THE INTERPLAY OF SATIRE, PARODY, AND EPISTEMIC FRAMEWORKS: LITERATURE AND SCIENCE IN TIME'S ARROW AND DO ANDROIDS DREAM OF ELECTRIC SHEEP?

Unai Izquierdo Berasaluce
Universidad Nacional de Educación a Distancia
uizquierdo@flog.uned.es

ABSTRACT. This paper explores the intersection of satire, parody, and scientific paradigms in Time's Arrow by Martin Amis and Do Androids Dream of Electric Sheep? by Philip K. Dick. Both novels deploy satire and parody to challenge dominant notions of rationality, ethics, and human identity. Amis manipulates temporality to reveal the ideological mechanisms that frame historical atrocities as rational progress, while Dick blurs the human/nonhuman divide, uncovering the artificial foundations of technoscientific conceptions of identity. As contemporary shifts in artificial intelligence, digital media, and geopolitical power reshape knowledge production, literature continues to play a crucial role in interrogating shifting epistemic frameworks. By analyzing these works, this article examines how satire and parody function as conduits between literature and scientific discourse, illustrating their ability to challenge and destabilize entrenched systems of thought.

Keywords: satire, parody, technoscience, epistemic frameworks, temporality, human/nonhuman divide.

LA INTERACCIÓN ENTRE LA SÁTIRA, LA PARODIA Y MARCOS EPISTÉMICOS: LITERATURA Y CIENCIA EN *LA FLECHA DEL TIEMPO* Y ¿SUEÑAN LOS ANDROIDES CON OVEJAS ELÉCTRICAS?

RESUMEN. Este artículo analiza la intersección entre sátira, parodia y paradigmas científicos en La flecha del tiempo de Martin Amis y ¿Sueñan los androides con ovejas eléctricas? de Philip K. Dick. Ambas novelas emplean la sátira y la parodia para desafiar nociones dominantes de racionalidad, ética e identidad humana. Amis subvierte la temporalidad para evidenciar los mecanismos ideológicos que presentaron las atrocidades del Holocausto como parte de un progreso racional, mientras que Dick desestabiliza la división humano/no humano, exponiendo la base artificial de las concepciones tecnocientíficas de la identidad. En un contexto donde la inteligencia artificial, los medios digitales y el poder geopolítico transforman la producción del conocimiento, la literatura sigue desempeñando un papel crucial en la exploración de los marcos epistémicos cambiantes. A través del análisis de estas obras, este artículo explora cómo la sátira y la parodia funcionan como puentes entre la literatura y el discurso científico, ilustrando su capacidad para cuestionar y desestabilizar sistemas de pensamiento arraigados.

Palabras clave: sátira, parodia, tecnociencia, marcos epistémicos, temporalidad, división humano/no humano.

Received 10/03/2025

Revised version accepted 01/09/2025

1. INTRODUCTION

In the 1990s, post-structuralist, multicultural, and feminist thought began to challenge the objectivity and methods of science, casting doubt on its ability to represent reality. This critique did not reject science outright but questioned its methods of representation and their cultural and linguistic underpinnings. The identification of certain scientific concepts or procedures as social constructions and the resulting view of knowledge seemed anti-scientific from a postmodern perspective. In *Higher Superstition* (1994, aptly subtitled *The Academic Left and Its Quarrels with Science*), Paul R. Gross and Norman Levitt criticized interdisciplinary studies for opposing modern science and attacking its concepts without understanding their intellectual origins (4-5).

Gross and Levitt's rejection of postmodern thought fails to acknowledge how it complements, rather than negates, scientific inquiry. These critiques highlight the need for reflexivity regarding the cultural and linguistic dimensions of scientific practices. Postmodern thinkers like Jacques Derrida and Jean-François Lyotard argued that reality is inextricable from the language that produces it. For Derrida, this does not imply a denial of reality but critiques the assumption that language can represent it transparently. His concept of *différance* highlights the instability of meaning in language, affecting all representational systems, including science.

Similarly, Lyotard critiques grand narratives—including those in science—that claim to explain all phenomena under one logic. Instead, he advocates for recognizing a plurality of *petit récits* or localized, contingent discourses, with scientific narratives as one among multiple valid forms of knowledge. Thus, these critiques encourage rethinking science as a cultural construct, emphasizing its role as one mode of meaning-making rather than the ultimate arbiter of truth.

Acknowledging the cultural and linguistic foundations of scientific discourse, some literary works reinterpret specific epistemic structures that underpin fictional narratives, interrogating and reimagining them within specific historical and social contexts. In this reciprocal interaction, scientific discourse both influences and is influenced by cultural and linguistic practices, creating a feedback loop where literature plays a pivotal role. By selectively manipulating and recontextualizing scientific assumptions, certain literary texts expose their inherent ambiguities and limitations. This process pushes the limits of scientific reasoning or reframes it to unsettle accepted truths or critique societal issues. Satire and parody can serve as critical devices in this context, amplifying the impact of these reinterpretations and highlighting the implications of scientific paradigms. Through irony, exaggeration, and absurdity, they reveal inconsistencies within epistemic frameworks, subjecting them to scrutiny and subversion.

Using the framework of Foucauldian epistemes—broad systems of thought that define knowledge within a given historical period, shaping and constraining how societies understand the world—this analysis positions literary works not as passive reflections of scientific thought but as active participants in shaping and contesting such frameworks. Technoscience, understood as the convergence of technological and scientific systems, transforms human understanding by challenging established modes of knowledge and creating new paradigms for interpreting foundational aspects of human experience, such as identity and the rational structures that sometimes enable violence. This dynamic unfolds in the novels examined in this paper, where scientific and historical constructs are destabilized and reimagined. Literature not only highlights these disruptions but also analyzes their cultural and epistemological implications. The ridicule that satire and parody generate amplifies these effects, intensifying the disorientation and questioning provoked by these shifting frameworks while exposing their broader consequences.

The disruption of linear temporality and the dissolution of identity boundaries, as framed by scientific epistemes, reshape prevailing paradigms by subjecting both ideas and individuals to ridicule, thereby emphasizing the contradictions and limitations within these systems. Through analyses of *Time's Arrow* and *Do Androids Dream of Electric Sheep?*, this paper argues that satire and parody expose the epistemological ruptures introduced by the manipulation of scientific frameworks while also revealing the failures of the ideologies that sustain them. In *Time's Arrow*, Martin Amis wittily distorts relativist notions of chronological time to challenge liberal humanist ideas rooted in modernity. Similarly, in *Do Androids Dream of Electric Sheep?*, Philip K. Dick mocks a dystopian society and destabilizes concepts of humanity by exploring rhizomatic structures—a Deleuzian term for non-

hierarchical, interconnected networks resisting traditional linear structures—between humans and androids. Despite their distinct genres—*Electric Sheep* as science fiction and *Time's Arrow* as experimental fiction—both novels employ speculative and narrative strategies to question epistemologies. This article explores how literature employs satire, parody, and epistemic structures to interrogate shifting paradigms of identity and the ideological systems that led to the rise of Nazism.

To substantiate these arguments, this paper analyzes the strategies of ridicule employed by Amis and Dick: Amis links the transgression of linear time with modernity's vices, while Dick's satire underscores technoscience's role in dissolving the human/nonhuman binary.

2. LITERATURE, SCIENCE, AND RIDICULE: INTERROGATING EPISTEMOLOGICAL RUPTURES

Now that we have established the notion of episteme, we turn to the key elements Amis and Dick rely on to achieve their objectives: ridicule and technoscience.

Ridicule serves as a tool for critique, subversion, and engagement with epistemological contradictions. It appears in many manifestations, including satire and parody, both of which often incorporate it for critical reflection. However, two key points must be acknowledged: ridicule can appear in works that are not wholly satirical or parodic, and, conversely, satire and parody do not always rely on humor as their primary mode of expression. Humor is frequent in satire and parody, but not indispensable. As Dustin Griffin explains, some satirical works are sharp and moralizing, aimed at enforcing ethical judgments or highlighting social failings. Others lean toward inquiry, speculation, or playfulness, inviting the reader into exploratory reflection without delivering clear conclusions (221-222), a quality that makes satire resistant to closure and capable not only of critique but also of speculative thinking, or disruptive play (10-12). This variation suggests that satire operates through different registers, not all of which are humorous. Some satirical works adopt a serious tone; likewise, certain parodies focus on imitation without overt comedic intent. As the Concise Oxford Dictionary of Literary Terms defines them, satire "exposes the failings of individuals, institutions, or societies to ridicule and scorn", while parody is "a mocking imitation of the style of a literary work or works, ridiculing the stylistic habits of an author or school by exaggerated mimicry" (Baldick).

Because this article examines how parody and satire function in narrative, stylistic, or epistemological terms rather than as fixed genres, they are approached here as flexible critical modes. They use ridicule—with or without humor—to challenge authoritative narratives for comedic, critical, or subversive purposes through irony, exaggeration, or structural mimicry. Parody can reconfigure familiar discourses to question established meanings or expose implicit tensions, while satire often relies on ambiguity, fragmentation, or contradiction to provoke or interrogate.

This adaptability allows both satire and parody to adjust to context and content, making them effective instruments for interrogating dominant assumptions and revealing inconsistencies within systems of knowledge.

The distinction between satire and parody is not always clear-cut as they frequently coexist in literary texts. Linda Hutcheon, in *A Theory of Parody* (1985), argues that while satire tends to engage external targets, such as social institutions, ideologies, or individuals, parody is often more self-referential, engaging primarily with literary or artistic conventions (43–44, 49). Despite this distinction, both rely on critical distancing and involve value judgments (44). This overlap explains why satire and parody often appear together, especially when a work employs parodic structures for either expository or subversive purposes. Hutcheon characterizes postmodern parody as "repetition with critical distance", meaning that it simultaneously imitates and undermines its sources (6). This dynamic is particularly evident in *Time's Arrow* and *Electric Sheep*, as these works do not merely mock their source material but engage in a layered critique, exposing societal and epistemological contradictions.

This article does not aim to provide an exhaustive differentiation between satire and parody in these two works. Instead, it explores how these strategies, whether satirical, parodic, or humorous in the broader sense, reveal contradictions within epistemological and scientific structures. In particular, we examine how these literary mechanisms interrogate the authority of scientific discourse and expose its underlying tensions.

Fredric Jameson, in *Postmodernism*, or the Cultural Logic of Late Capitalism (1991), describes how postmodernity collapses distinctions between high and low culture, incorporating elite art with mass media and reshaping modes of critique. Ridicule, in its various manifestations, humorous or not, plays a central role in this process, revealing inconsistencies within rigid power structures and challenging assumptions about cultural hierarchy. In doing so, it becomes a means of destabilizing epistemes and their claims to authority.

Technoscience, a term developed by Bruno Latour in works like *We Have Never Been Modern* (1993), provides essential context for understanding these epistemological challenges. As the fusion of technological and scientific systems, it reshapes human understanding by breaking down traditional boundaries and redefining fundamental concepts of reality, knowledge, and human experience (29–39). Donna Haraway, in *Simians, Cyborgs, and Women* (1991), extends this by examining how technoscience complicates the natural/artificial and human/machine

_

¹ Although satire and parody often intersect, each can operate independently or combine to varying degrees. Jonathan Swift's "A Modest Proposal" (1729) is both satirical and parodic: it delivers scathing social critique through mimicry of economic pamphlets. Margaret Atwood's *The Handmaid's Tale* (1985) parodies biblical language and patriarchal discourse to construct a dystopian critique with satirical elements. Thomas Pynchon's *The Crying of Lot 49* (1966) employs literary parody (particularly of detective fiction) without engaging in direct moral or political satire.

divides. Her concept of the cyborg challenges essentialist notions of identity, emphasizing hybridity and interconnectedness (150-151). Haraway's work highlights how technoscience actively shapes these ruptures, becoming a site of both liberation and control.

In this light, the intersections of satire and technoscience also provide an opportunity to interrogate epistemes. While satire foregrounds contradictions and instability, humor shapes and intensifies how readers perceive these ruptures. Satire's power to illuminate contradictions and absurdities forces readers to confront the instability of dominant epistemological and moral frameworks. Through irony, exaggeration, and defamiliarization, it dismantles prevailing narratives and reveals the ideological mechanisms sustaining them. Just as technoscience challenges fixed categories of human identity, satire questions assumptions about knowledge and ethical certainty, exposing their contingent nature. This capacity to challenge foundational beliefs makes both satire and technoscience powerful forces in reshaping established systems of meaning and authority.

This convergence also calls into question the Cartesian dualism that has historically defined Western thought, particularly its separation of subjects (humans) and objects (nonhumans). Verbeek highlights how this dualism underpins the rigid epistemological boundaries on which modern science relies (22). Coeckelbergh, in turn, critiques how these frameworks restrict understanding of human-nonhuman interrelations, increasingly evident in technoscientific contexts (66). Latour pushes this critique further by rejecting fixed distinctions altogether, proposing instead a networked view where humans and nonhumans form dynamic, interdependent assemblages (77). This relational ontology reveals the fragility of epistemological structures based on dichotomies, a theme explored in both *Time's Arrow* and *Electric Sheep*.

Whereas Dick uses technoscience to dissolve the human/nonhuman boundary, Amis's manipulation of time challenges the Enlightenment's linear, progressive view of history. The novel's reversed chronology reveals how atrocity and rationalized systems of violence were not exceptions to progress but rather products of its logic. This subversion reflects postmodern critiques of grand narratives that obscure the ideological foundations of scientific and bureaucratic advancements. Both authors, through distinct strategies, challenge epistemological categories and expose their limitations when confronted with structures of power, ideology, and violence.

By crossing epistemological boundaries, and highlighting that transgression through satire and humor, both authors illuminate the fragility of humanist ideals, the instability of knowledge, and the cultural implications of scientific progress. As will be shown, technoscience alone can at times blur categories and raise fundamental ethical questions, yet satire and other humorous elements play a crucial role in amplifying these concerns.

3. REVERSING TIME: SATIRICAL CHALLENGES TO MODERNITY IN TIME'S ARROW

Set after the Holocaust and on the brink of nuclear apocalypse, *Time's Arrow* examines, through the reversal of time within a single consciousness, modernity's destructive tendencies and its failure to deliver on its ideals of coherence and progress. Marshall Berman describes modernity as a "maelstrom of perpetual disintegration and renewal, of struggle and contradiction, of ambiguity and anguish" (15), while Fredric Jameson highlights its crises of representation and fragmentation (25), both reflecting the breakdown depicted in the novel. Amis explores how Enlightenment ideals of progress and reason, intended to advance humanity, were ultimately distorted within liberal humanism, allowing for the unprecedented violence of the Holocaust.

Rooted in the liberal humanist tradition, modernity positioned humans as autonomous creators of knowledge, whose freedom would establish systems of liberty and equality. Amis satirizes this idealism by laying bare its perversion under Nazi ideology, where Hitler's regime exploited modernity's rhetoric of progress and rationality to justify racial purification and genocide. As Adorno and Horkheimer argue in *Dialectic of Enlightenment*, the Enlightenment's focus on instrumental reason facilitated the dehumanizing logic of the Holocaust, normalizing racial purification as a rational, scientific goal (20–32). This critique highlights the tensions within modernity's structures, where progress coexists with destructive tendencies.

Since Einstein proposed his General Theory of Relativity in 1916, the relativist model replaced the Newtonian view of space and time as separate, redefining them as a continuum. This shift is reflected in early twentieth-century literature, such as Virginia Woolf's *Mrs. Dalloway* (1925) and James Joyce's *Ulysses* (1920), which challenge linear time by presenting it as fluid and fragmented.

Time's Arrow radicalizes the relationship between narrative and temporality by reversing time, creating a world where causality is inverted. The novel forces readers to confront time's irreversibility by narrating events in reverse, with Odilo as a time traveler whose journey exposes the absurdity of reversing moral and historical causality.² This inversion is often interpreted as a critique of the Enlightenment's promise of progress and reason, revealing how liberal humanism's ideals of autonomy, rationality, and emancipation failed to prevent acts of violence, such as the Holocaust.

In a reality where time and space intermingle, the changes in matter and the physical world caused by time travel highlight time's abstract and irreversible nature, as elucidated by Stephen Hawking in *A Brief History of Time* (1988). Amis deliberately transgresses this principle to critique humanity's flawed trajectory, revealing its descent into moral and existential collapse.

_

² For the sake of clarity, the protagonist is henceforth referred to as Odilo, despite its various names in the novel.

The irreversibility of time intersects with thermodynamics and entropy. The second law of thermodynamics states that entropy, a measure of disorder or randomness, in a closed system increases over time, marking time's one-way direction. Richard Menke describes *Time's Arrow* as presenting a "darkly thermodynamic vision of [twentieth-century] history" (961), where destruction is unavoidable. Amis's portrayal of Europe's modern history fits this description, as the reversed narrative disrupts the balance between order and disorder, emphasizing the ease of destruction over creation.

Odilo's soul symbolically conveys the irrationality of his host's atrocities through vivid descriptions of his warped environment: "I know I live on a fierce and magical planet ... which with a single shrug of its tectonic plates can erect a city in half an hour. Creation ... is easy, is quick" (M. Amis 13). Through time reversal, Amis crafts a satirical setting that critiques the Nazis's distorted manipulation of logic and reason. Alvin B. Kernan explains that satirical plots sometimes unfold without a clear linear or causal sequence, presenting instead the actions of what he terms "self-deceived figures", individuals who misunderstand the world not from ignorance but from a willful belief that they can transcend ordinary human limits, often leading to moral and logical perversion (100, 102). This does not mean that all satire must rely on temporal inversion as extreme as that in Time's Arrow; rather, satire often distorts narrative logic to expose the absurdity of systems of logic or belief. For example, Kernan cites Swift's A Tale of a Tub as a satire where the narrator's confused, disjointed argumentation reveals his flawed reasoning (103). Amis goes beyond by reversing not only causality but the very structure of Odilo's world, making the novel a strikingly literal instance of satire's tendency to disrupt conventional causality.

The Nazis in Time's Arrow exemplify what Kernan (drawing from the Augustan satire of Pope and Swift) calls "dullness", a degrading force that corrupts language, thought, and perception, often stemming from vanity, inflexibility, or misguided intellectual ambition. In this context, dullness refers not simply to a lack of excitement, but to a kind of mental and moral inertia, a dulling of reason and ethical judgment. Those dominated by it, the "self-deceived", are not passive sufferers but active carriers of its distortions, shaping a reality marked by moral disorientation and conceptual confusion. Kernan writes that such figures disregard "what is possible for man" and, in their attempt to force progress, inevitably produce its opposite: moral collapse, absurdity, and destruction (102). From this reading, Time's Arrow portrays the Nazis as agents of delusion, whose self-deception enables collective deceit. Odilo, whose soul is paradoxically both perpetrator and passive observer, witnesses this dullness from within. As the consciousness of a Nazi physician, he moves backward through atrocities he helped commit, alienated from their rationale yet unable to escape them. The twisted satirical setting of the novel, in which time, ethics, and causality disintegrate, shows how distorted logics reflect the ideological blindness behind systems that justified mass destruction. Creation is depicted as "quick" and "easy", while destruction seems laborious, subverting the readers' expectations and exposing the grotesque inversion of Nazi ideology. This satirical

inversion of logic, where death becomes life and destruction becomes creation, mirrors the grotesque absurdity of rationalizing genocide as progress.

The Enlightenment, as a foundational intellectual movement, underpins Amis's critique. Its ideals of reason, empirical science, and progress shaped modernity, fostering narratives of technological advancement and administrative effectiveness as signs of human improvement. Amis highlights how these ideals were not only corrupted but actively weaponized in the twentieth century. The Nazis's genocide, executed with bureaucratic precision and scientific rigor, exposes the dangers of rationality stripped of moral responsibility. By inverting time, Amis critiques the intellectual and ideological frameworks that legitimized systematic extermination, revealing their role in justifying destruction as rational order, an external critique that reflects satire's critique of political and social structures. This reversal also echoes postmodern literature's parody of grand narratives like reason and progress, challenging modernity's unquestioned faith in autonomous systems of efficiency as inherently liberating.

The moral void of Nazi logic, conflating destruction with the creation of a racially pure society, reflects the Enlightenment's focus on categorization and control, embodied in racial pseudoscience and mechanized extermination, laying bare the perverse legacy of these ideals. The reversed narrative becomes fully clear only as the plot unfolds backward, gradually revealing Odilo's identity as Dr. Unverdorben, a Nazi physician. This structural choice mirrors the warped reasoning of Nazi ideology, where destruction was rationalized as creation.

The novel's inverted temporality reframes the Holocaust, characterized by irreversibility and moral chaos, as a grotesque act of creation aimed at engineering societal purity, showing the perverse reasoning behind such atrocities. As Greg Harris notes, "Nazi 'rationality' ... blurred the lines between creation and destruction, as destruction was often rationalized as a means to create" (489).

Odilo functions as a subverted iteration of the traditional time traveler, making *Time's Arrow* a parodic critique with an internal target: the narrative conventions of time-travel fiction. Classic works in the genre, from H. G. Wells's *The Time Machine* (1895) to Vonnegut's *Slaughterhouse-Five* (1969), typically grant protagonists some level of agency over time, allowing them to alter or reconsider history. Amis undermines this premise: Odilo moves backward through events, yet remains powerless to change them, his trajectory fixed. This inversion mirrors Nazi ideology's rigid determinism, which framed its actions as unavoidable and justified, revealing the fatalism underlying its reasoning.

This parody follows Hutcheon's notion of postmodernism's "complications critique" (4). As she argues in *The Politics of Postmodernism* (2002), postmodern parody simultaneously engages with and destabilizes the structures it draws upon. This dual movement defines *Time's Arrow*: Amis reverses time to mimic the Nazis's twisted logic, equating creation with destruction, while exposing its moral and epistemological flaws.

Amis amplifies the paradox inherent in Nazi ideology by reflecting it through the reversed narrative structure. This inversion critiques modernity's ideological failure: its ideals of progress and rationality were co-opted to serve the Holocaust, turning reason into a tool for inhuman ends. The reversed timeline satirizes the absurdity of rationalizing systematic slaughter as progress, while irony arises from the tension between the narrative's structure and the reader's historical knowledge.

This critique challenges Hegel's well-known claim in *The Philosophy of Right* that "[w]hat is real is rational, and what is rational is real" (20). The Holocaust is undeniably real, yet its events, while rationally justified by the perpetrators, remain fundamentally irrational. The systematic actions leading to the deaths of six million people expose modernity's contradictory nature: shaped by ideals of progress, yet capable of barbarism. Amis underscores this duality by juxtaposing the bureaucratic precision of genocide with its inherent irrationality, presenting civilization and barbarism as entangled rather than opposed (Finney 102–05).

An example of Amis's irony, tinged with melancholic monologue, emerges in the second chapter during Odilo's move to America. The soul's narrative voice expresses delight in America's "human variety" and "pretty pluralism" (M. Amis 25), contrasting with Tod's conflicted feelings. His "two minds" (25) about his new home serve as a metaphor for his criminal past and inner turmoil, mirrored in his strange behavior in the garden:

The garden was heaven when we started out, but over the years, well, don't blame me is all I'm saying. ... Tod's tears were tears of remorse, or propitiation. For what he'd done. Look at it. A nightmare of wilt and mildew, of fungus and black spot. All the tulips and roses he patiently drained and crushed, then sealed their exhumed corpses and took them in the paper bag to the store for money. All the weeds and nettles he screwed into the soil—and the earth took this ugliness, snatched at it with a sudden grip. Such, then, are the fruits of Tod's meticulous vandalism. Destruction—is difficult. Destruction is slow. (M. Amis 26)

Amis uses the garden as a symbolic representation of Nazi ideology. Once a symbol of life and renewal, it becomes a site of destruction disguised as creation. This inversion reflects Hutcheon's concept of complicitous critique, wherein parody engages with ideological structures while exposing their contradictions. Tod, as a time traveler, perceives this reversal firsthand, witnessing a world where decay appears as restoration. As a satirical device, the garden embodies Nazi ideology's tension between creation and destruction. By having Tod "care" for the garden through acts of destruction, Amis ironically critiques the Nazis's use of death to build a so-called pure society, exposing the absurdity of rationalizing mass murder and the hollowness of their ideological justifications.

Amis extends this critique through Tod's soul, an external observer whose cynical tone contrasts with the horrors it narrates. This voice juxtaposes trivial observations with the profound moral implications of the events, collapsing boundaries between high and low culture, as Jameson might argue. Amis employs both parody and satire: parody operates internally, targeting time-travel conventions by making Tod a

powerless traveler trapped in reverse causality, while satire functions externally, exposing the Nazis's deceit and the grand narrative of historical progress that legitimized their actions. The novel unsettles entrenched narratives of ideological authority, revealing modernity's fragile claims to rationalism and improvement. Tod's symbolic tears of "remorse" and the garden's transformation into a site of "meticulous vandalism" further satirize the rationalization of cruelty, unveiling its inhumanity and the banal justifications for atrocities cloaked in the rhetoric of advancement.

Both satire and parody share a formal mechanism: the self-contradictory style of inverted narration and its imagery, where death seemingly creates life. The tone remains bitterly ironic, presenting one thing while implying its opposite, as neither time is reversible nor the depicted world possible. Tod's description of his garden reflects this contradiction: "Destruction — is difficult. Destruction is slow" (M. Amis 26). Yet, destruction in the Holocaust was neither slow nor difficult. According to the second law of thermodynamics, disorder and destruction are natural tendencies in a closed system over time. In the closed system of Amis's novel, however, this law is deliberately reversed, mirroring the Nazis's acceleration of chaos under the pretense of rational order. The novel's inversion of causality thus exposes the ethical void that emerges when rationality is severed from ethics.

The chapter title of the quotation above, "You Have to Be Cruel to Be Kind", ironically underscores the deceitful paradox of Nazi ideology and the text's ironic tone. Greg Harris observes that "by progressing backwards, the narrative style in and of itself comments on the Nazis's paradoxical version of 'progress'" (489), revealing how their appropriation of archaic myths and militarism was framed as modern progress. Jameson's notion of satire as a bridge between cultural forms is evident here: Amis manipulates the principles of modern physics related to chronological time and entropy to craft a satirical contrast between a seemingly lighthearted narrative style and a critical examination of humanity's complicity in historical horrors.

The grotesque contradictions Amis addresses in *Time's Arrow* extend beyond historical abstraction, reflecting his own personal tensions within the author. This interplay between history and self emerges in Amis's reflections on trauma and subtle remnants of his experiences within his works.

Odilo mirrors the paradox Amis perceives in himself. In the preface to Kingsley Amis's *Memoirs* (1991), Martin Amis recalls the traumatic TV coverage of the Cuban crisis and his childhood belief that nuclear drills at school could protect him from global annihilation (330–37). As an adult, he admits struggling with this trauma and acknowledges a subtle reflection of himself in works like *Time's Arrow*, noting that while "these novels are firmly unautobiographical", they inevitably reveal "something about the kind of person I am" (337).

Just as Amis is divided between resisting the memory of nuclear threat and remaining haunted by it, Odilo is similarly fragmented, moving in opposing temporal directions. His soul, as an intradiegetic narrator, inhabits an ameliorative version of modernity, while his body, in the reversed narrative, experiences in a degenerative one.

In Amis's mind, modernity reaches its peak with the Holocaust, which, alongside the nuclear bombings of Hiroshima and Nagasaki, epitomizes the West's self-destructive drive, satirized by the novel through its subversion of time (de la Concha et al. 94-95). This critique reflects Fredric Jameson's notion of postmodernism as a challenge to grand narratives, as Amis destabilizes Enlightenment rationality through cultural subversion, weaponizing both satire and parody to ridicule how modernity's ideals of advancement culminate in senseless destruction, reducing civilization's narrative to a hollow act of self-annihilation.

Amis criticizes modernity's blindness to its own destruction, a theme he encapsulates in his phrase "the toiletization of the planet", used in a 1989 interview on *The South Bank Show*, a British television program. In this vision, the world collapses under its own evil, vanishing like a futile flush in the bathroom. This metaphor belongs to a long tradition of employing scatology to expose societal decay and moral absurdity, seen in authors from Jonathan Swift to Ian McEwan.

Jonathan Swift, for instance, uses bodily functions in Gulliver's Travels (1726) to mock human vanity and delusions of grandeur. In Lilliput, Gulliver urinates on a fire in the royal palace, saving lives but being charged with treason. In Brobdingnag, he defecates in private behind leaves, despite being no bigger than an insect, demonstrating a ridiculous sense of propriety and inflated self-importance (Clark 117). These grotesque episodes suggest that even the most basic bodily acts, often seen as private or shameful, can expose the contradictions and absurdities in social and political order. Ian McEwan, too, uses bodily decay and excretion in The Comfort of Strangers (1981) to critique conventional ideals of intimacy and gender (Delogu 4-5). These examples help us understand how Amis draws on this tradition in Time's Arrow. As the novel unfolds in reverse, so do the bodily processes: excrement re-enters the body, corpses rise from graves. These reversals dramatize the illusion of historical progress, echoing Amis's bleak remark about civilization undoing itself, like a toilet flushing. The grotesque in *Time's Arrow* is not mere shock but a means to confront uncomfortable truths and prepare readers for Amis's most unsettling inversion.

In *Time's Arrow*, this tradition appears through the grotesque inversion of modernity's foundations, where scatology highlights humanity's self-inflicted decline. The novel's reversal of causality reaches its most chilling form in Odilo's rhetoric, which reconfigures genocide as warped alchemy, a transformation of annihilation into genesis: "Our preternatural purpose? To dream a race. To make a people from the weather. From thunder and from lightning. With gas, with electricity, with shit, with fire" (M. Amis 128).

This passage encapsulates the Holocaust's deranged logic in reverse: the Nazi regime appears to create rather than exterminate. The juxtaposition of grandiose ambition with base materials, gas, fire, and even excrement, heightens the absurdity, making the horror grotesquely ridiculous. This form of Juvenalian satire is defined

by moral indignation and a stark contrast between ideals and corruption. As Ronald Paulson explains, Juvenal exposes evil not through ridicule but through fierce denunciation, revealing how hypocrisy hides vice behind virtue (23-24). Kernan similarly describes Juvenal's method as one that "literally batter[s] down all pretense" to reveal brutal truth beneath civility (86-87). In *Time's Arrow*, the vision of genocide as genesis, expressed in elevated language yet rooted in waste and fire, follows this model, denouncing the moral inversion at the heart of Nazi ideology.

Despite the seemingly light tone that scatology imparts, the text's violation of scientific paradigms governing chronological time and entropy renders Amis's style profoundly complex. The inverted narrative disrupts the foundational assumptions of cause and effect central to modern science, creating an aura of inescapable finality for the characters, who embody modernity's exhaustion, while simultaneously emphasizing the paradoxical nature of life, as seeing how death deceptively masks life makes existence feel more meaningful.

Amis's portrayal of the narrator's apocalypse challenges scientific principles to interrogate modernity's paradoxes. By reversing time, the novel forces both narrator and reader to experience the Holocaust as destruction disguised as creation. This structural manipulation blends humor and horror, unsettling the audience by exposing the disturbing logic behind historical atrocities. As the narrator passively accepts these events, the reader must confront their true meaning. The novel's detached presentation of reversed extermination reinforces Amis's critique of modernity: scientific and technological progress, rather than leading to enlightenment, descends into destruction and absurdity.

This narrative approach finds deeper theoretical grounding in Brian Finney's analysis of *Time's Arrow*, which explores Lyotard's concept of the sublime. Lyotard's framework, as Finney explains, comprises two components: the melancholic (pain) and the jubilatory (pleasure) (104-115). Pleasure arises when reason surpasses representation, while pain emerges when imagination falters before the incomprehensible.

The reversal of time exemplifies the postmodern sublime, where the imagination fails to grasp the vastness of human atrocity, eliciting a paradoxical mix of pain and pleasure. Here, scatology in the novel does not merely add grotesqueness but intensifies the disjunction between rationalized violence and its consequences. Amis employs satirical language through the sterile tone of medical or scientific discourse to describe extermination as if it were healing, using euphemistic and oddly serene language to reflect the absurdity of bureaucratic violence. This tonal distortion makes language a vehicle of critique, revealing how modernity's tools of reason can justify atrocity. The narrator's calm and the inverted causality together expose modernity's failure, where grand narratives yield not progress but chaos.

At the novel's start, Odilo is old and fatigued, his routines amusingly baffle the narrator. As aging reverses, Odilo feels rejuvenated, but this is a narrative trick: just as the unreliable narrator innocently misreads events, Amis critiques modernity's epistemic dissonance. The chaotic narration satirizes how rationality, deemed

progressive, masks horrors and normalizes atrocities, as Tod chillingly observes: "You don't want to know,' Tod whispers. 'She doesn't want to know. I don't want to know. No one wants to know'" (M. Amis 66). The novel's fragmented structure aligns with modernity's grand narrative, which, in pursuing universal standards, fostered hostility to deviation, enabling barbarism like the Holocaust. Amis critiques this paradox, positioning *Time's Arrow* within Lyotard's definition of postmodernism, which rejects the metanarratives of rational progress embedded in its historical context.

In *Time's Arrow*, Amis employs these dual aspects of the sublime to reflect modernity's double-faceted nature: its capacity for both progress and destruction. The inversion of time and the grotesque humor underscore this tension, creating a persistent crisis in representation that mirrors the collapse of modern epistemic certainties. As Lyotard suggests, postmodern art invents new rules to confront what can be conceived but not fully represented, and Amis's dark humor challenges these boundaries by letting a pessimistic vision dominate the narrative.

Time's Arrow explores modernity's unresolved tensions by contrasting the two constituents of the sublime (Finney 112-116): Odilo's forward-moving life evokes regret, while its reversed narration elicits both happiness and pleasure. This duality reflects modernity's paradox—rational progress simultaneously enabling destruction, as seen in the Holocaust. Amis replaces conventional notions of motivation and plot with destiny and obsession, where events unfold as inevitable outcomes dictated by a fixed end rather than causes with effects. Through the interplay of Odilo's naïve narrative voice and his criminal past, Amis crafts a satire that misleads readers into thinking they are heading toward an imminent future where disaster awaits, while the apocalypse is actually set in the past—a past they have already forgotten.

The disruption of chronological time unveils a familiar, yet uncanny world as sinister clues emerge. This technique heightens the postmodern sublime by framing past horrors as repressed memories, forcing a confrontation between knowledge and oblivion. A pattern of disturbing medical imagery, including surgeons, bloodstained rubber bibs, and recurring "bomb babies", gradually reveals what has been hidden, alluding to the horrifying practices of figures like Dr. Mengele and his collaborators. Rape is also starkly depicted:

The women at the crisis centres ... are all hiding from their redeemers. ... The welts, the abrasions and the black eyes get starker ... until it is time for the women to return in an ecstasy of distress, to the men who will suddenly heal them. Some require more specialized treatment. ... men come along and rape them, and then they are okay, again. (M. Amis 39)

The inverted narration distorts women's suffering, making it appear as though they are healed by rapists at crisis centers. This mocking reversal suggests the horrors of the concentration camps by presenting violence as its opposite. In response, Amis refrains from passing moral judgment, portraying remorselessness as part of the postmodern sublime, where the grotesque unfolds without resolution or moral clarity. As with other paradoxes in the novel, he leaves it unresolved, allowing pain and danger to accumulate, defying narrative closure and demanding engagement with the unresolved and unpresentable. The unresolved lies in violence's cyclical return, where suffering offers no catharsis or redemption. The unpresentable emerges in the contrast between everyday normality and repressed atrocities of history, highlighting our inability to fully grasp the scale of these horrors.

Blending horror and absurdity, Amis employs sublimity as a provocative tool to expose the flaws within modernity's moral framework. He does so first by combining time's inversion and the narrator's naïve perspective, which destabilizes epistemic certainties and mirrors modernity's dual nature. By ridiculing the mechanisms that render atrocity comprehensible, be it through bureaucratic language, scientific rationalization, or narrative coherence, Amis unveils the moral and intellectual voids beneath them. The juxtaposition of unpresentable horrors with temporal reversal heightens the novel's shock and dark humor. Through this interplay of parody, satire, and sublimity, Amis critiques modern thought's inherent contradictions, drawing on the narrative potential of scientific paradigms that sustain linear conceptions of time.

4. BLURRING BOUNDARIES: SATIRICAL DECONSTRUCTION OF HUMANITY IN DO ANDROIDS DREAM OF ELECTRIC SHEEP?

Historically, epistemic shifts have defined "human" through traits like reason, emotions, and, more recently, fluidity or multiplicity. However, technoscience disrupts these notions, enabling concepts like "the posthuman"—which Lucian Gomoll describes as "a hybrid figure characterized primarily by the overlay and interactions of human and machine" (3)—to challenge essentialist, naturalized identity constructs that have shaped human self-understanding.

Deleuze and Guattari argue that traditional arborescent thought ties humanity to origins, genealogy, and linear progression (16). Over time, Darwinian evolution reinforced this framework by embedding humanity within a progressive developmental trajectory. Such paradigms have also been contested: the English Enlightenment, for instance, defined humans as *animal rationale* (rational animals), while Jonathan Swift, in *A Tale of a Tub*, satirically redefined them as *animal rationis capax*, animals merely capable of reasoning (174). Continuing this critical tradition, this section examines how *Do Androids Dream of Electric Sheep?* interrogates these constructs primarily through technoscience and satire. The novel's liminal creatures, emerging from a technobiological framework, blur human boundaries and render them absurd. This rhizomatic model of decentered identity highlights shared traits between androids and humans, their power dynamics, and their resistance to fixed categorization. These strategies are central to Dick's dystopia, where the ideal of human empathy is subverted by a society far removed from humanity yet obsessively clinging to its values.

Dick's use of science fiction is integral to his critique. The genre uniquely challenges identity and humanity by imagining futures where human boundaries dissolve. In *Electric Sheep*, Dick employs these conventions not just to depict a future world but to critique the present. Its speculative nature explores tensions between human and nonhuman, organic and artificial, prompting readers to reconsider the epistemic frameworks that define humanity. By situating his critique within a dystopian framework, Dick engages with postmodern interrogations of identity and the epistemological structures underpinning human definitions, while distinguishing himself through his incisive use of science fiction to expose contradictions in these systems.

The novel's thematic engagement with absurdity shares much with postmodern works often associated with the absurdist aesthetic, which uses distinct strategies to interrogate human existence. For example, Thomas Pynchon's *Gravity's Rainbow* (1973) layers irony and fragmented narratives to expose contradictions in rationality and historical progress, while John Barth's *The Sot-Weed Factor* (1960) employs parody and metafiction to unravel grand narratives and the supposed coherence of historical accounts. Similarly, Richard Brautigan's *The Hawkline Monster* (1974) blends gothic and Western tropes with absurdist humor, challenging genre boundaries and cultural paradigms.

Dick sets himself apart from these authors by using science fiction to highlight the fragility of human identity. Rather than metafictional play or genre hybridization, he constructs a dystopian world where empathy and human/nonhuman boundaries are commodified. His speculative framework critiques human exceptionalism, rooted in Enlightenment rationalism and liberal humanism, which relies on binaries like mind/body, human/machine, and subject/object, while satire exaggerates and exposes their constructed nature, reflecting the destabilizing impact of midtwentieth-century technoscience on established paradigms.

In a world where identity, empathy, and authenticity are commercialized, the novel reflects on humanity's attempts to define itself through traits that are ultimately undermined by the systems that sustain them. Embedding these contradictions within a speculative framework, the work points to the instability of human identity and the absurdity of defining humanity through external validation. This critique focuses on the very mechanisms that sustain this paradox: consumerism, scientific efforts to enforce human exceptionalism, and social hierarchies, which form the central target of Dick's novel. The relationship between humans and animals in the novel exemplifies this contradiction: real and electric animals symbolize empathy, ostensibly humanity's defining trait, yet empathy itself is commodified, valued less as an intrinsic moral quality than as demonstration of moral worth and social success. This concept is reinforced by media-driven consumerism that shapes desires and ensures conformity. This commodification, while appearing to uphold human virtues, ultimately hollows them out, reducing empathy to mere currency and compassion to a transaction.

The satirical use of animals to reflect human flaws underscores the superficiality of consumerist society. As scholars have noted, animals in literature frequently project human concerns and weaknesses, reinforcing satire's critical edge. Ellen Douglass Leyburn, in her study on satiric allegory, discusses how animal narratives reveal cultural anxieties, illustrating satire's role in questioning dominant ideals (50-70). Dick employs this strategy to satirize his novel's materialistic society, where the status-driven absurdity of valuing animals exposes the way in which consumerism transforms empathy and undermines moral ideals The satirical effect emerges through inverting expectations: empathy, assumed to be a human trait, is reduced by consumerism to a shallow marker of prestige, highlighting its fragility and artificiality.

Electric animals extend this critique, collapsing the boundary between the authentic and the simulated into a network of interdependencies that reshapes human identity. In a world where humans interact with non-biological creatures, Dick uses electric animals to reflect humanity's fragmented self-conception. Owners of these artificial creatures extend their identity into a rhizome-like network, an intricate web of connections that resists hierarchical or stable definitions, toward beings that lack life yet hold social significance. This interconnectedness lays bare the contradictions within the novel's society, where technoscience simultaneously fragments and redefines humanity. Ultimately, humans, in their desperate bid for uniqueness, only reinforce their own absurdity.

Following from humanity's entwined relationship with animals and their artificial counterparts, Dick shifts his focus to androids and other technologies, challenging efforts to maintain boundaries between humans and artificial beings. As N. Katherine Hayles and Rosi Braidotti explain, the posthuman challenges essentialist identity by breaking down distinctions between the organic and the artificial, emphasizing hybridity, interconnectivity, and technology's role in shaping identity (Hayles 2-3; Braidotti 26-29). Devices like the mood organ and the empathy box mechanize compassion, turning it into a technologically mediated experience. Meanwhile, society's fear of androids becoming indistinguishable from humans overlooks a deeper paradox: humans, through consumerism and media-driven conformity, come closer to functioning like robots. The absurdity arises from a layered irony: humanity's essence, celebrated as empathy, is reduced to a mechanized, hollowed-out state achievable through a box.

Dick moves beyond critiquing consumerism to examine its deeper foundations, shaped by technoscience and cultural constructs. His satire operates from a destabilizing perspective, where the absurdity of mechanized emotions and blurred human/android boundaries reveals the fragility of long-held notions of human identity. At its core, the novel challenges faith in essentialist identity, showing how

-

³ The concept of the posthuman is approached from divergent theoretical perspectives. Gomoll emphasizes the extension of subjectivity through digital technologies and the integration of the self with technological systems (192). Braidotti, for her part, foregrounds species equality, challenging "the violence and the hierarchical thinking that result from human arrogance and the assumption of transcendental human exceptionalism" (86).

technoscience erodes the human/nonhuman binary. At the same time, it ridicules human distinction as a mere performance, exposing it as yet another artificial construct.

This dissolution extends to human identity, which is increasingly shaped by technological and social frameworks. Compared to *Time's Arrow*, technoscience in *Electric Sheep* functions more autonomously from satire. In Amis's novel, time's reversal underscores the grotesque nature of historical atrocities, while in *Electric Sheep*, technoscience is embedded in the world itself, shaping its logic. Rather than acting as an external tool to reveal contradictions within a real-world framework, it constitutes the very blurring of the boundaries that define humans. The novel thus satirically undermines scientific assumptions about human essence while ridiculing humanity's inflated sense of self-importance.

Richard Deckard, a bounty hunter tasked with retiring rogue androids, embodies these contradictions. His society paradoxically develops tests to distinguish humans from androids while exalting empathy as a uniquely human trait through animal ownership. This paradox underscores technoscience as the central force that reshapes human categories. Humanity appears most authentic when it involuntarily extends its condition to other species, yet this very process depends on artificial systems. By promoting an interconnected network of beings, technoscience dismantles the linear and autonomous concept of humanity, reshaping its definition through its entanglement with animals and robotic technology and making the pursuit of human exceptionalism seem laughable.

The reliance on a machine to measure empathy exemplifies the novel's satire on scientific assumptions about humanity. By reducing human identity to quantifiable metrics, the novel satirizes the absurdity of defining humanity through empirical data. Androids are so indistinguishable from humans that society depends on the Voigt-Kampff test—a mechanized system measuring empathetic responses—to classify humanity. While humans display empathy in hypothetical scenarios, androids respond with calculated detachment, interpreted as psychopathy. This test paradoxically reinforces and undermines human uniqueness, revealing the absurdity of the entire system in a single stroke.

Commenting on *Electric Sheep* and its movie adaptation, *Blade Runner* (1982), Javier de Lucas Martín notes that empathy, unlike intelligence, becomes the defining criterion for humanity because robotics allegedly cannot replicate it (35). Since empathy is not a rational thought, it is presumed to be unique to humans. Yet Dick challenges this by depicting androids like Pris Stratton mourning their android companions, while humans like Philip Resch display cruelty. Furthermore, empathy is shown not as an intrinsic human quality but as a construct shaped by external systems. The Voigt-Kampff test, itself a technoscientific product, makes humanity dependent on its own measuring tools. As Jill Galvan observes, "what passes for 'empathy' among humans derives far more from a cultural construction than from any categorical essence" (145), underscoring how the human/android divide is mediated by artificial frameworks.

Dick reinforces the satire by embedding this paradox within a dystopian, technoscientific setting, exposing the absurdity of a society that quantifies empathy. The speculative setting, with its sense of detachment, encourages critical reflection on the contradictions inherent in humanity as defined by this construct. The reliance on machines to determine artificiality becomes an ironic exercise: humans, convinced of their superiority through science, fail to see the flaws in their own premises. Through this satirical turn, Dick critiques unquestioned faith in technoscience as a means of asserting dominance and defining identity, exposing the hubris underlying this assumption.

The human/android binary is further complicated by characters who occupy rhizomatic liminal spaces, interstitial zones where traditional oppositions blur. Iran, Rick Deckard's wife, exemplifies this tension: her dependence on the mood organ, a device that artificially manipulates emotions, renders her reliant on technology to experience empathy or happiness, turning her into a satirical representation of the very qualities dreaded in androids: an inability to feel authentically. This irony deepens in Rick's contrasting attitudes toward Iran and Rachael Rosen, her synthetic counterpart. Though a Nexus-6 replicant, Rachael's allure and willingness to assist Rick associate her with empathy and other positive traits, positioning her above his human wife.

The satire lies in this reversal: humans, who claim emotional authenticity, exhibit android-like qualities as they rely on technology to simulate traits they consider innate. The very boundaries meant to separate humans from androids collapse, revealing a world where humans, in their dependence on technology, "become androids incapable of feeling for or with others" (Vinci 2).

This blurring between humanity and technological constructs is reflected in Rick's shifting perceptions and relationships. Dissatisfied with Iran, Rick idealizes Rachael, whose apparent empathy and agency contrast with his wife's detachment. When Rick muses that his wife "doesn't care whether [they] own an ostrich or not", his thoughts immediately turn to Rachael (Dick 55), illustrating how his identity and emotional world are shaped by artificial constructs: his attachment to a replicant, his fixation on electric animals, and his reliance on the Voigt-Kampff test to define humanity. Both Iran's dependence on the mood organ and Rick's attachment to an empathy-symbolizing fake animal highlight the novel's critique of humanity's circular entanglement with its technological creations.

The ostrich, a fabricated creature imbued with symbolic value, satirizes these dependencies. Its symbolism emerges from its characteristics and cultural associations. Known for their speed and the myth of burying their heads in the sand, ostriches serve as a metaphor for humanity's tendency to evade uncomfortable truths, such as the artificiality of their relationships and the loss of authentic emotions. Their rarity and exotic nature also mirror the consumerist obsession with status symbols in Dick's world. This recalls other literary uses of animals, such as the dodo in *Alice's Adventures in Wonderland* (1865). The dodo, a flightless bird like the ostrich, may evoke absurdity and the breakdown of logic. Similarly, Dick's

ostrich highlights the irony of assigning value to artificial constructs while neglecting genuine human connections.

This critique extends beyond animals to the technologies that shape identity and emotion. A critical perspective emerges through the character of Irmgard Batty, a mercenary android. She suggests that the empathy box, rather than fostering genuine connections, diminishes identity, erasing individuality under the guise of shared experience. This tension highlights empathy's instability as a defining trait, exposing its failure to establish clear boundaries between humans and androids.

The ambiguity intensifies when Rachael's actions appear altruistic, challenging the notion that empathy is exclusive to humans. However, this apparent empathy is later revealed as strategic self-preservation, driven by a desire to protect her fellow androids. This twist mirrors the cruelty and emotional distance of human characters like Philip Resch, whose actions contradict the idea of empathy as a uniquely human trait. The conclusion becomes unavoidable: no stable hierarchy exists between dehumanized humans, ostensibly "authentic" humans, and androids who appear humanized through their actions. Technology, as the force mediating these interactions, dissolves the boundaries between human and artificial, destabilizing the very categories used to define humanity.

This focus on empathy's instability naturally raises broader questions about how humanity perceives itself and others. If empathy, long seen as uniquely human, can be simulated, what other supposedly stable aspects of identity might also be illusions? As Adam Gopnik observes in *The New Yorker, Electric Sheep* blurs the line between reality and constructed perception, imagining a future where humanity's ability to recognize others as human deteriorates. Dick achieves this by imparting androids with intelligence and emotion-like traits, further humanizing them while simultaneously dehumanizing the human characters in his narrative.

From the novel's outset, the technobiological rhizome that Dick nurtures gives rise to a system where humans, robots, and their abilities intertwine, portraying the advanced Nexus-6 androids as surpassing humans in certain capacities:

... androids equipped with the new Nexus-6 brain unit had from a sort of rough, pragmatic, no-nonsense standpoint evolved beyond a major – but inferior – segment of mankind. For better or worse. The servant had in some cases become more adroit than its master. (Dick 19)

The binaries of creator/human or human/machine are rooted in the arborescent thought described by Deleuze and Guattari. In Judeo-Christian traditions a superior being is believed to grant life to an inferior one, or humans are defined by a soul or unique attributes, like empathy in Dick's novel. Nonetheless, the fluid networks brought by technoscience enable transformation not only along a linear trajectory but also in lateral and even regressive directions. The Nexus-6 model's name reflects its link to a "major-but inferior-segment of mankind", while radioactive dust from World War Terminus splits humanity into intelligent beings and those failing cognitive tests. The latter group, exemplified by the character John Isidore,

demonstrates how machines not only rival but surpass humans in intelligence, dismantling intellect-based distinctions.

On a deeper level, Dick suggests that the division between creator and created central to the novel may be less significant than it seems, thereby satirizing the arborescent, hierarchical view that asserts human originality. The runaway androids justify their actions, harbor illusions, and hope for a future. After asking if androids dream of electric sheep, Dick implies they do more than dream, they actively resist and assert autonomy. Facing extermination, they reject their fate, seeking self-definition not just through survival but through collective agency. By framing their struggle as one for self-determination rather than mere survival, Dick subverts humanity's self-perception as superior and emphasizes its shared traits with nonhumans.

Thus, Dick brings his critique to a culmination, questioning not just human identity but the very foundations of its continuity. Some Nexus-6 androids begin to doubt whether they are truly androids because they possess (possibly) implanted memories of childhood or adolescence. Humans, too, understand themselves and their world through past images stored in memory, yet many of these images come from cultural narratives that inscribe them into our collective consciousness. Once again, Dick disrupts the concept of human identity, as much of what defines it relies on external memories. Like those of androids, these memories are shaped by external influences, drawn from diverse sources, authors, ideologies, and global narratives, then reshaped and passed along in a web of influence rather than a fixed structure. By revealing memory as fluid and constructed, Dick delivers a final blow to the notion of human exceptionalism. This destabilization sharpens his satire, challenging the assumption that cultural and intellectual achievements uniquely define humanity. If identity's markers are as artificial and malleable as those of androids, then what—if anything—truly sets humans apart?

4. CONCLUSION

Time's Arrow and Do Androids Dream of Electric Sheep? illustrate how literature and scientific paradigms intersect through satire and parody as instruments of epistemological disruption. Amis distorts temporality to expose the moral contradictions within rationalist thought, while Dick collapses the boundary between human and nonhuman to reveal the artificial foundations of ethical certainty. Both novels reveal how epistemic frameworks are not neutral but shaped by ideology, while satire and parody urge audiences to confront contradictions within dominant narratives of progress, be it through Amis's inversion of causality or Dick's destabilization of human exceptionalism.

The interplay between scientific discourse and literary critique positions satire and parody as more than acts of ridicule; they actively question and reshape knowledge systems. Amis and Dick exemplify this through distinct strategies: one exposing the absurdity of historical rationalization through biting satire and parody, the other challenging the ontological premises of technological innovation through ironic, satirical defamiliarization. Both underscore the fragility of epistemological categories and their susceptibility to ideological manipulation. Far from mere mockery, satire and parody critically engage with scientific paradigms, exposing their cultural and ethical blind spots.

In the twenty-first century, emerging scientific paradigms continue to reshape identity, agency, and morality. Artificial intelligence, for instance, challenges traditional notions of consciousness while raising concerns about accountability, bias, and the delegation of decision-making to nonhuman entities. Writers like Ian McEwan (*Machines Like Me*, 2019) and Kazuo Ishiguro (*Klara and the Sun*, 2021) explore these dilemmas, using literature to interrogate Al's ethical implications. Meanwhile, social media's influence on identity formation, algorithmic control, and digital surveillance further blurs the line between perception and manipulation, an area literature will likely continue to explore. Likewise, the rise of geopolitical power dynamics and the strategic use of financial systems signal global transformations that demand literary critique. Following Amis and Dick, future literary works may scrutinize contradictions within these evolving paradigms and challenge the narratives that sustain them.

Looking ahead, satire, parody, and humor will remain vital links between scientific and literary discourses, questioning emerging systems of knowledge as they have in the past. Whether through literary subversion or speculative critique, literature continues to scrutinize the cultural logic of scientific progress. As new technologies blur distinctions between human and machine, natural and artificial, or reality and simulation, literature's destabilizing force will remain essential. The dialogue between science and literature is ongoing, an evolving interplay where satire and parody continue to illuminate the most pressing ethical and epistemological questions of our time.

REFERENCES

Amis, Kingsley. Memoirs. Vintage, 2004.

Amis, Martin. Time's Arrow. Vintage, 1991.

Atwood, Margaret. The Handmaid's Tale. Anchor Books, 2017.

Barth, John. The Sot-Weed Factor. Anchor Books, 1987.

Baldick, Chris, editor. *The Concise Oxford Dictionary of Literary Terms*. 3rd ed., Oxford UP, 2008.

Berman, Marshall. *All That Is Solid Melts into Air: The Experience of Modernity*. Verso, 1982.

Braidotti, Rosi. The Posthuman. Polity Press, 2013.

Brautigan, Richard. *The Hawkline Monster: A Gothic Western*. Houghton Mifflin, 1974. Carroll, Lewis. *Alice's Adventures in Wonderland*. Macmillan, 2015.

- Coeckelbergh, Mark. "The Moral Standing of Machines: Towards a Relational and Non-Cartesian Moral Hermeneutics." *Philosophy and Technology*, vol. 27, no. 1, 2014, pp. 61-77. https://doi.org/10.1007/s13347-013-0133-8
- Clark, John R. *The Modern Satiric Grotesque and Its Traditions*, University Press of Kentucky, 1991.
- Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi, University of Minnesota Press, 1987.
- Delogu, C. Jon. "Shit Happens': Grotesque-Reality in the Narrative Fictions of Ian McEwan." *Ré-inventer le réel*, edited by Thomas Dutoit and Trevor Harris, Presses Universitaires François-Rabelais, 1999, pp. 61-71. https://doi.org/10.4000/books.pufr.4122
- de la Concha, Ángeles, et al. English Literature IV: The Postmodern Turn. UNED.
- de Lucas Martín, Javier. *Blade Runner: El Derecho, guardián de la diferencia*. Tirant lo Blanch, 2002.
- Dick, Philip K. Do Androids Dream of Electric Sheep? Gollancz, 2010.
- Finney, Brian. "Martin Amis's *Time's Arrow* and the Postmodern Sublime." *Martin Amis: Postmodernism and Beyond*, edited by Gavin Keulks, Palgrave Macmillan, 2006, pp. 101-116. https://www.doi.org/10.1057/9780230598478_8
- Galvan, Jill. "Entering the Posthuman Collective in Philip K. Dick's *Do Androids Dream of Electric Sheep?*" *Science Fiction Studies*, vol. 24, no. 3, 1997, pp. 413-429, www.jstor.org/stable/4240644
- Gomoll, Lucian. "Posthuman Performance." *Total Art Journal*, vol. 1, no. 3, Aug. 2011, pp. 1-15.
- Gopnik, Adam. "Blows Against the Empire: The Return of Philip K. Dick." *The New Yorker*, 13 Aug. 2007. www.newyorker.com/magazine/2007/08/20/blowsagainst-the-empire
- Gross, Paul. and Levitt, Norman. *Higher Superstition: The Academic Left and its Quarrels with Science*. Johns Hopkins UP, 1994.
- Griffin, Dustin H. Satire A Critical Reintroduction. University of Kentucky Press, 1994.
- Harris, Greg. "Men Giving Birth to New World Orders: Martin Amis's *Time's Arrow*." *Studies in the Novel*, vol. 31, no. 4, 1999, pp. 489-505. www.jstor.org/stable/29533359
- Hayles, N. Katherine. *How We Became Postbuman: Virtual Bodies in Cybernetics, Literature, and Informatics.* University of Chicago Press, 1999.
- Hegel, G. W. F. *Elements of the Philosophy of Right*. Translated by H. B. Nisbet, edited by Allen W. Wood, Cambridge UP, 1991.
- Hutcheon, Linda. *A Theory of Parody: The Teachings of Twentieth-Century Art Forms.* Methuen, 1985.
- Hutcheon, Linda. The Politics of Postmodernism. Routledge, 2002.

UNAI IZQUIERDO BERASALUCE

Hawking, Stephen. A Brief History of Time. Bantam Books, 1988.

Horkheimer, Max, and Theodor W. Adorno. *Dialectic of Enlightenment: Philosophical Fragments*. Translated by Edmund Jephcott, Stanford UP, 2002.

Ishiguro, Kazuo. Klara and the Sun. Knopf, 2021.

Jameson, Fredric. *Postmodernism, or the Cultural Logic of Late Capitalism*. Duke UP, 1991.

Joyce, James. Ulysses. Vintage International, 1990.

Kernan, Alvin B. The Plot of Satire. Yale UP, 1965.

Latour, Bruno. We Have Never Been Modern. Harvester Wheatsheaf, 1993.

Leyburn, Ellen Douglass. Satiric Allegory: Mirror of Man. Yale UP, 1956.

McEwan, Ian. Machines Like Me. Jonathan Cape, 2019.

McEwan, Ian. The Comfort of Strangers. Vintage International, 1992.

Menke, Richard. "Narrative Reversals and the Thermodynamics of History in Martin Amis's *Times Arrow.*" *Modern Fiction Studies*, vol. 44, no. 4, 1998, pp. 959-980. www.jstor.org/stable/26285325

Paulson, Ronald. The Fictions of Satire. Johns Hopkins UP, 1967.

Pynchon, Thomas. Gravity's Rainbow. Viking Press, 1973.

Pynchon, Thomas. The Crying of Lot 49. Vintage Classics, 2022.

Scott, Ridley, director. *Blade Runner*. Performance by Harrison Ford, Rutger Hauer, Sean Young, and Edward James Olmos, Warner Bros., 1982.

Swift, Jonathan. Four Notable Works by Jonathan Swift. Benediction Classics, 2013.

The South Bank Show. "Martin Amis." Directed by Gillian Greenwood, season 13, episode 1, London Weekend Television, 17 Sept. 1989.

Verbeek, Peter-Paul. *Moralizing Technology. Understanding and Designing the Morality of Things.* University of Chicago Press, 2011.

Vinci, Tony M. "Posthuman Wounds: Trauma, Non-Anthropocentric Vulnerability, and the Human/Android/Animal Dynamic in Philip K. Dick's *Do Androids Dream of Electric Sheep?*" *The Journal of the Midwest Modern Language Association*, vol. 47, no. 2, 2014, pp. 91-112. www.jstor.org/stable/44066191

Vonnegut, Kurt. Slaughterhouse-Five. Dell, 1991.

Wells, H. G. The Time Machine. Martino Fine Books, 2011.

Woolf, Virginia. Mrs. Dalloway. Harcourt, 2005.