedness inherent in humankind's attempts to broaden its experiential horizon into the virtual. He makes clear the transformative nature of even fairly low-tech computer environments when they are brought into the everyday life of unsuspecting users. The virtual is appropriately accompanied by feelings of dread as well as excitement. This leads to considerations of postmodern challenges to cognitive mapping that are already considerable due to the undecipherable nature of late capitalist reality and are then further complicated with the virtual where nothing may be what it seems.

Maxine's attempts to navigate this transformed reality lead her to make connections between the actual and virtual worlds as flip sides of one another. As the Island of Meadows passage shows, late capitalist projects to index, reduce, and commodify are similar online and offline. DeepArcher's turn towards the excessively commercial after the installation of the backdoor signals the tenacity of late capitalist development to relegate everything novel and utopian to a subservient position. However, the means of language, representation, memory, and interpellation as keys of resistance to dystopian forces are shown to be able to act as a sort of reset in a commercialized system. In *Bleeding Edge*, this does not occur as an overthrow of the material conditions that make late capitalism possible, but as a democratization of the means of meaning-making. By letting go of control, Justin and Lucas are able to maintain the utopian potential of their project, even if they lose the possibility of influencing its end result or protecting some original vision.

As the final consequences of DeepArcher's open source move are not revealed and the crisis brought on by September 11 is left unresolved,

Bleeding Edge ends on an ambiguous note. The world, virtual or otherwise, does not become free of danger or reductionist agendas, but the struggle of meaning-making goes on, as Ziggy and Otis are set free to venture to the scary world outside their home, however reluctantly, by Maxine. *Bleeding Edge* might not unproblematically appear as either Suvin's fallible dystopia or Sargent's flawed utopia, but the utopian project of polyvocal history-in-the-making appears ever-compromised and subject to change.

Works Cited

- Alter, Alexandra. 2017. "Boom Times for the New Dystopians." *New York Times*, March 30. <https://www.nytimes.com/2017/03/30/books/boom-times-for-the-new-dystopians.html>, retrieved 26 April 2017.
- Baccolini, Raffaella and Tom Moylan. 2003. "Introduction: Dystopia and Histories." In *Dark Horizons: Science Fiction and the Dystopian Imagination*, Raffaella Baccolini & Tom Moylan (eds). New York: Routledge, 1–12.
- Booker, M. Keith. 2013. "On Dystopia." In *Dystopia*, M. Keith Booker (ed.). Ipswich: Salem Press, 1–15.
- Collado-Rodríguez, Francisco. 2016. "Intertextuality, Trauma, and the Posthuman in Thomas Pynchon's *Bleeding Edge*." *Critique: Studies in Contemporary Fiction* 57 (3): 229–241.
- Cowart, David. 2012. "Pynchon in Literary History." In *The Cambridge Companion to Thomas Pynchon*, Inger H. Dalsgaard, Luc Herman, & Brian McHale (eds). Cambridge: Cambridge University Press, 83–96.
- Cowart, David. 2013. "'Down on the Barroom Floor of History': Pynchon's *Bleeding Edge*." *Postmodern Culture*, 24 (1): np, retrieved 28 April 2017. doi: 10.1353/pmc.2013.0060
- Dalsgaard, Inger H. 2012. "Science and Technology." In *The Cambridge Companion to Thomas Pynchon*, Inger H. Dalsgaard, Luc Herman, & Brian McHale (eds). Cambridge University Press, 156–167.
- Elias, Amy J. 2012. "History." In *The Cambridge Companion to Thomas Pynchon*, Inger H. Dalsgaard, Luc Herman, & Brian McHale (eds). Cambridge University Press, 123–135.
- Ercolino, Stefano. 2014. *The Maximalist Novel: From Thomas Pynchon's Gravity's Rainbow to Roberto Bolaños 2666*. New York & London: Bloomsbury.
- Gibson, William. 1995. *Neuromancer*. London: Voyager.

- Hogan, Ron. 2017. “‘There’s Too Much Reality’: On Jack Womack’s *Random Acts of Senseless Violence*.” *Los Angeles Review of Books*, 22 February: np <https://lareviewofbooks.org/article/theres-too-much-reality-on-jack-womacks-random-acts-of-senseless-violence/>, retrieved 26 April 2017.
- Jameson, Fredric. 1991. *Postmodernism, or, the Cultural Logic of Late Capitalism*. London & New York: Verso.
- Käkelä, Jari. 2016. “The Cowboy Politics of an Enlightened Future: History, Expansionism, and Guardianship in Isaac Asimov’s Science Fiction”. PhD thesis, University of Helsinki.
- McHale, Brian. 2012. “Pynchon’s Postmodernism.” In *The Cambridge Companion to Thomas Pynchon*, Inger H. Dalsgaard, Luc Herman, & Brian McHale (eds). Cambridge: Cambridge University Press, 97–111.
- Moylan, Tom. 2000. *Scraps of the Untainted Sky: Science Fiction, Utopia, Dystopia*. Boulder: Westview Press.
- Pynchon, Thomas. 2013. *Bleeding Edge*. London: Jonathan Cape.
- Sargent, Lyman Tower. 2003. “The Problem of the ‘Flawed Utopia.’” In *Dark Horizons: Science Fiction and the Dystopian Imagination*, Raffaella Baccolini & Tom Moylan (eds). New York: Routledge, 225–231.
- Siegel, Jason. 2016. “Meatspace is Cyberspace: The Pynchonian Posthuman in *Bleeding Edge*.” *Orbit: A Journal of American Literature* 4 (2): 1–27.
- Suoranta, Esko. 2014. “Agents or Pawns? Power Relations in William Gibson’s Bigend Trilogy.” *Fafnir – Nordic Journal of Science Fiction and Fantasy Research* 1 (1): 19–31.
- Suvin, Darko. 1991. “On Gibson and Cyberpunk SF.” In *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodern Fiction*, Larry McCaffery (ed.). Durham & London: Duke University Press, 349–365.
- Suvin, Darko. 2003. “Theses on Dystopia 2001.” In *Dark Horizons: Science Fiction and the Dystopian Imagination*, Raffaella Baccolini & Tom Moylan (eds). New York: Routledge, 187–201.
- Tabbi, Joseph. 1995. *Postmodern Sublime: Technology and American Writing from Mailer to Cyberpunk*. Ithaca & London: Cornell University Press.