CHAPTER TWO

THE CELLULAR AND THE CELLULOID: RE-PURPOSING THE BODY IN *GRAVITY'S RAINBOW*

Is this the way out? Faces turn to the windows, but no one dares ask, not out loud. Rain comes down. No, this is not a disentanglement from, but a progressive *knotting into*—they go in under archways, secret entrances of rotted concrete that only looked like loops of an underpass... certain trestles of blackened wood have moved slowly by overhead, and the smells begun of coal from days far to the past, smells of naphtha winters, of Sundays when no traffic came through, of the coral-like and mysteriously vital growth, around the blind curves and out the lonely spurs, a sour smell of rolling-stock absence, of maturing rust, developing through those emptying days brilliant and deep, especially at dawn, with blue shadows to seal its passage, to try to bring events to Absolute Zero... (Pynchon, *GR* 3-4; Pynchon's emphasis and ellipses)

Like other sorts of paranoia, it is nothing less than the onset, the leading edge, of the discovery that *everything is connected*, everything in the Creation, a secondary illumination—not yet blindingly One, but at least connected... (Pynchon, *GR* 717; italics in original)

Six years before the publication of *Gravity's Rainbow* (1973), one of Pynchon's early commentators suggested that the "only difficulty in Pynchon's practice is that some experience evidently precedes the speculation, so that the significance of human experience, freed from the usual categories of abstraction, is defined partly by speculation and partly by experience that one feels *should* be significant" (Young 76-77, emphasis in original). Fifty years on since the novel's first appearance, the statement still lends credence to the critical enquiries that seek to situate in the novel patterns of thought that have become habitual in the contemporary. The interplay between "speculation" and "experience"—one textual, the other textualized—in Pynchon's corpus (and in *Gravity's Rainbow* in particular) is interwoven into disparate plotting of events that resist attempts at easy explication. Pynchon's poetics has instantiated a cult of the author—dramatized in a documentary film (Donatello and Dubini 2002) and dubbed as a classic case of the Barthesian word made flesh¹—whose writerly aesthetics comprise the ability "to mix

writings, to counter the ones with the others, in such a way as never to rest on any of them" (Tanner, *Pynchon* 11). Given his renunciation of the authorial subjectivity², Pynchon's readers are torn between "the author and his life" and "whatever texts bear his name" (Tanner, *Pynchon* 11). With *Gravity's Rainbow*, however, such perplexities appear to be minimal, if not utterly inconsequential. The novel has been canonized as a classic postmodern text for its indeterminant epistemology. With its incorporation of stylistic imports from comedy, tragedy, slapstick and pastiche typical of the postmodernist mode of storytelling, the novel appears to threaten the idea of conventional historicity. Contrary to such propositions, however, it "always retains concrete historical reality as its referent, but presents history in grotesque characterizations and cartoonish allegorical plots punctuated by disruptive digressions and an often-playful mocking narrative voice" (McHugh 2). The current reading builds on this train of thought in looking at the cultural fabric to which the novel responds.

For some time now, the critical enterprise around Pynchon has outlined a series of contexts against which his oeuvre maybe read and interpreted. Among others, the emphasis on narrative indeterminacy in his novels is perhaps the most pronounced which provides eloquent testimony to a writer often described as having "the definitive postmodern career" (Cowart, "Attenuated" 68). Drawing attention to the inconsistency in the omniscient narrator in Gravity's Rainbow, Louis Mackey observes that the "narrator does everything in his power to make us doubt the omniscience... It is not obvious that he is even a single persona, since his relationship to the story is continually changing" (23). For this, one critic refuses to affirm the employment of a narrator in the story as such, and talks instead of "narrative voices" (Hume 7). This is indicative of the general attitude towards the novel as a work of postmodern playfulness following Brian McHale's propositions (Fiction 21-25). While the enquiries that orient us towards the epistemic frame of the novel are relevant, most of the readings pay little attention to the ontological complexities it manoeuvres. Above all else, the German V-2 operates as a significant material presence throughout the novel that cannot be undermined. Looking at the overarching contours of the Rocket, Richard Poirier remarks that "the character is the Rocket itself, and all other characters, for one reason or another, are involved in a quest for it, especially for a secret component, the so-called Schwarzgerät" ("Rocket" 173). Joseph Tabbi was perhaps the first to acknowledge that "the rocket in Gravity's Rainbow is more than symbolic" ("Pynchon's Psychology" 160). Inspired by the ontological turn in literary theory³, Martinson stresses the "need for a reading of the Rocket as an object instead of a metaphor" and offers an analysis of "the Rocket qua Rocket (3). Likewise, Nina Engelhardt's recent essay attends to the tactility of the Rocket by focusing on "the physical concept of gravity" (2) that determines the Rocket's (and metonymically, the novel's) trajectory. The current reading reinforces these frameworks in resisting the "epistemological wavering on matters" (Martinson 5) to examine how Pynchon appears to accommodate an entangled ontology.

The fact that Pynchon plays with a quest narrative and offers an inversion of the detective story⁴ is a pertinent point to begin with. This is particularly true of his first three novels: V. (1963), The Crying of Lot 49 (1965) and Gravity's Rainbow. He returns to this framework in his recent novel Bleeding Edge (2013), as we shall see in a later chapter. We see Herbert Stencil's quest for the eponymous woman in V. which turns out to be pointless. In The Crying of Lot 49, Oedipa abandons her investigation in search of the truth about the Trystero, "[h]aving began to feel reluctant about following up anything" (Pynchon, L49 137). Likewise, Lt. Tyrone Slothrop abandons his quest for the rocket halfway as he himself disappears from the plot in *Gravity's Rainbow*. Besides Slothrop's quest, however, there are a few more quests that Pynchon chooses to dramatize and deprecate in the novel. There is the German scientist Franz Pökler, who is consumed by a search for his daughter and there is the Russian Tchitcherine, who embarks upon an obsessive pursuit of his half-brother Enzian, the leader of the Schwartzkommando. The futility of these quests is suggested to the reader as Pökler's daughter is revealed to be a "moving image of a daughter" (Pynchon, GR 429) or a kind of simulacrum (perhaps deployed by the authorities to keep a check on him) and in the case of Tchitcherine, the two brothers meet but fail to recognise each other at the end of the novel. For such reversals undertaken by Pynchon, one critic suggests that "the text is thematically committed to incompleteness. The fact that ostensibly central concerns fail to achieve any sort of resolution reinforces the suggestion" (Hite 9). In essence, therefore, Pynchon's quests turn out to be anticlimactic or anti-quests. His purpose is to make us aware of the fictive nature of the essentialist epistemologies.

Pynchon's critique of the unified modes characterise the discourse of science historically informed by the tenets of Western Enlightenment. The ideology of Enlightenment riffs on the logic of dualism: psyche and soma, human and non-human. In *Gravity's Rainbow*, Pynchon's parody of such unitary frameworks has been exemplified

in the institution named PISCES (Psychological Intelligence Schemes for Expediating Surrender) headed by Ned Pointsman. Pointsman is a self-proclaimed Pavlovian who appreciates "strictly defined, clinical version of truth" (Pynchon, GR 276) and appropriates a vision of the world that operates on binaries: cause and effect, stimulus and response. Pointsman is the counterpart of Weissmann, also known as Blecheröd or Blicero, the Nazi director of the rocket programme. While Weissmann is driven by a desire to use science for destruction, Pointsman wants to turn technology into an apparatus of social-psychological surveillance. They appear to embody "the logic of western metaphysics reduced to the precise calculations of machines" (McHugh 4). Against the melodrama that unfolds in the novel, Pynchon offers a parody of the technocratic regimes that runs on the logic of dualism underpinned by the legacy of Cartesian cogito⁵. He does this by accommodating codes of counterculture and points at an emergent epistemology of entanglements. Joseph Slade articulates this position as he notes that "everything [in the novel] is about connectedness: Pynchon has created a universe in which everything is related to everything" (159; emphasis in original). Similar valences maybe found in John Johnston's Deleuzian reading of the novel (1998) as well. In this chapter, we look at these episodes of entanglement by focalising on instances where the body eschews the organically founded fixities.

Allusion and Intertextuality

Perhaps the earliest critical commentary that hints at Pynchon's thematic preoccupation with a framework of entanglement came from John Stark. Drawing on C. P, Snow's classic account of the "two cultures"⁶, he notes that "Pynchon seems to close the gap between the two cultures that alarmed Snow" (Stark 2). Later critics such as Thomas Moore (1987) further corroborate this position. The current chapter finds in this statement an entry point into *Gravity's Rainbow*. With diegetic crossovers, each conveying carefully orchestrated minutiae (such as the role of Shell Oil in World War II following "an agreement with Imperial Chemicals dated 1939" on page 254) and a motley of characters ranging from counsels, lieutenants, physicists, spies, evacuees, refugees, glamorous starlets and surviving concentration camp interns among others, the novel evades easy explanation. It weaves into its fabric dense allusions and intertextual resonances⁷. In this, the novel articulates the possibility of entanglement at a textual level. The narrator engages us with hymns, chants, limericks⁸ and equations of calculus. Against the conventional generic confinements, perhaps, Pynchon believed in a narrative of

convergences. From "the quantum mechanical behaviour of elementary particles to the Friedmann geometry of the curved universe, we are teased with facts about chemistry, physics, mathematics, and cosmology" (Friedman and Puetz 346). For this, reading the novel may at times appear to be "like riding across the country in a bus driven by a maniac" (Pynchon, *GR* 419). As one critic suggests, it "demands that the reader impose his own meaning" (Plater 14)⁹. A cogent summation of the storyline may be found in McHugh's essay that tries to analyse the novel against a central conflict:

On one side, an oppressive and hegemonic "System" serving an elite or "Elect" "They" is coercing the entire planet toward military apocalypse. On the other side, a victimized, mostly power less, and likeablely human "preterite" "us" attempts in varying ways and with varying degrees of manic euphoria and desperate futility to counter the apocalyptic momentum of the System. This melodrama is, of course, historically recognizable. Referring generally to the terror of the Cold War, it conveys the resistance of the radicalized 60s to the status quo, especially to the nuclear madness of U.S. military policy. (3)

We will try to situate the course of our discussion along these lines throughout this chapter, in order not to swerve our way into the Borgesian labyrinths¹⁰ that this novel appears to fabricate. In fact, there are references to Borges (1899-1986) throughout the text that cannot be overlooked.

In one of the episodes in the novel, Slothrop sees "an old newspaper that appears to be in Spanish" (Pynchon, GR 266) at the Odeon in Zürich, a café once frequented by Lenin, Trotsky, Joyce and Einstein. At this point, the narrative introduces the Argentine anarchist named Francisco Squalidozzi who cuts a deal with Slothrop. The historical backdrop, we are told, was "the Uriburu revolution of 1930" (Pynchon, GR 267). Here the narrator refers to one Graciela Imago Portales, a gaucho anarchist¹¹ classified as an "international eccentric" (Pynchon, GR 267). The moment is crucial for it foregrounds a convergence of fiction and facticity. When we are introduced to Portales later on, the narrator tells us that "[s]he was a particular favorite of the literati. Borges is said to have dedicated a poem to her ("El laberinto de tu incertidumbre/Me trama con la disquietante luna . . .")" (Pynchon, GR 389). Earlier too, Squalidozzi reminisced on the fate of Buenos Aires amid his conversation with Slothrop thus: "We are obsessed with building labyrinths, where before there was open plain and sky. To draw ever more complex

patterns on the blank sheet... Look at Borges. Look at the suburbs of Buenos Aires. The tyrant Rosas has been dead a century, but his cult flourishes." (Pynchon, *GR* 268; ellipses added). These are some of the explicit references to Borges and the labyrinth. Besides, there is a Dutch spy named Katje Borgesius whose character morphs into many avatars throughout the text.

Affective Correlative

A while after Slothrop rescues her from "the biggest fucking octopus [he] has ever seen outside of the movies" (Pynchon, *GR* 188) on a beach, we find Katje, in the guise of the dominatrix Dominica Nocturna with Brigadier Pudding, the director of the project called The White Visitation. Her role as a stand-in or body double has been analysed from the point of view of cinematic shape-shifting. In fact, the novel's filmic references and its adoption of the film form and visual conventions have occupied a considerable position in Pynchon criticism¹². The episode that we are referring to here carries an instance of discomfiting coprophilia. For its striking depiction of the bodily, critics have envisaged the implications of postmodern parody while looking at the connection between humour and gender. Christy L. Burns, for instance, holds that "sado-masochism, in Pynchon, replicates the humour of absurdist reversals as it presses the roles of controller and controlled to extremes" (156). It is a grotesque portrayal of sexual control that articulates the masculine anxiety of control and evokes, at once, both pity and humour. One passage from the scene is pertinent for us, for it directs our glance at the sensory architecture of the body:

But tonight he lies humped on the floor at her feet, his withered ass elevated for the cane, bound by nothing but his need for pain, for something real, something pure. They have taken him so far from the simple nerves. They have stuffed paper illusions and military euphemisms between him and this truth, this rare decency, this moment at her scrupulous feet ... no it's not guilt here, not so much as amazement [...] his failing body, his true body: undisguised by uniform, uncluttered by drugs to keep from him her communiques of vertigo, nausea and pain.... Above all, pain. The clearest poetry, the endearment of greatest worth.... (Pynchon, *GR* 237)

The passage is replete with medicalized vocabulary ("nerves", "drugs", "nausea" etc.). It is a moment in the text that registers how the "affectivity of pain is crucial to the forming

of the body as both a material and lived entity" (Ahmed, *Emotion* 24). General Pudding's "need for pain" (Pynchon, *GR* 237) is an attempt to register the feeling body amidst the "illusions and military euphemisms" (Pynchon, *GR* 237) created in the Zone. It is necessary to note that "his failing body" is equated with the "true body" (Pynchon, *GR* 237). The physicality and fallibility of the corporeal body is heightened here as a reversal to the aesthetics of control adopted by Them.

Mediated Bodies

Pynchon's narrative dramatizes a shift in our perception of temporal and historical continuity at the close of WWII. With experiences such as pain/pleasure, as Sarah Ahmed suggests, we acquire a sense of our skin "as something that keeps us apart from others, and as something that 'mediates' the relationship between internal or external, or inside and outside" (*Emotion* 24). The text's incorporation of the slapstick mode to depict the body doubling illustrates corporeal instabilities. Elsewhere in the novel, we are given a vignette of a cold night in London with Katje Borgesius watching:

Outside, the long rain in silicon and freezing descent smacks, desolate, slowly corrosive against the medieval windows, curtaining like smoke the river's far shore. This city, in all its *bomb-pierced* miles: this inexhaustibly *knotted* victim... skin of glistening roofslates, sooted brick flooded high about each window dark or lit, each of a million openings vulnerable to the gloom of this winter day. The rain washes, drenches, fills the gutters singing, the city receives it, lifting, in a perpetual shrug. (Pynchon, *GR* 95; emphasis added)

The passage uses corporeal marker of the skin to signify a landscape of entanglements. Katje's position resonates with the fate of the city under siege. It is a shared sense of vulnerability that the text illuminates at this juncture. The moment makes us aware of the permeability of the skin ("bomb-pierced") that corresponds to simultaneous ("knotted") insides and outsides. By capturing a moment of convergence, the narrative appears to threaten the dualistic understanding of organic/animate and inorganic/inanimate ensured by the body's epidermic confinement. This is an extreme inversion of Pointsman's binary mindset that seeks to prove "the stone determinacy of everything, of every soul" (Pynchon, *GR* 88). He wishes to establish the Pavlovian "true mechanical explanation" (Pynchon, *GR* 90) for human behaviour. Pointsman articulates this anxiety in his reflection on Roger Mexico early in the novel: "he wrecks the elegant rooms of history,

threatens the idea of cause and effect itself. What if Mexico's whole *generation* have turned out like this?" (Pynchon, *GR* 57; Pynchon's emphasis). It is necessary to note the presence of Osbie, the secret cameraman appointed by ACHTUNG (a special operation unit in the British military), around Katje. In fact, the entire scene has been woven as a cinematic spectacle that operates on what Steven Shaviro calls "the simulacral logic" where it "becomes impossible to identify definitively either the original or the copies" (35). In episodes such as these, the frames and their visual sequence operate as a merger of the factual and fictional in the novel.

Entangled Worlding(s)

There are several instances in the text that illustrate this position. Earlier in this chapter, Franz Pökler's quest for his daughter has been mentioned briefly. "They" made Pökler to work on the Schwarzgerät by holding Ilse hostage in a concentration camp called Dora under the supervision of Blicero (as Weissmann). The policy was to release Ilse for a week or two every summer in order to keep Pökler in line and prevent him from "sabotaging the rocket programme" (Pynchon, *GR* 421). But it was "the moving image of a daughter" (Pynchon, *GR* 429) created by "Them" that Pökler was fetched. This event reiterates the ontological play between presence and absence that characterises the Baudrillardian hyperreal¹³. By manufacturing an image that executes its fundamentally mimetic function, "They" reduce the materiality of the human to an extent where the sense of the self is fostered solely by a series of simulacra.

The moment is inscribed in a vocabulary that showcases the increasing internalization of technology. It is the hyperreal that constitutes malleability: "[a] daughter a year, each one about a year older, each time taking up nearly from the scratch. The only continuity has been her name, and Zwölfkinder, and Pökler's love" (Pynchon, *GR* 429). This blurs the borderline between the actual and the virtual. Ilse's image carries an affective value¹⁴ that drives her father throughout the novel. The images inhabit a palimpsest where everything including human emotions can be reified and replicated. It can be suggested that such a position is crucial for entanglements to take place. Emerging as a site where the authentic (corporeal/bodily) and the inauthentic (machine induced reproduction) are entangled, the episode of Pökler's psychological surveillance predates the politics of contemporary cyber societies.

This ontological slippage is further corroborated by the events that preceded the birth of Pökler's daughter. At one point in the novel, we come across the screening of Alpdrücken, a fictional film by the German director turned marketeer Gerhardt von Göll. This episode is significant for it links together many of the characters and anecdotes seemingly dispersed across the novel¹⁵. Coming out of "the Ufa theatre on the Friedrichstrasse that night with an erection" (Pynchon, GR 404), Pökler realizes that it was on the Alpdrücken night that Ilse, his daughter, was conceived. The movie portrayed an erotic saturnalia featuring Margherita Erdmann which moved Pökler to make love to his wife Leni. Ruminating on this, Pökler now wonders: "How many shadow-children would be fathered on Erdmann that night?" (Pynchon, GR 404). He descends into an existential dilemma suspecting that the child Weissmann sends him every summer is a "movie-child" (Pynchon, GR 404). The ambivalence behind this episode comes to the fore when it is revealed that Margherita's own daughter was also conceived during the filming of the movie. After Bianca's death on the Anubis, we are faced with this situation thus: "Ilse, fathered on Greta Erdmann's silver and passive image, Bianca, conceived during the filming of the very scene that was in his thoughts as Pökler pumped in the fatal charge of sperm—how could they not be the same child?" (Pynchon, GR 586). Pökler's ambivalence regarding his daughter highlights a point where cinematic spectacles are affectively linked to the cellular biomechanisms of the body. His subsequent uncertainty regarding whether "this child was his own" (Pynchon, GR 425) or "some Ilse" (Pynchon, GR 425) registers a disintegration of the embodied and organically grounded notions of reality.

Pökler's sense of having organically linked to a "movie-child" (Pynchon, *GR* 404), a product of technological simulation, informs an anxiety articulated by N. Katherine Hayles, among others, in her provocatively titled *My Mother Was a Computer* (2005). Hayles talks about an emerging cultural condition where "humans anthropomorphise the virtual creatures, and on the other hand, virtual creatures computationalize the humans" (207). Franz Pökler's awareness of the connection his biologically conceived offspring has with the filmic mediation foregrounds the collapse of the ontological divide between human and the extra-human. It reflects a convergence of the "silver and passive image" (Pynchon, *GR* 586) and the cellular materiality (in this case, implied in erection and coitus) of the body. At this point, the text dismantles the organically founded fixity of the body in favour of a narrative where materiality and hyperreality are entangled. The body remains a corporeal medium where the organic merges with the inorganic orders. With the employment of subsequent filmic mediations, the text sets up the landscape of entanglements at different levels.

Significantly, this point is reiterated through other related episodes. This time, we find Franz Pökler with his wife at the Ufa watching Fritz Lang's 1929 science fiction Die Frau im Mond. Unlike Alpdrücken, Lang's is a real/historical silent movie on rocketry and space travel (with a storyline introducing long-range guided ballistic missiles and a rocket projectile carrying passengers to the moon). It was "popular in Weimar Germany, though a modern audience would laugh at its technical clumsiness and scientific naivete" (Moore 40). An Expressionist foray, the movie was viewed by the "young rocket engineers of the real-historical Verein für Raumschiffahrt – Wernher von Braun among them" (Moore 40). Pynchon's text is replete with references to von Braun (from the epigraph to the first portion of the novel to concerns regarding his birthday celebration). However, von Braun does not appear anywhere in the novel in person. "The social spectrum" we are told, "ran from von Braun, the Prussian aristocrat, down to the likes of Pökler, [...] all equally at the Rocket's mercy" (Pynchon, GR 409). The connection between the two, therefore, is apparent. After watching the movie, "Franz was amused, condescending. He picked at technical points. He knew some of the people who'd worked on the special effects" (Pynchon, GR 162). The film emerges as an affective signifier for him, for his immersion into the story-world foregrounds his culturally situated self.

"Not A before B, but all together"

As Carl Platinga asserts, "to watch a movie is to engage in the virtual rehearsal of movement. Brain processes involving mirror neurons enable us to understand faces and bodies in action and link us to other people's activities and feelings" (101). Amidst the mock-heroic quests that inform the lives in novel, cinematic simulacrum permits an emotional valence for Pökler. His role as a rocket engineer is contingent on the ways in which filmic fabulation communicates with socio-historical imaginaries. It is a crucial point of convergence between Pökler's neural nodes and the pixelated celluloid phenomenon. The point is prescient in the way Pökler's wife experiences the movie: "Leni saw a dream of flight. One of many possible. Real flight and dreams of flight go together. Both are part of the same movement. Not A before B, but all together...." (Pynchon, *GR* 162; Pynchon's ellipses). Dreams inform a complex cognitive framework

that relates to brain activities. The episode of watching Lang's *Die Frau im Mond* combines the dreamworld and the real suggesting a convergence of the material and the emotional realms of the subject. For dreams contextualize emotions (Hartmann 1999), the scene promotes a dialogue of the organically grounded cognition and the inorganic/extra-human ontology. The filmic intervention into the embodied experience of the self is depicted in DeLillo's fiction as well. In an early episode in *Point Omega* (2010), the narrator situates a movie screening thus: "The film made him feel like someone watching a film. The meaning of this escaped him [...] It was videotape. But it was also film. In the broader meaning he was watching a film, a movie, a more or less moving picture" (DeLillo, *PO* 11). Such events accommodate an interplay between embodiment and machine-induced affect unsettling the logic of ontological occurrences ("Not A before B, but all together").

A Technological Sublime

While on board *Anubis*, we find Miklos Thanatz admit this ambivalence that permeates the novel: "Of course it happened. Of course it didn't happen" (Pynchon, *GR* 680). It is an intensification of the technological sublime that Pynchon portrays in the novel. In *The Machine in the Garden* (1964), Leo Marx introduced the idea of the technological sublime to suggest the grandness and ambiguity of twentieth century technologies. It appears to anticipate the posthumanist perspectives on materiality. The case of the Pöklers in Pynchon's novel illustrates the plasticity of neural networks that characterises cognition. Theorists in cognitive neuroscience hold that cognition is not a hermetically sealed phenomenon, but a socially situated and materially informed process¹⁶. What informs this proposition is the notion that the human brain, "far from being a hard-wired modular organ, emerges as a dynamic co-evolutionary process of deep enculturation and material engagement" (Malafouris 45). It also implies that our sense of the self and subjectivity is founded on the convergence of mind and matter.

Andy Clark sees in this position the situatedness of the self. Drawing on the dialogue between the biological and the cultural, he argues that agency is mediated by "the ubiquitous devices of language, speech and text" (Clark, "Brain" 14). Pynchon's engagement with technologies of augmented and mixed reality wagers a radical reframing of this phenomenon. His adherence to the aesthetic implications of cinematography in factionalizing the events showcase a point of divergence where "the

screen becomes a page and the page a screen" (Grmusa 260). This is crucial inasmuch as it relates to agentic status of the self that is simultaneously informed by "speech" and "screen". It demonstrates Pynchon's prophecies of the contemporary digital/social media scenario "where everything is prone to cinematisation" (Grmusa 263). In today's culture of interactive ambient technologies, the virtual vehicles serve to structure the ways in which individuals navigate the immediate environs. Pynchon's text manages to convey pointers to interrogate this condition.

With its dramatization of an ontology of entanglements, the novel "has moved beyond the irreconcilable classical conflict between utopia and dystopia, moving instead towards heterotopia, the co-existence of mutually undermining meaning systems which point to the dissolution of the unitary notion of the subject" (Braidotti, *Metamorphosis* 183). The episode that articulates von Göll/Springer's thoughts on the Schwarzkommando, "fraudulent African rocket troops" (Pynchon, *GR* 115), affirms this transition from conflict to coexistence. Coded in a vocabulary that conflates the "real" and the "paracinematic", there are instances that register corporeal indeterminacy of the subject. This is one such:

Since discovering that Schwarzkommando are really in the Zone, leading real, paracinematic lives that have nothing to do with him or the phony Schwarzkommando footage he shot last winter in England for Operation Black Wing, Springer has been zooming around in a controlled ecstasy of megalomania. He is convinced that his film has somehow brought them into being. "It is my mission," he announces to Squalidozzi, with the profound humility that only a German movie director can summon, "to sow in the Zone seeds of reality. The historical moment demands this, and I can only be its servant. My images, somehow, have been chosen for incarnation... (Pynchon, *GR* 394)

The fictive representation of the Schwarzkommando in Springer's film predated the discovery of the Herero rocket troops. Springer's conviction that "his film has somehow brought them into being" (Pynchon, GR 394) accentuates a dissolution of the tactile body schema. Here, the pathological body is repurposed by the informational body that emerges in the form electronic image projections. The coming together of these extremities invoke a significant bearing of the technological sublime.

Seeds of Reality: "fundamentally motile" and "fundamentally visual"

The situations where "seeds of reality" converge with the onscreen "image" inform the ideology of the virtual landscape. As the corporeal presuppositions of the Schwarzkommando are reduced to the functionality of pixelated images, the episode produces and perpetuates a "body in code" (Hansen 2006). Structurally, the Schwarzkommando emerges as a cinematic subject and informs a weld between "*the (fundamentally motile) body schema from the (fundamentally visual) body image*" (Hansen 20; emphasis in original). The corollaries between these two realms are what characterise the cybernetic. Bodies, at this point in the novel, are "submitted to *and constituted* by an unavoidable and empowering technical deterritorialization" (Hansen 20; emphasis in original). To this end, Pynchon's novel problematizes the conventional logic of the corporeal anticipating an entanglement of visceral and the virtual.

In a similar vein, the demarcation between life and non-life has been rendered untenable throughout the text. In Pirate Prentice's vision that starts off the novel, refugees are depicted as "stacked about among the rest of the things to be carried out to salvation" (Pynchon, GR 3). Pirate, a British Intelligence officer who later joins the Counterforce, receives other people's reveries. He is mysteriously linked to the psyche of the others. Extending this line of thought, Brian Stonehill holds that Pirate's "Condition" of "getting inside the fantasies of others" (Pynchon, GR 12) illustrates "a form of disembodied, apparently instantaneous communication of information – in this case, information in the form of imagery, which makes Pirate something like a GIF file receiver" (13). Stonehill adopts a lexicon of the digital database in projecting Pynchon as an ancestor to the cyberpunk dystopias exemplified by William Gibson and others¹⁷. In fact, Pynchon's prophecy of the cyberspace is not one-off in his oeuvre. At the end of *The Crying of Lot* 49, Pynchon positions his female protagonist Oedipa in the realm of alternative ontologies, caught in the flux between place and non-place:

For it was now like walking among matrices of a great digital computer, the zeroes and ones twinned above, hanging like balanced mobiles right and left, ahead, thick, maybe endless. Behind the hieroglyphic streets there would either be a transcendent meaning, or only the earth [....] Ones and zeroes [....] Another mode of meaning behind the obvious, or none. Either Oedipa in the orbiting ecstasy of a true paranoia, or a real Tristero. (Pynchon, *L49* 181-82)

Oedipa's indecisiveness at this point is registered through tropes of information and communication technology¹⁸. The "zeros and ones" (Pynchon, *L49* 181) chime in with the morphology of computer-generated simulations that privilege "[a]nother mode of meaning behind the obvious" (Pynchon, *L49* 182). Ned Pointsman in *Gravity's Rainbow* points to this unique digital ecology:

The young statistician is devoted to number and to method, not table-rapping or wishful thinking. But in the domain of zero to one, not-something to something, Pointsman can only possess the zero and the one. He cannot, like Mexico, survive anyplace in between. Like his master I. P. Pavlov before him, he imagines the cortex of the brain as a mosaic of tiny on/off elements. Some are always in bright excitation, others darkly inhibited. The contours, bright and dark, keep changing. But each point is allowed only the two states: waking or sleep. One or zero. (Pynchon, *GR* 56)

By imagining the cognitive schema of an individual ("cortex of the brain") in machinic vocabulary ("on/off"), the passage illustrates an emerging ontology of entanglement. At this point, the text suggests a posthuman convergence that reduces the feeling human to an order of automatism. It does so by transgressing the notional binaries of organic intelligence and artificial inorganic intelligence, as individuals are perpetually embedded in a network of digital transmission determined by the Boolean domain of zero and one. Don DeLillo's *Cosmopolis* (2003) pushes this further, as we shall see in a later chapter. It sets into motion a metropolis where the machines that we manufacture determine the body and its sentience. In Pynchon's novel, this is perhaps best exemplified by the visionary Laszlo Jamf, the doctor who conditioned Slothrop with Imipolex G. In his lecture on chemistry at T.H. Munich, Jamf puts forward his thoughts thus:

"You have the two choices," Jamf cried, his last lecture of the year [...] "stay behind with carbon and hydrogen, take your lunch-bucket in to the works every morning with the faceless droves who can't wait to get in out of the sunlight – or move beyond. Silicon, boron, phosphorus – these can replace carbon, and can bond to nitrogen instead of hydrogen –" [...] "move beyond life, toward the inorganic. Here is no frailty, no mortality – here is Strength, and the Timeless." Then his wellknown finale, as he wiped away the scrawled C—H on his chalkboard and wrote, in enormous letters, Si—N. (Pynchon, *GR* 590) It is a significant moment in the novel that registers a technologically determined heterotopic condition. In his articulation of a movement "beyond life, toward the inorganic", Jamf exemplifies a proclivity to posthuman states. Informed by a willingness to supersede the physicality of the body— "no frailty, no mortality" —the passage hints at an event of re-corporealization. The mobility and interactivity that characterises Jamf's technological imaginary blurs the borderline between the human body and inorganic matter. It is simultaneously subversive and reflective of the prosthetic promises of perfectibility. Through instances like this, the text appears to endorse a 'play' between the biochemical and the technological, "re-thinking human embodiment in a manner that is co-extensive with our technological habitat" (Braidotti, *Metamorphosis* 225). Such a position problematises the conventional referents of the corporeal.

Technoscapes: A Digital Ecology

The reference to silicon (which is a recurring trope in the novel) foregrounds the logic of the posthuman. At a fundamental level, the posthuman position reconstitutes the corporeal logic through robotics and contemporary prosthetic technologies. Implicated in this, is the idea of corporeal emancipation from the point where embodiment is indexed by social and cultural performativity. To move beyond "mortality", in this sense, is indicative of "Strength" and "Timeless" existence. In Don DeLillo's *Cosmopolis*, Eric Packer acknowledges the possibility of living "outside the given limits, in a chip, on a disk, as data" (206). A small episode in *Gravity's Rainbow* bears a strong and complex resonance with DeLillo's description as it illustrates the possibility of a human mind being uploaded into a machine: "We can live forever, in a clean, honest, purified Electroworld—" (713). This moment is crucial for it unsettles the tenets of evolutionary biology allowing the human mind to attain an engineered psychological sustenance. It registers a point of transhuman augmentation¹⁹ where a disembodied consciousness instantiates a dissolution of the subject across a techno-corporeal assemblage.

Pynchon outlines the plasticity of the self by dramatizing an entanglement between synaptic nodes and electronic networks that appears to repurpose the logic of corporeality. In this, he anticipates the anxiety of alterity²⁰ that finds an outlet in works of speculative fiction such as Stanley Bing's *Immortal Life: A Soon To Be True Story* (2017). In this novel, a future society has been portrayed where human life can medically augmented to sustain the promise of immortality. In effect, the society is peopled with enhanced

individuals who could harness the possibility of the cyborg. Such tales exhibit an epistemic flux that situates transhumanist vision simultaneously as a "means to help people lead better human lives" (Rubin 155) and "the most dangerous idea in the world" (Fukuyama 42-43). This ambivalent articulation of possibility and paranoia is what characterises the cultures of contemporary technoscience.

Pynchon's posthuman affinities are suggestive of a scenario where the dialogue between man and machine constitutes the fulcrum of cultural landscapes. He describes Fergus Mixolydian, the Irish American Jew in his debut novel V, as "an extension of the TV set" (56). With an incorporation into machinic vitality, the vulnerability of the somatic attributes has been perpetually deferred in such a state. This is a marker of what Žižek calls-drawing on Deleuze- "becoming-machine" (Organs 14). A situation of this kind is prescient in the way Kurt Mondaugen, the electrical engineer who works with Pökler for Blicero, is described in Gravity's Rainbow: "He thought of himself, there and here, as a radio transmitter of some kind, and believed that whatever he was broadcasting at the time was at least no threat to them" (410). Pökler also saw himself as "an extension of the Rocket" (Pynchon, GR 408). Elsewhere in the text, a reconceptualization of the technological comes to the fore in the episodes around Carroll Eventyr, the "resident medium" (Pynchon, GR 141) at The White Visitation. It is a former psychiatric facility now run by Pointsman who supervises the experiments in psychological warfare. Besides Eventyr, the hospital is home to characters with uncanny cognitive capabilities (Ronald Cherrycoke, Margaret Quartertone, Gavin Trefoil et al.). Eventyr, who is described as "a victim of his freak talent" (Pynchon, GR 147), serves as "an analogue for advanced communication and media technologies of the twentieth century" (Whitmarsh, "Spectres" 527). The appropriation of his "freak talent" by the authorities provides provocative portents of a culture where-as Angela Carter tells us in The Infernal Desire Machines of Doctor Hoffman (1972) — "the freak is the norm" (130). Carter's novel cuts across an emerging environment of virtual technologies that divest the creation myths of its claims displacing the logic of the bodily attributes. With the episodes around Eventyr (and the other inmates at The White Visitation), Pynchon participates in a "postsubjective imaginary" (Whitmarsh, "Spectres" 537) by "removing human actors from their positions as controllers of communication and repositioning them as effects of communication" (Whitmarsh, "Spectres" 534). This is a point that pushes us to see entangled ontology of the subject.

Re-reading Planetarity: A Plea for the Ecosophical

While this chapter does not pursue a full exeges is of this perspective illustrated in Patrick Whitmarsh's insightful reading of the text, it takes up a few of his arguments that are necessary for further analysis of the novel. For Whitmarsh, Pynchon casts a machinic assemblage scenario where "human bodies and minds find themselves redistributed along vectors that do not conform to the model of liberal subjectivity" ("Spectres" 537). This is a crucial point that indicates a relational understanding of the self defying the logic of essential organicity. Whitmarsh extends this point by looking at the infamous episode of Byron the bulb who could supplement "visual frequencies with audio frequencies, imagining different modes of communicative possibility" ("Spectres" 537). Byron illustrates a merger of the human with the technological that unsettles the putative divide between the two realms. This is suggestive of a posthuman predicament that dismantles the unitary notion of selfhood in favour of radical relationality. In addition to this, Slothrop's disintegration into the Zone evinces an instance "of people being absorbed into their own technologies" (Tabbi, Postmodern 99). At this point, the corporeal conflates with a machinic vocabulary enacting a defamiliarized structure of sentience that marks the existential awareness of the subject. Such episodes characterise "a new kind of eco-sophical unity, not unlike the symbiotic relationship between the animal and its planetary habitat" (Braidotti, Posthuman 92). Whitmarsh's essay touches upon this point when it wagers that the diegetic space of the novel "abides by a nonhuman logic" and acknowledges the agentic status of "nonhuman actors" ("Spectres" 537). Besides investing into the narrative the questions of the non-human life forms, Pynchon's fictional landscape is rich in clues for us to negotiate the anthropocenic concerns and planetarity²¹.

In a scene from *Against the Day* (2006), a mysterious troop of interlopers arrive from the future seeking refuge from "a time of worldwide famine, exhausted fuel supplies, terminal poverty— the end of the capitalistic experiment" (Pynchon, *AtD* 415). Their journey back in time is prompted by "the simple thermodynamic truth that Earth's resources were limited" (Pynchon, *AtD* 415). It highlights the insufficiency of our ways in apprehending the atmospheric and foregrounds, as Pieter Vermeulen argues, "human life's entanglement with planetary forces (geological time)" ("Posthuman" 71). The time travel undertaken by the Trespassers (as they are called in the novel) is reflective of the colonial ideology, in this case, a temporal colonization of a less depleted era. By conveying a fallout of the capitalocene²², the novel interrogates the ways in which human life is enmeshed in social and spatial practices. While this novel serves to underscore a future scenario of anthropogenic extremity, *Gravity's Rainbow* takes us back to a world prior to human existence. The passage deserves to be quoted in full in order to depict the temporal immensity involved in the text:

[H]uman consciousness, that poor cripple, that deformed and doomed thing, is about to be born. This is the World just before men. Too violently pitched alive in constant flow ever to be seen by men directly. They are meant only to look at it dead, in still strata, transputrefied to oil or coal. Alive, it was a threat: it was Titans, was an overpeaking of life so clangorous and mad, such a green corona about Earth's body that some spoiler had to be brought in before it blew the Creation apart. So we, the crippled keepers, were sent out to multiply, to have dominion. God's spoilers. Us. Counterrevolutionaries. It is our mission to promote death. The way we kill, the way we die, being unique among the Creatures. It was something we had to work on, historically and personally. To build from scratch up to its present status as reaction, nearly as strong as life, holding down the green uprising. But only nearly as strong. (Pynchon, *GR* 734-35)

On the one hand, the centrality of the humans-the emphasis on consciousness denotes the liberal humanist idea of subjectivity defined by the Cartesian cogito-has been minimized ("that poor cripple") in the passage. On the other hand, it reveals a constitutive otherness of the species ("that deformed and doomed thing") in the face of planetary ontologies. The play between the 'consumer' and the 'consumed' is conveyed as a cosmic irony. The attention to nonlife ("oil or coal") is crucial at this juncture, for it signifies the entanglement of human and nonhuman forces/entities in an expanded geohistorical milieu ("Earth's body"). By recasting the embedded historical location of the human within an atmospheric "deep time"²³, the episode foregrounds the essential anthropocenic affinity that the novel appears to endorse: "[s]ociosymbolic phenomena have to be conceptualized in relation to the inhuman forms, forces, and scales of planetary systems and geologic time" (Menley and Taylor 12). Such a position compels us to rethink the human in terms of their creatureliness ("poor", "thing") in a multispecies environment. The text participates in this by allowing us to look at extinction narratives²⁴ that resonates with the portrayal of humans as "planetary creatures rather than global entities" (Spivak 73). In this sense, Pynchon pushes us to revisit the implicit anthropocentrism that characterises the dominant epistemologies of our time.

De-Scribing the Anthropocene

When we are told that Frans Van der Groov, the colonial ancestor to Katje Borgesius, hunted dodos in the 17th century, the vocabulary in which the account is conveyed is crucial to take note of. "The colony, the venture, was dying", says the narrator, "like the ebony trees they were stripping from the island, like the poor species they were removing totally from the earth. By 1681, Didus ineptus would be gone" (Pynchon, GR 112). The moment envisages a two-pronged exegesis: first, the dodos' extinction is attributed to the activity of the colonizer, hinting at the ecological threat mankind possesses for the planetary system; second, this depletion of the biosphere resonates with a simultaneous undoing of the empire²⁵. In episodes such as this, the text focuses on the entangled epistemes of the social/cultural and the biological/ecological. This is given weight by the novel's subsequent attention to Frans' ignorance that "these were the only dodoes in the Creation, and that he was helping exterminate a race" (Pynchon, GR 114). The depiction of the dodos, first as a "poor species" and later as "a race", connects the nonhuman with the human, "that poor cripple, that deformed and doomed thing" (Pynchon, GR 734). Earlier in the novel, Pynchon gives us an account of the Herero people as "specimens of a possibly doomed race" (Pynchon, GR 319) by drawing an analogy of the Schwartzkommando and King Kong. With these, the text captures a planetary condition where "the extermination of nonhuman species stands as a correlation to a concurrent extermination of human races" (Andersen 102). The adoption of a Linnean taxonomic marker (Didus ineptus) indicates the clinical acuity of the situation in addition to the social symbolism evidenced in the act. Thus far, in dramatizing a dialectical play between sovereignty (global agent), which translates into the freedom of a species to exercise its own corporeal logic-and vulnerability (planetary subject), which translates into the denial of the corporeal logic of a species-the novel partakes in an emergent landscape of entanglements.

There is a passage that describes Slothrop's uncle Lyle Bland who "imagines that he has been journeying underneath history" (Pynchon, GR 600). In a cosmic manner, we are told, "that history is Earth's mind, and that there are layers [...] analogues to layers of coal and oil in Earth's body" (Pynchon, GR 600). The attention to "coal and oil" heightens the sense of planetarity. Previously we have seen that an ontological claim to life has been depicted in relation to death when the narrator holds that men are meant to be "transputrefied to oil or coal" (Pynchon, GR 734). In moments such as these, the text

demonstrates potentially anthropocenic concerns "associated with the burning of wood and fossil fuels, industrial chemistry" (Wenzel 4) simultaneously reflecting on the finitude and transience of the human species. It is followed by a play between life and nonlife that is viewed in a deep time perspective:

[I]t's hard to get over the wonder of finding that Earth is a living critter, after all these years of thinking about a big dumb rock to find a *body and psyche* [...] To find that Gravity, taken so for granted, is really something *eerie*, *Messianic*, *extrasensory* in Earth's mindbody... having hugged to its holy center the *wastes of dead species*, gathered, packed, transmuted, realigned, and rewoven molecules... (Pynchon, *GR* 600; emphasis added)

The geophysical parameters of the earth have been conveyed in a corporeal vocabulary ("body and psyche") in the novel. To conceptualize the gravitational phenomenon of the earth as "eerie, Messianic, extrasensory" is to acknowledge "a planet that is essentially *unheimlich*" (Baishya and Kumar 305). With references to the "holy center" being littered with "wastes of dead species", the passage illustrates an instance of biophysical intervention that destabilises planetary logic. The moment is merger of capital (there are references to corporations such as Shell Oil and IG Farben throughout the text)²⁶ and corporeal consumption.

An Ontology of Waste

In such settings, the ontology of waste emerges as a signifier of consumerist cultures and marks the onset of anthropogenic extremities. Early on in the novel, an afternoon in London has been described in terms of "the yellow sun being teased apart by a thousand chimneys breathing, fawning upward without shame" (Pynchon, *GR* 26). A few pages later we find "[o]dors of Diesel fuel and Sous le Vent mingle" (Pynchon, *GR* 31) registering the transformative effects of human activities on earth's atmosphere. We shall see this at length in DeLillo's *White Noise* in the chapter that follows. However, many of these positions are prescient in Pynchon's narrative imaginary. While waste registers a negation and denial, it is reflective of corporeal finitude that binds the bodies to impermanence and instability. The novel depicts several situations that accommodate this complexity at visual and visceral levels. During the analeptic episode at St. Veronica's, the fictional hospital in London where Slothrop reports for his tour of duty as a testing subject, the landscape has been described thus:

St. Veronica's Downtown Bus Station, their crossroads (newly arrived on this fake parquetry, chewing-gum scuffed charcoal black, slicks of nighttime vomit, pale yellow, clear as the fluids of gods, waste newspapers or propaganda leaflets no one has read in torn scythe-shaped pieces, old nose-pickings, black grime that blows weakly in when the doors open...) (Pynchon, *GR* 51; Pynchon's ellipses)

The passage highlights the production of bodily waste and the perpetuation of trash that simultaneously corroborates the desirability and disposability of matter. Body fluid ("nighttime vomit") suggests the fallibility of our corporeal schema suggesting "close associations with our animal matter" (Kennedy 23). It attests "to the permeability of the body, its necessary dependence on an outside, its liability to collapse into this outside (this is what death implies), to the perilous divisions between the body's inside and its outside" (Grosz, *Volatile* 193). The event, therefore, is a merger of exteriority and interiority where the body acts as a conduit. With the collapse of this divide, bodily matter has been reified and relativized in terms of its plasticity. This corresponds to the text's further depiction of corporeal vulnerability:

At which precise point there comes this godawful surge from up the line, noise growing like a tidal wave, a jam-packed wavefront of shit, vomit, toilet paper and dingleberries in mind-boggling mosaic, rushing down on panicky Slothrop like an MTA subway train on its own hapless victim [...] A looming wall stringing long tendrils of shitpaper behind, the shockwave is on him—GAAHHH! he tries a feeble frog kick at the very last moment but already the cylinder of waste has wiped him out, dark as cold beef gelatin along his upper backbone, the paper snapping up, wrapping across his lips, his nostrils, everything gone and shit-stinking now as he has to keep batting micro-turds out of his eyelashes, it's worse than being torpedoed by Japs! (Pynchon, GR 67-68; italics in original)

With a close-up depiction of Slothrop's physiognomic profile ("lips", "nostrils", "eyelashes"), the episode dramatizes an epidermalization of his identity. Here, body fluids ("shit", "vomit") heighten a sense of corporeal vulnerability ("panicky", "feeble") that characterises an ontology of waste. The text's further incorporation of random inorganic trash—glimpsed through some "tarry kind of waste" (Pynchon, *GR* 496), "synthetic wastefield" (Pynchon, *GR* 531) et cetera—illuminates the ways in which the consumerist body processes matter for the production and proliferation of useless junk.

For this, Greg Kennedy defines trash to be "objects presupposed as essentially disposable" that "results from a willful human determination concerning the being of the object" (23). This involves the material residue that connects the global and the planetary to hark back to the Spivakian neologisms. Unlike organic waste, however, it is the "synthetic" and "tarry" residue that forms this entanglement. The centrality of Imipolex G in the novel signifies the functionality of plastic which permeates our lives. It is crucial to note that Imipolex G is at once internalised in Slothrop and externalised in the Rocket. Plastic acts simultaneously as a pervasive material agent that can repurpose life and it generates liminal waste that informs anthropogenic risks.

The Nonhuman Turn

Elsewhere in the text, we are introduced to the "Scientist Rocksters" who believe that rocks possess "a form of mineral consciousness not too much different from that of plants and animals, except for the time scale. Rock's time scale is a lot more stretched out" (Pynchon, GR 623). The temporal immensity associated with the geophysical placement of the rocks finds resonance with the portrayal of "a prehistoric city greater than Babylon" (Pynchon, GR 364). The latter has been revealed as the final destination for Tchitcherine. In his search for the Kirgiz Light (that runs parallel to Slothrop's dogged pursuit of the Rocket in the novel), Tchitcherine arrives at this perplexing place said to be "in stifled mineral sleep a kilometer below his back, as the shadow of the tall rock" (Pynchon, GR 364). The nonlife architectonics of the rocks is indicative of a heterogeneous temporality that the text appears to inhabit. Such extra-human entities constitute the exteriority of the weather and planetary ecosystem. By interposing the lithic between "consciousness" and "sleep", the text combines the markers of interiority and exteriority. It is conveyed in terms of the nonhuman ("mineral") duration in which chronological coordinates are not tenable. The text's participation in this is indexed by the subsequent narrative investments in a kind of botanical consciousness. This is evident from Slothrop's realization that "each tree is a creature, carrying on its individual life, aware of what's happening around it" (Pynchon, GR 562). The cusp of this statement lies in the sense of "aware"-ness that connects the ontology of vegetal existence with the creaturely. On one hand, plant-life signifies passivity and placidity; on the other hand, it means "exuberance of life, vigor, and brimming energy" (Marder 20). Pynchon's text seeks to situate this problematic within a framework of multispecies entanglements. In so doing, it seems to anticipate much later critical concerns that interrogate "the systematic devaluation of vegetal life in Western thought" (Marder 24). To this end, the novel revisits the dominant ideologies and philosophical positions.

Questions Concerning Animality

Taking this conjecture to its logical extreme, the text incorporates animals amenable to being positioned in "material-semiotic entanglements" (Haraway, *When Species Meet* 236) through which species relations are forged. Less attention has been paid to Pynchon's interest in animals, albeit occasional readings have tried to trace this trajectory²⁷. The figuration of animals is informed by economies of power and affect. As *Gravity's Rainbow* begins, Pynchon introduces a canine presence into the narrative. Also, dogs lead a laboratory life at Ned Pointsman's facility: "In the ARF wing, the stolen dogs sleep, scratch, recall shadowy smells of humans who may have loved them..." (Pynchon, *GR* 79). The statement invokes the status of the canines simultaneously as feral beings ("scratch") and as companion species ("shadowy smells of humans") predisposed to "significant otherness and signifying others" (Haraway, *When Species Meet* 97). From this generic viewpoint, the text shifts focus to the specific case of dog Vanya biomedically conditioned to salivate as a corporeal response to an aural stimulus. The moment interposes the neoliberal aesthetic of a laboratory:

The duct of Dog Vanya's submaxillary gland was long ago carried out the bottom of his chin through an incision and sutured in place, leading saliva outside to the collecting funnel, fixed there with the traditional orange Pavlovian Cement of rosin, iron oxide and beeswax [...] Inside and outside remain just as they were, but the interface—the cortex of Dog Vanya's brain—is changing, in any number of ways, and that is the really peculiar thing about these transmarginal events. (Pynchon, *GR* 80; ellipses added)

While dogs foster affective cohabitations with humans within the domestic space of the household, dog Vanya's laboratory life showcases an image of bestiality and sheer abjection. Vanya emerges as a specimen of the species whose primal instincts are reengineered to accord its animality a specific form of biovalue. The surgical modification of a visceral phenomenon in the dog's body unmoors "a surplus value of vitality and instrumental knowledge which can be placed at the disposal of the human subject" (Waldby 19). In Vanya's case, the text demonstrates a life "stripped of its historically specific form" (Ziarek 96), a mere body that illustrates the Agambenian idea of $zo\dot{e}^{28}$. The textual emphasis on the corporeal substrate of the animal ("duct", "gland", "cortex" etc.) separates its location from *bios* and its claims to culturally acquired/inherited credentials. Subsequently, the laboratory space in which the canine is positioned emerges as "a state of exception"— "a zone of indistinction between law and nature, outside and inside" (Agamben 64)—that displaces the individual rights over bodies. This is further seen in the case of Webley Silvernail's rats at The White Visitation. It is crucial to note that Vanya's biovalue that serves Pointsman's military manoeuvres is material-discursive inasmuch as it is constitutive of body-matter and the discourse of animality. That is, to draw on Karen Barad²⁹, a condition that emerges in the "intraaction" between apparatuses of the laboratory and bodily productions.

The event calls attention to the point where the animals' labour becomes the medium through which they are perceived. By focalising how specific traits of a species may promote an amplification of biovalue, the episode highlights the embeddedness of life within the systems of bioscience and global economic exchanges. At The White Visitation's Abreaction Research Facility (ARF), we find another animal life being enclosed into the laboratory. This time, it is an octopus named Grigori, an experimental subject assigned to Dr. Porkyevitch and Spectro who condition the animal to chase Katje on a beach. The process involves, besides biomedical interventions, an immersion into filmic simulations:

Webley Silvernail comes to carry the projector back down the chilly scuffed-wood corridors again to the ARF wing, in to the inner room where octopus Grigori oozes sullenly in his tank. In other rooms the dogs whine, bark shrilly in pain, whimper for a stimulus that does not, will never come, and the snow goes whirling, invisible tattooing needles against the nerveless window glass behind the green shades. The reel is threaded, the lights are switched off, Grigori's attention is directed to the screen, where an image already walks. (Pynchon, GR 115)

The episode underscores a juxtaposition of the corporeal language of animality ("ooze", "whine", "bark", "whimper") and the vocabulary of technoscience ("reel", "screen", "image"). In the conditioning of the octopus, the scientists complicate the apparently stable ontology of the animal. This is evidenced in Grigori's perpetually shifting roles as a beast inducing horror – as Slothrop exclaims: "more and more of the octopus revealed the closer he comes and wow it's a *big* one, holycow" (Pynchon, *GR* 188) – and an aider

of diplomatic exercises for the Zone. With this, the text dramatises an instance of "demetaphorization" of language in which "words are thrust... into living animal bodies" (Lippit 163) so that the pathology of the animal assumes a site of semiosis. It is necessary to note that the laboratory procedures at ARF follow from Spectro's observation that octopi are suitable subjects for the experimentation, for they "are docile under surgery. They can survive massive removals of brain tissue" (Pynchon, *GR* 53). In this, the text gestures to what Derrida terms the "absolute alterity" ("Animal" 380) of animals. The discourse in which it partakes in celebrates the alterity of the animal bodies and diagrams an affirmative trans-species entanglement.

Grigori's subsequent corporeal performance is predicted on a contingent historical framework that links power and the materiality of the body. The monstrosity of the animal is ostensibly transformed into a form of biocapital³⁰ for the Zone that maybe defined by "a tripartite structure: use value, exchange value, and encounter value, without the problematic solace of human exceptionalism" (Haraway, *When Species Meet* 46). The ontological choreography of the octopus ensures its position as "lively capital", to again borrow a term from Donna Haraway, for Pointsman and others. In addition to dog Vanya and octopus Grigori, the text delineates multiple trans-species encounters. There is Ludwig's lemming Ursula which he won as the "first prize in a Hitler Youth pet show" (Pynchon, *GR* 566); in an infamous episode we see Slothrop impose a German Expressionist label on himself to be dressed as a pig for the pigherofestival (Pynchon, *GR* 578) and his subsequent encounter with pig Frieda (Pynchon, *GR* 585-86), etc. To this end, the text presages an emergent landscape of multispecies cohabitation. In so doing, Pynchon enacts a play between anthropomorphism and alterity anticipating possible outlets of theorising animal subjectivity.

Biomedicalization

With questions of biotechnological interventions comes the prospect of clinical reordering of the bodily schema. Pynchon's text is uniquely equipped to illuminate this problematic that marks the practices of contemporary biomedicine. Among other things of the laboratory ilk, the synthetic substances (plastics, polymers, chemicals) figure prominently throughout the novel. "The centrality of plastic", as McHugh holds, "indicates the power of human discourse to shape material reality at the molecular level, transforming natural carbon arrangements into something not only artificial but also

malleable and manipulable" (5). It is an accentuation of the shift that Michel Foucault identifies in *Birth of the Clinic* (1963). For him, the transition from a taxonomical understanding of the natural world to an intervention in psychology and biochemistry is what constitutes the practices in contemporary life sciences. The knowledge of human anatomy necessitated "a shift from a medicine of surfaces and classifications to a medicine of depth, of organs and functions" (Rose, *Politics* 43). In a grotesquely surreal episode at the outset of the novel, we see Slothrop's sodium amytal induced trip down a toilet in Boston's Roseland Ballroom. As the event begins to reel off a description of his hypnotic vision, it registers a chemical intervention into the cognitive schema of the individual. The text introduces fictive compounds such as Kryptosam (Pynchon, *GR* 72) and Mipolam (Pynchon, *GR* 97) that intervene the pathological climate of the time.

Throughout the text, we find frequent references to aspirin (acetylsalicylic acid): "broken aspirins ground to powder" (Pynchon, GR 18), "lots of aspirin" (Pynchon, GR 61), "aspirins for sleep" (Pynchon, GR 75) etc. The presence of the drug and its commonplace functionality invokes a narrative that reifies the visceral body in terms of the culturally qualified notions of the self. It is necessary to note that aspirin qualifies as a household medicine in the post-nuclear era which is accessible without any pharmaceutical directives. Such a landscape situates the human as a product of perpetual approximations defined by the nexus of synthesised substances and performative events. This is pushed to the extremes in the depiction of Tyrone Slothrop in the novel. In the middle of the text, we see his involuntary autobiographical memory being rekindled by a smell: "a smell from before his conscious memory begins, a soft and chemical smell, threatening, haunting, not a smell to be found out in the world" (Pynchon, GR 289-90). This is a crucial point in the novel that registers an entanglement between neural nodes (human) and chemical residues (extra-human). However, the insistence on the olfactory is not a one-off reference in the text. While describing the scene of a "holiday by the sea", we are conveyed the details of the weather in these terms: "The weather is not ideal. An overcast, a wind that will be chilly by midafternoon. A smell of ozone blows up from the Dodgem cars out of the gray steel girdework along the promenade, along with smells of shellfish on the barrows, and of salt." (Pynchon, GR 277). These are instances in which the body's sensory schema is affectively linked with the environment.

In Slothrop's case, the "chemical smell" prefigures the organic link that he shares with the Rocket and the Schwarzgerät. His connection with the Schwarzgerät (a device made to carry a passenger within the Rocket) is revealed to us as the former finds the dossier to Laszlo Jamf. As it turns out, "the infant Slothrop" (Pynchon, *GR* 85) was sold to IG Farben, the German chemical company, and he was conditioned with Imipolex G, "an aromatic heterocyclic polymer, developed in 1939" (Pynchon, *GR* 252) to be used later in the construction of the Schwarzgerät. This contract has been made even before his birth. Slothrop's position as an experimental subject refracts the modern biopolitical imaginary that recontextualises the body vis-a-vis medical technologies. It is a pointer to the biomedicalization of life that characterises the contemporary culture. By looking at the twentieth century totalitarian forms of control over the corporeal, Agamben sees at this juncture a process in which "the biological life and its needs had become the *politically* decisive fact" (122; emphasis in original). Slothrop's biological body becomes a site where human and the non-human elements are endlessly entangled. His performative self—evidenced in the acts of his sexual conquests throughout London— conflates with the impact points of the German V2. This is an affective phenomenon inasmuch as it unsettles the logic of inside and outside.

Slothrop interiorises the chemical codes of Imipolex G that drives him towards erection and intercourse. Likewise, the Schwarzgerät has been described as "the womb into which Gottfried returns" (Pynchon, *GR* 765), conveying an exterior arrangement in a visceral vocabulary. Such events inform a sense of bodily and spatial disorientation eschewing the essentialist notion of the self. This is pushed to the extremes in Slothrop as he ends up "scattered all over the Zone" so much so that "[i]t's doubtful if he can ever be 'found' again, in the conventional sense of 'positively identified and detained" (Pynchon, *GR* 702). In this, one can argue, the novel dramatizes the ultimate exemplum of corporeal entanglements that inform the narrative teleology of the text.

Though *Gravity's Rainbow* is far too complex a text to be reduced to this single dimension, it can be said to have anticipated a critical hermeneutics of entangled corporeality. The epigraphs to the chapter would serve as a preamble to this proposition. The novel's structure suggests an undoing of essentialist ideologies underpinned by Cartesian cogito, Newtonian absolutes and Darwinian determinism. It corresponds to the semantic matter of the novel for the narrative encodes epistemic crossovers and diegetic convergences blurring the borderlines between ontological occurrences. For this, Pynchon's project appropriates a genre that merges science fiction with horror, fantasies with documented historical realities, and partakes in occult atmosphere and hallucinatory

dream sequences, exemplifying a case of entangled genres. His reactionary apparatus culminates in a narrative opacity that eschews explanation and occluded perspectives that orient us towards a closure that does not close. What Pynchon appears to endorse here is an imaginative antidote to the realities orchestrated by authoritarian spectres. In so doing, he manages to create a labyrinthine time-space that communicates with multiple epistemologies at once.