Posthuman Emotion Artificial Intelligence in Postcyberpunk Cityscape:
A Multimodal Reading of Blade Runner 2049 (2017)

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ABSTRACT

Within visual culture, postcyberpunk films are best approached as 'places of Otherness' whereby human identity and agency are downplayed and posthumans are magnified in highly technopolic societies marked with scientific determinism. Postcyberpunk treats the posthuman as an enclave oscillating between utopian and dystopian spaces, potentially, and optimistically, creating a space for humanity to be reassessed and renegotiated. The hybridity pertinent to the film genre and the inner and outer topographies of posthuman representation are insightful investigative vantage points of multimodal inquiry for the socio-political and technocratic implications they underlie. Against this backdrop, Blade Runner 2049 is one fertile example grounded in paradoxes and ambiguities around the contradiction between humans and replicants, artificial intelligence and super-large enterprises. With technology seamlessly integrated into social spaces and posthuman bodies, Blade Runner 2049 is arguably structured as an emotional journey composed of multiple spatial layers, ruptures and bifurcations expressed through socio-political capitalist projections. The article adamantly argues for new philosophical perspectives and praxis in redefinition of the social relationship between humans and posthumans.

Keywords: Blade Runner 2049; emotion artificial intelligence; postcyberpunk cityscape; posthumanism; transhumanism

PRELUDE

Since its inception in the 1980s as a sub-genre of Science Fiction films, dystopian cyberpunk signaled a break from previous traditions and witnessed a substantial growth as the literary expression of postmodernism (Diggle and Ball 2014; Lovén 2010). Cyberpunk narratives, as cultural practices, tap into the transformation into colossal megacities and the anxieties surrounding the nature of humanity and posthuman imaginaries amidst the deluge of advanced technology (Zaidi and Sahibzada 2020). In these narratives, control is no longer envisioned from a cybernetic impartial lens; rather, it is the inherent suppressive structures and institutions that take full accountability of the status quo in Western societies (McFarlane, Schmeink and Murphy 2019). Power is exercised not only through preeminent android technologies but also through the very cyborgs who have become mere objects of control in surveillant capitalist and technocratic communities. Cyberpunk literary works have profoundly influenced the narrative framework and aesthetic style of dystopian films, namely Ridley Scott's feature film Blade Runner (1982), based on the novel "Do Androids Dream of Electric Sheep?" (1968) by Philip. K. Dick (which is considered a precursor literary work to cyberpunk). The film popularized cinematic cyberpunk whereby global corporations take the place of nations, and their ruthless capitalism exiles the disenfranchised into a life of hustling on the fringes of the city.

In the 1990s, a new wave matured within the cyberpunk genre to aptly articulate the apprehensions of postmodernist contemporary life, coined by Person

(1999) as postcyberpunk. Whereas the essence of cyberpunk is chaos and disorder, in the world of postcyberpunk chaos is eliminated and order is re-established by a massive system of central power and dominion perpetuated through novel cyber and virtual reality technologies (Murphy and Vint 2010), on the one hand, and through taxonomic identifications of 'self' and 'other', on the other hand. Since the 1990s, postcyberpunk narratives have heavily invested on multi-dimensional socio-cultural and technological themes pertinent to the predominance of international corporate conglomerates and the creation of hyper-real places and simulacra with an acute sense of postmodern global malaise.

Within visual culture, postcyberpunk has become a well-established sub-genre, with cinematic works at the forefront such as Artificial Intelligence (2001), Her (2013), Transcendence (2014), Blade Runner 2049 (2017), Alita: Battle Angel (2019), among many others. A three-fold configuration defines these works, namely: fully commercialized dystopian cityscapes in distant futures void of life; multimodal aesthetic grandeur symptomatic of the extrapolation of late capitalism and postmodernity; and the display of all-powerful humanoids developing self-sentience. Such films are best approached as 'places of Otherness' whereby human identity and agency are downplayed and posthumans are magnified in highly 'technopolic societies' (Postman 1993) – societies marked with pessimism, skepticism and scientific determinism (Murphy and Schmeink 2018).

Peculiarly, postcyberpunk power extends from the dystopian cityscape space to the posthuman Artificial Intelligence (AI) bodily space as the new transcendent 'self'. The posthuman body, as a consequence, gains momentum. While posthumans in orthodox cyberpunk narratives are essentially depicted as 'dystopian enclaves', postcyberpunk treats the posthuman as an enclave oscillating between utopian and dystopian spaces, potentially, and optimistically, creating a space for humanity to be reassessed and renegotiated. In postcyberpunk films, posthumans are featured in aesthetically complex, philosophically disturbing and ideologically ambivalent sensibility. Against these depictions, engagement with the postcyberpunk

cityscape is a fully embodied activity that is inseparable from the social and material practices of a given time and place. Since place does not appear *ex nihilo* but is part of a process, the status of posthumans and their allegorical politics are embedded in the film's representations of bioengineered life. A new conceptualization of posthuman merging the categories of city space and body space into a 'semiotic aggregate' (Scollen and Scollen 2003), that is, a complex spatio-temporal configuration featuring a spectrum of overlapping rhythms is, as a consequence, mandated.

Acknowledging that place, space and body are inherently embodied, the current research endeavor scrutinizes posthuman representation, in terms of embodied emotion Artificial Intelligence (AI) in conjunction with dystopian cityscapes. Emotion AI is understood here as the embodied emotional transcendence (in terms of simulated artificial affects, moods, perceptions, intentions, etc.) associated with some level of human intelligence (Broussard 2018; DeFalco 2020; De Togni et al. 2021; Fahn 2019; Frankish and Ramsey 2014; McStay 2020) and dynamically produced through spatial engagement with the surrounding environment.

Multimodal Critical Discourse Analysis (MCDA) scholarship has much to gain from a fuller engagement with dystopian cityscapes in conjunction with posthuman emotion AI. MCDA is concerned with the synergy of semiotic resources and sensory modalities for poly-semiotic communication to effectively take place. Several critical discourse analysis studies place significant emphasis on the multimodal legitimation of social practices in hybrid means of communication (See, for example, Elyamany 2020, 2021; Ledin and Machin 2019; Machin 2016; Machin, Caldas-Coulthard and Milani 2016; Machin and Mayr 2012; Zhao et al. 2019).

Although MCDA unveils the ideological and social practices situated in the intersemiosis prevailing cinematic discourse (Bateman and Schmidt 2013; Piazza, Bednarek and Rossi 2011), it barely directs attention to the indexicalities of posthuman identity construction from spatio-temporal and cognitive standpoints. Arguably, the posthuman body, conceptualized as embodied space(s), incorporates topographical metaphors, ideologies and spatial orientations worthy

of scrutiny. Introducing embodiment into spatial analysis makes grappling with this interconnection tantamount in tracing out potential multimodal patterns of posthuman emotion AI representations.

BLADE RUNNER 2049

Directed by the French Canadian Denis Villeneuve, Blade Runner 2049 (2017) is a film ushering in the time of the post-anthropocene and is replete with distinct conceptual, audio-visual and spatio-temporal representations. It has been acclaimed, analyzed and interpreted by scholars and critics alike. Blade Runner 2049 (henceforth BR2049) is a recapitulation of, and a writing back to, Blade Runner. Whereas the original film focuses on the production, legal and ontological status and subsequent autonomy of replicants (Sammon 2017), the sequel places emphasis on their capacity of procreation (i.e. reproduction). In Blade Runner, Tyrell Corporation produces genetically engineered robots, dubbed replicants to emphasize their artificiality as opposed to human authenticity (See Figure 1).

Although they are hard to differentiate from human beings with the naked eye, they are bounded by a four-year life span and implanted with 'prosthetic memories' to have human-like responses and manage their regular experiences. BR2049 picks up 30 years after the original film. In the sequel, following the aftermath of environmental collapse, Niander Wallace takes over the bankrupt Tyrell Corporation. New restrictions on the design and control have been put in place to produce a new line of physically redoubtable and emotionally dry replicants who live legally on Earth and obey their human masters. While humans are not stronger, more intelligent, or cybernetically enhanced, replicants are nothing more than the slaves of the galaxy, seemingly having few to no rights.

Although permitted to live on their own and earn a living, replicants are 'retired' if they cannot fulfil their purpose. BR2049 follows the story of Officer K, a replicant of a new Nexus-9 model who works for the Los Angeles Police Department (LAPD) as a blade runner, that is, a police officer commissioned to hunt and kill rogue replicants.

Figure 1. Screenshot of the headquarters of Wallace Corporation featuring bio-engineered replicants in Blade Runner 2049.

MULTIMODAL READING

Postcyberbunk Cityscape

In full expression of the inherent cosmic disorder and polyglot chaos, BR2049 hosts an intensely uneven patchwork of dystopian, post-utopian and heterotopian polyrhythmic patterns that are spatially proximate yet institutionally estranged (See Figure 2). These rhythms characterize the post-anthroposcene of the city creating 'territory-rhythm complexes' (Brighenti and Karrholm 2018). That is, several patterns of rhythms intersect and interplay in assemblages, forming a complex of spatial arrangements that, in turn, mark key paradigmatic turns in the filmic narrative, in general, and posthuman emotion AI representation, in specific.
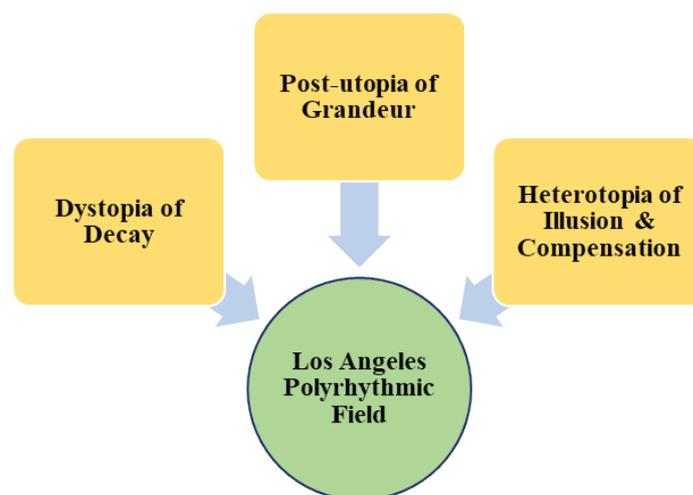

Figure 2. The dystopian/post-utopian/heterotopian triad in the cityscape of Los Angeles in BR2049.

Starting from the opening scene, Villeneuve produces an alarming aestheticized visual register and disturbed

vision of humanity, depicting in the process a transformed West ravaged by ecological anxieties. The film's preoccupation with the visualization of the post-anthropocene is prominently embedded in its cinematography, which frequently favors non-human points of view and extreme long shots. By virtue of the eloquent aerial long-range perspectives and the spectacular expansion of zoom-in and zoom-out possibilities, the urban landscape paradigm serves as a cultural portrait of a dystopian narrative centered on the loss of human control over nature.

In this seeming impasse, the gigantic scale of the extreme long shots, especially in the extended long takes of the barren landscapes that visually communicate the film's anthropogenic aesthetic, morphs and syncs up with the shifting position of humanity and utterly dwarfs the human figure in relation to the frame, twice removing them from such inhospitable landscapes. Unable to conceive of a future that moves beyond the existing order, Villeneuve leaves no room for a positive change to the hostile and precarious mode of existence in this 'dystopia of decay.' The once prosperous West has turned into an apocalyptic 'continuous city' (Lerup 2017) in an ever-warming planet (Hern and Johal 2018). This very scenario serves as an allegory of the social and human-induced ecological decay of the present nation and continued decline of contemporary multinational capitalism.

In 2049, LA is best regarded as a 'postmetropolis' (Soja 2000) where socio-economic cleavages are deepened. The ironic dichotomies of ecological collapse/renewable energy and free/slave labor allude to the current global collapse in climactic, financial and sociopolitical realities. As a space of capital and a radical utopian blueprint of techno-political systems, Wallace Corporation now rules the world. It not only maintains an antagonistic monopoly on technological developments that enslave the replicants and oppress the human overlords on Earth, but constantly seeks to advance android technology while simultaneously pursuing harsh re-bordering strategies to control populations as well. The off-world colonies provide a better life, being a utopia for the elite who are reluctant to risk exposure to (and barely venture into) the lower regions of the city.

As Gomel (2018) argues, "Utopias are always guarded by fences, walls, oceans or cosmic distances; protected from the pollution of history; kept pure and undefiled" (p. 6). Indeed, it is this 'enclosure' that characterizes Wallace's corporate complex. Structurally, the corporation is portrayed as a massive, 300-story building. The gigantic, postmodern style of Wallace Corporation (not seen in entirety, nor fully accessible) induces a sense of atrocity, yet the interior exudes an inviting warmth. Whether its uniform color, large and tough high-class architecture, simple decoration or the sense of line and geometry created by light and shadow, the interior structural space aims to highlight the uniqueness and superiority of the elite. Wallace Corporation is best described as a political 'post-utopia' (Bell 2017) that relates to the current geopolitical situation.

Villeneuve's visualization of humanity's ugly future is tempered by the beauty of the replicants who stand in sharp contrast with the grim milieu of LA. The dystopic scenario induces the need for redemption, a pseudo humanity that restores what has previously been destroyed. Paradoxically, experiences that transcend life in the biological sense acquire utopian significance and, as a consequence, the misé-en-scene acquires an active role in the film and the merit of the narrative goes well beyond its embodied aesthetics. The crux of argument is that Wallace Corporation par excellence, with both its inclusionary and exclusionary practices, brings embedded heterotopias into being in vastly different ways. Like a factory, it is both indoors and outdoors.

At first glance, the corporation can be considered a heterotopia of 'deviance' where a highly controlled environment prevails and relationships between humans and posthumans are organizationally structured. However, as both a physical and conceptual space, it is an aspirant post-utopia, a fantasy in the messy and imperfect real world representing a safe haven for the protagonists. Just like Foucault's remarks on the ship as a heterotopia, Wallace Corporation is a microcosm of a placeless place that functions according to its own rules and gives the illusion to replicants that they have life and status and simultaneously simulates a utopia free of humans.

Posthuman Emotion Artificial Intelligence

Similar to the dystopian cityscape of BR2049, the posthuman body constitutes a patchwork of topian, utopian and heterotopian spaces that are spatially proximate yet estranged. The replicant body is spatially conceived as an inescapable limited and finite space (i.e. topia). Replicants are spatially confined by their topographies (AI bodily mental features), territories (socio-political divisions in LA), and boundaries (limited life spans, prosthetic memories, etc.).

Indeed, the topographies of posthumans qualify as 'spatial metaphors' that function allegorically throughout the film. The realization of replicants as technological utopias is, however, always 'partial', 'compromised', 'unstable' and 'ephemeral' utterly dependent on the contextual forces which would otherwise extinguish them. Wallace Corporation celebrates the posthuman body as an 'autoplastic' work in progress. Presented as 'nexus models', replicants are highly developed in intelligence, speed, reflexes, rationality and even emotion, yet suffer from mutilation (due to the four-year-old life span), the thing that leads to their fragility and dilemma of realizing self-worth.

Since replicants' prosthetic memories are borrowed from the experience of real people, their identity is, as a consequence, troublesome. In total, these memories, as projections of virtual spatio-temporal configurations, render replicants 'utopias of escapism' providing escape routes from the ugly spatio-temporal norm transgressed. As the film progresses, however, replicant bodies are depicted in a contestation of power and undergo a significant emotional transcendence marking a paradigmatic shift to 'utopia of seamless body/mind dualism'.

Prosthetic memories, as multilayered dynamic complex of time-space rhythms, as a consequence, become a harbinger of, and vehicle for, cognitive freedom. The height of subjective individualization is when the replicant, having always lived in the certainty of its condition, begins to question its own existence, in the hope of being also human. Operating as repressive but pervasive forms of presence, several heterotopias abound in the reconfigured Nexus-9 replicant body, coalescing to play a subversive, contestatory role.

Implanted memories can simultaneously be considered as heterotopias of 'illusion' and 'compensation' whereby their reality is largely 'prosthetic', a fantasy that cannot be deemed real, yet is a reconciliation that unfolds the chaotic postmodernity into regulated and organized colonies. Emotion AI, as both an experienced and observed activity in urban space, is inherently rhythmic, influenced by the embodied sense of place. Throughout spatial practices, replicants traverse the lived spaces, engage in movements and social practices, and generate in the process polyrhythmical fields of interaction. Their AI mind cognitively transitions from mimetic schema to image schema and retain a sense of (and for) place. As varied as these practices are, the pace and rhythm in relationships to urban space unfolds.

CONCLUSION

The post-anthroposcenery of LA is a polyrhythmic field and a compound of static rhythmic spatial patterns (represented by the dystopian cityscape) and dynamic spatial rhythms (represented by the post-utopian Wallace Corporation and replicants whose activities add rich complex layers to the rhythmic fields of space).

Akin to laboratories, Wallace Corporation can be taken as the site in which new ways of experimenting with ordering society are tried out. As a replicant state of exception from some or all of the rules of the wider society in which it is embedded, the corporation embodies space-time chunks in which, however briefly, the orthodox sociopolitical order is suspended, allowing radical new forms of hierarchical social relations to take hold. It is through this 'laboratorization' of narrative space that a new social ordering emerges. Against the polyrhythmic field, the modified bodies of replicants become sites of transformed subjectivity, appropriated power and cyborg rebellion.

This, in effect, has a 'synaesthetic effect' (Pallasmaa 1996) upon replicants that cannot be reduced to two dimensions. In BR2049, Wallace constantly revolutionizes replicant technology and perversely uses birth as a means to achieve the ultimate 'miracle' of endowing such artificial beings with the power to reproduce in the same manner humans do.

The replicant evolution will then be the ultimate existential threat to biological humans, who are being surpassed and transcended by a new posthuman agent of their own making who have reclaimed the spiritual values of love, forgiveness, grace, mercy, redemption and liberty that the materialistic humans have gradually denied and rejected. Replicants have come to embrace their status as a liminal entity, one that exists in the interstices between two oppositions occupying a transcendent space of cognitive estrangement where identity is in a state of perpetual becoming.

As a 'trope of postmodern liberalism' (Farnell 2014), their body space challenges existing meanings of space and produces contesting enclaves within extraordinary timespaces. With technology seamlessly integrated into social spaces and posthuman bodies, BR2049 is arguably structured as an emotional journey composed of multiple spatial layers, ruptures, and bifurcations expressed through socio-political capitalist projections.

RECOMMENDATIONS FOR FUTURE RESEARCH

This article adamantly argues for new philosophical perspectives and praxis in redefinition of the social relationship between human and posthuman in a future not far from real. Posthuman innovations signal metamorphic changes to the representations of lived experience and, therefore, pose a daunting existential challenge in a world where the human race is usurped by its own artificial progeny. The enhanced non-human beings, if endowed with limitless life spans, can be individuals of unlimited vigor, cognitive power and can presumably eventually transcend the fragilities and biological limitations of the present human form.

It is, therefore, imperative to shift our gaze to the social ramifications, the promise of an empowering integrative posthuman world to expand their existing capabilities, agencies and aspirations. This is where transhumanism seems very relevant whereby the development of benevolent AI converges with forms of human enhancement or transformation. In transhumanistic terms, humans can transcend their bodily status through technological modification into a superior successor so

that faster, more intelligent, longer-living human bodies may one day exist on Earth (Fuller 2017; Huxley 1968; More 2009; Nayar 2013).

In extension of Göcke's (2018) notion of "moderate transhumanism" that is compassion-based, Belk's (2021) investigation of transhumanism in speculative fiction and Sorgner's (2021) recent work on the transhumanist repertoire from a dozen intriguing facets, future research endeavors can philosophically examine postcyberbunk filmography, namely the magnum opus Blade Runner 2049, in close relation to hybridized life forms, technologically-assisted human enhancements measures and the accompanying new realms of experiences and values.

On a different note, timely theoretically-based scholarship on the intriguing interplay between communication theory and AI-enabled consequential technology (See, for example, Guzman 2018, 2019, 2020; Guzman and Lewis 2020; Lewis et al. 2019) is discernible in the literature to date. Remarkably, Guzman's works have enticed a human–machine communication (HMC) research framework with emerging metaphysical and ontological ramifications in response to a more invasive scrutiny of life-like AI technologies and how humans interact with them (Guzman 2018; Peter and Kühne 2018). Extending Guzman's implications to the study of posthumans in postcyberbunk movies whereby "social presence" is key (Lee and Nass 2003, 2005) and AI technology is an embodied "social actor" (Brave, Nass and Hutchinson 2005; Nass et al. 1994) is therefore recommended to examine how much emotionally intelligent and transcendent posthumans can be.

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