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From Motes to Heaps of Dust: *Waste, Value, and Catastrophe in Dickens and Steinbeck*

ABSTRACT: This essay investigates the symbolic and social meanings of dust in English-language literature, tracing its evolution from a biblical emblem of human mortality to a sign of modern collective crisis. Moving beyond the traditional image of dust as a barely visible residue, the study focuses on instances in which dust becomes an overwhelming material presence—accumulating into heaps or erupting into storms—and thereby shifts from a private, metaphysical reminder of decay into a political and environmental force. Through Dickens's representations of Victorian London, dust appears as soot, waste, and monumental dust heaps, embodying industrial pollution, capitalist accumulation, and moral corruption, yet paradoxically also suggesting forms of redemption through recycling and reuse. Conversely, in Steinbeck's *The Grapes of Wrath*, dust becomes apocalyptic and irredeemable: the Dust Bowl transforms soil into a suffocating atmosphere, triggering dispossession and mass migration. By juxtaposing Dickens and Steinbeck, the essay argues that dust functions as an *archive* of modernity and anticipates Anthropocene anxieties, revealing how human economies generate residues that return as catastrophe.

KEYWORDS: Dickens, Steinbeck, Dust Heaps, Dust Bowl, Material Culture

This dust will not settle in our time.
And when it does some great roaring machine
will come and whirl it all skyhigh again.
Samuel Beckett

Dust is a silent and everyday element that often escapes direct attention and is, by definition, a residual and disintegrated substance, poised at the threshold between the visible and the invisible, and between the material and the immaterial. And yet, it is ubiquitous and inexhaustible: it accumulates, returns, and survives every conscious attempt to remove it.

In its condition as a substance both minimal and constitutive of the human being, concrete yet lacking cohesion, imperceptible yet omnipresent, dust reveals its full symbolic and mysterious charge. Its paradoxical nature makes it oscillate between being the emblem of disintegration, oblivion, and the inevitable transience of human beings and things, and, conversely, the symbol of an original matter from which everything comes and to which everything returns: the final residue that persists as a faint trace, the memory that endures and accumulates, but also «[a] gentle refusal of complete evanescence, a protest, lodged at the heart of mortality»[1].

Although it can be easily lifted and dispersed by the slightest movement of air, dust reveals a tenacious and invasive character, in the impossibility of eliminating it entirely. It seems stubbornly to refute nothingness, as if time, through a gradual process of subtraction, pulverised everything, only to lay once again upon all things the very outcome of destruction. In this perpetual cycle of decomposition and recomposition, what is great shatters into the infinitesimal, only to compact itself again; what is visible becomes almost invisible, only to return, in the end, to perception.

In its constant oscillation between presence and absence, creation and destruction, materiality and immateriality—evoking both the atoms of natural philosophy and the cyclical nature of life, as well as biblical images of vanity—dust inhabits a space of semantic and symbolic ambiguity. It forges deep connections between existential, social, cultural, and spiritual concerns, functioning as a bridge between literature, philosophy, science, ethics, and theology, and illuminating the very contradictions of human existence.

In literature, dust is one of the most discreet yet most persistent motifs. Able to slip between the verses of a poem or the lines of a novel without ever dominating the scene—rarely the protagonist of a plot or of an explicit symbolic system—dust nonetheless remains one of literature's most layered and recurrent symbols, capable of traversing epochs, genres, and cultural paradigms.

In the English tradition, ever since its biblical formulation—which contains the original core of its meaning—«for dust thou art, and unto dust shalt thou return» (Genesis 3:19, King James Bible), dust has functioned as a material sign of physical transience and of humanity's ultimate destiny. Yet throughout English literary history, the echo of this verse has been refracted along multiple trajectories. If in Shakespeare *Hamlet* defines the human being as «this quintessence of dust» (Hamlet II.ii)—the zero degree of matter, bearing no residue of transcendence but only the reminder that humanity, beyond any presumed greatness, returns to refuse—dust instead becomes a liminal substance in John Donne's metaphysical poetry: a material sign of dissolution, but also an eschatological prelude: «the much more haste and despatch, which my God shall use, in re-collecting and re-uniting this dust again at the resurrection» (*Devotions*, II. Expostulation).

Later, through a gradual process of secularisation, Thomas Gray's graveyard poetry—though still framed within a Christian moral horizon—employs dust to evoke the collapse of earthly hierarchies and the absolute equality imposed by death:

Can storied urn or animated bust
Back to its mansion call the fleeting breath?
Can Honour's voice provoke the silent dust
Or Flatt'ry soothe the dull cold ear of Death?

In the Romantic period, it then takes on a political and historical resonance, becoming the tangible symbol of the transience of power and the inevitable oblivion that follows every political greatness, as in the famous «Ozymandias» by P. B. Shelley:

Two vast and trunkless legs of stone
Stand in the desert. . . . Near them, on the sand,
Half sunk a shattered visage lies, […]
Nothing beside remains. Round the decay
Of that colossal Wreck, boundless and bare
The lone and level sands stretch far away.

It subsequently becomes, in Eliot, an emblem of irreversible cultural fragmentation and existential crisis, with no prospect of rebirth or transformation: «I will show you fear in a handful of dust» (*The Waste Land*, T. S. Eliot), where dust is at once the sign of an irretrievably lost past, the residue of a landscape devastated by war, and the mark of an entire era's spiritual sterility. Finally, it becomes the symbol of a terminal condition and of existential stagnation in Samuel Beckett.

In these cases, however, dust usually refers to a minimal quantity: a thin, almost imperceptible film that silently settles or accumulates on surfaces without drawing attention. Less common are instances in which the grain of dust multiplies until it becomes an invasive and tangible physical presence, imposing itself with brutal force upon everyday reality. At that point, its meaning seems to shift radically in both scale and significance. From a discreet sign of the entropy of things, of intimate and private mortality, it becomes a collective and intrusive force; from a silent and barely perceptible allusion, it turns into a concrete threat. As it accumulates, dust becomes a social and political entity, capable of embodying historical, social, and environmental crises; it turns into an oppressive material presence that invades spaces and consciences, able to reshape landscapes, economies, and human destinies, bearing witness to the fragility not only of the individual, but of the entire social and natural order.

This was the case in Victorian England, a period in which, with the rise of the Industrial Revolution, dust forced itself upon the attention of ordinary citizens, reformers, and scientists alike, both in its macroscopic and microscopic dimensions[2]. Indeed, if on the one hand it became necessary to confront the serious

problems of public health, hygiene, and urban decorum caused by the enormous circulation and accumulation of dusts of various kinds, on the other hand—and conversely—science and technology began to investigate the infinitesimal with systematic rigour. This made possible the study of the tiny grain of dust that had until then marked the extreme boundary of the perceptible, thus granting access to a microscopic world at once astonishing and unsettling.

1. *The Macroscopic Dimension: Old, Dirty London*

From the late eighteenth century through the entire first decade of Queen Victoria's reign, industry seemed to have truly brought about a dirtier and dustier world, and London found itself engaged in a constant struggle against severe problems of public health and hygiene: from recurring cholera outbreaks to the Great Stink, from air pollution to the potability of water, from street sanitation to the disposal of urban waste. All these issues were directly tied to London's transformation into a vast metropolis whose population grew with extraordinary speed, rising from roughly 2.3 million in the middle of the century to over 6.5 million by 1903.

Among the many environmental and sanitary problems afflicting the capital—as well as Britain's major cities—dust in its various forms—ash, earth, soot, sand, debris, slag, residues, refuse[3]—rapidly became a public health and social emergency, eventually developing into a cultural and symbolic phenomenon of major significance.

1.1 *Soot*

Dust manifested itself above all in the form of soot which, due to the enormous consumption of coal, fell incessantly over the city, depositing a dark film on every surface and saturating the air to the point of often making it unbreathable.

London thus appeared shrouded in a black veil that profoundly altered both its appearance and its perception, transforming the urban landscape into a space that was visually filthy and morally unsettling. Nothing could remain clean for long: buildings, monuments, and furnishings quickly blackened, and daily maintenance became a continuous struggle—never fully won—against the constant accumulation of dust and grime.

The daily experience of Londoners made this invasion particularly tangible through the so-called *blacks*—flakes and clumps of soot—which relentlessly stained bodies, clothes, furnishings, and everything else, penetrating both public spaces and the intimacy of domestic life.

The pervasive presence of soot also had serious health consequences. During the notorious *pea-soupers*, the London fogs laden with coal particles and combustion residues, dust mixed with atmospheric moisture, producing dramatic effects on public health. In periods of especially dense fog (such as in 1873), mortality rates surged due to bronchitis, pneumonia, and asthma, at times doubling the number of deaths caused by respiratory diseases.

Dust, therefore, did not merely soil surfaces: it violated the boundary between outside and inside, between the city and the home, between the body and its environment. As Charles Dickens put it at the beginning of *Bleak House*:

> Fog everywhere. Fog up the river, where it flows among green aits and meadows; fog down the river, where it rolls defiled among the tiers of shipping and the water-side pollutions of a great (and dirty) city. Fog on the Essex marshes, fog on the Kentish heights. […] Fog in the eyes and throats of ancient Greenwich pensioners, wheezing by the firesides of their wards; fog in the stem and bowl of the afternoon pipe of the wrathful skipper, down in his close cabin; fog cruelly pinching the toes and fingers of his shivering little 'prentice boy on deck. (Ch. 1)

In this context, soot became the visible sign of an invisible danger: a minute and seemingly inert substance which, precisely because of its pervasive diffusion, turned into an agent of illness and death, ultimately acquiring a powerful symbolic value.

In his novels, Charles Dickens presents the city's dust and dirt («the dust and grit that lay thick on everything», *Great Expectations*, Ch. 20) as a potent symbol of moral and social corruption, of an industrialisation that stains and poisons not only the environment but also human relationships. London is often described as shrouded and suffocated by vast quantities of a fine, oppressive dust that becomes a metaphor for the material and spiritual pollution of that world. The black dust of soot is a suspended substance which, inhaled daily, infiltrates bodies and reshapes human relations and the very conditions of life. It already functions as the symbol of a degradation that is collective and political, no longer merely individual or metaphysical. Dickens had already intuited, in the stifling atmosphere of his London descriptions, that air saturated with smoke and dust was the mark of a capitalism that transformed the city into a toxic organism, capable of shaping the daily lives of millions.

> It was a foggy day in London, and the fog was heavy and dark. Animate London, with smarting eyes and irritated lungs, was blinking, wheezing, and choking; inanimate London was a sooty spectre, […] the whole metropolis was a heap of vapour charged with muffled sound of wheels, and enfolding a gigantic catarrh. (*Our Mutual Friend*, Book 3, Ch. 1)

Thus, if on the one hand dust evoked—both emotionally and rationally—the idea of disease, contamination, and death, making its removal or control a necessary practice[4], on the other hand, on a social and ethical level, it soon became a symbol of the moral and material corruption of industrial civilisation. It embodied the dark side of industrial progress: the tangible residue of a productive system that promised prosperity and growth, yet at the same time generated degradation, illness, and a persistent sensation of suffocation. This environmental and moral decay was also reflected in language: the term *smut*, which originally referred to a soot stain or filth, came to mean obscenity and vulgar or indecent content, suggesting a symbolic continuity between physical dirt and moral contamination—as if soot did not merely stain bodies and objects, but also the ethical imagination of the Victorian society.

1.2 *Dust heaps*

In addition to the coal dust that clouded sight and lungs, London was besieged by dust heaps: enormous mounds of dust, ash, debris, and other domestic waste piled up on the outskirts of the capital[5], which became a permanent feature of the city's landscape. They were called dust heaps because they consisted primarily of the dust and ash produced by the intense consumption of coal burned in London between roughly 1800 and 1850. It is estimated that in that period each London household could burn up to 11 tons of coal per year for domestic heating. In reality, dust heaps soon came to be used as dumping grounds for scraps, rubble, and other kinds of "dust", and for this reason the word *dust* in everyday English still refers to rubbish or garbage in a general sense. In Dickens's description in *Our Mutual Friend*, the dust heaps were made up of «Coal-dust, vegetable-dust, bone-dust, crockery-dust, rough dust, and sifted dust—all manner of Dust» (Book 1, Ch. 2).

The dust heaps were so extensive that they took on the appearance of actual artificial hills, eventually dominating the horizon of entire peripheral neighbourhoods (Fig. 1). Illustrations from the time depicted them as surreal and apocalyptic landscapes: mountains of dust reminiscent of ancient ruins or dormant yet menacing volcanoes—masses so vast they made the humans venturing into them appear as tiny figures, almost like insects swarming around an anthill. Although the perspective chosen by illustrators of the era tended to accentuate the monumental scale of the phenomenon, these dark, stratified masses silhouetted against the London sky, complete with shacks, carts, and human figures, were truly immersed in a dimension that was both epic and wretched.

In this scenario, dust was transformed from an imperceptible element into a visible and imposing mass, capable of defining urban geography itself. In these

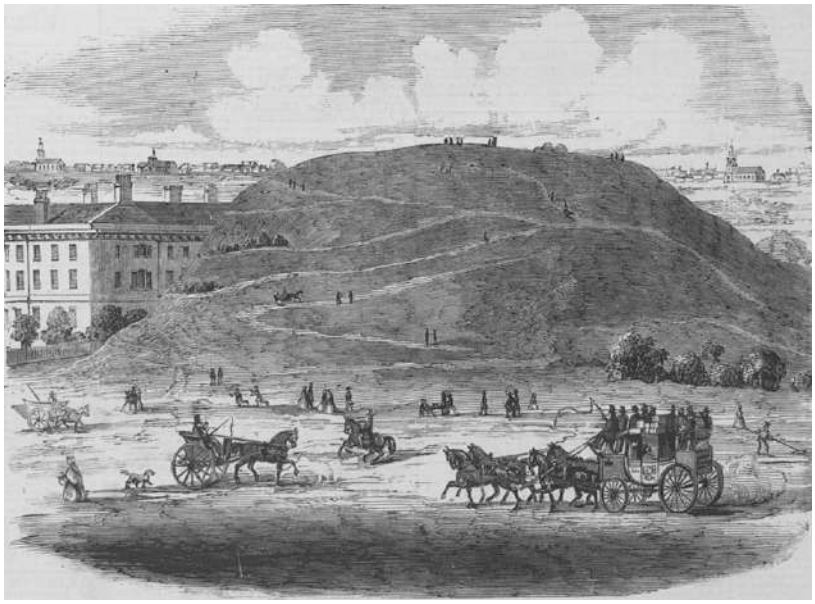

Fig. 1 – Whitechapel Mount, da un disegno del 1801.

representations, the dust heaps are not merely landfills but social landscapes, in which the recovery and separation of waste—an activity performed by the poor, women, and children—become an integral part of urban life. Once sorted, the materials were reused in agriculture, in the production of bricks, or resold as second-hand items.

Some plates illustrate the so-called "scavengers" or "sifters" intent on searching for useful residues: bones, metal fragments, shards, and reusable pieces of coal (Fig. 2). These minute figures, immersed among the refuse, underscore the aesthetic and ethical contradicttion of Victorian modernity: a civiliza-

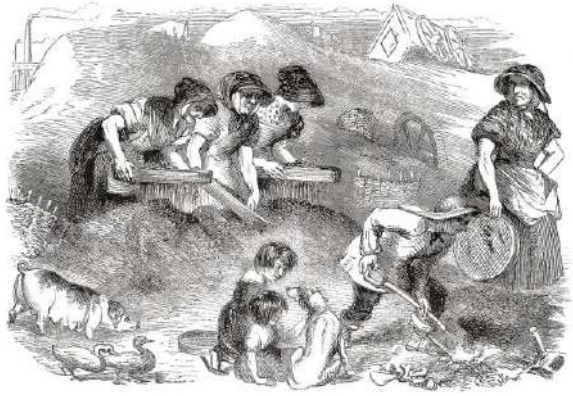

Fig. 2 – Scavengers at work on a dust yard. Henry Mayhew *London Labour and the London Poor*, vol. 2 1851.

tion capable of creating mountains of wealth and, alongside them, mountains of material and moral waste.

> a dreary and unsavoury locality, abandoned to mountains of refuse from the metropolitan dust-bins, strewn with decaying vegetables and foul-smelling fragments of what once had been fish […] and from these dwellings came out wretched creatures in rags and dirt, and searched amid the far-extending refuse for the filthy treasure by the aid of which they eked out a miserable livelihood[6].

The iconographic power of the dust heaps derived precisely from this ambivalence, which rendered them symbolically polyvalent and conceptually ambiguous: on one hand, the startling quantity of waste appeared as a tangible sign of the progress and technological triumph of the English productive system, an almost involuntary monument to industrial modernity; on the other, it embodied the horror of urban decay, sanitary risk, social marginality and precariousness, as well as the menacing magnitude of consumer civilization—the idea of a world oppressed by material excess and refuse.

1.3 *The Sanitary Reform*

The sanitary reform movement sought to remedy all these enormous problems, representing a major reformist effort that had Edwin Chadwick (1800–1890) as its central figure. Author of the celebrated *Report on the Sanitary Condition of the Labouring Population of Great Britain* (1842), Chadwick argued that epidemics did not depend on moral or providential factors, but rather on physical causes localised within the urban environment itself, which the State had a duty to remove to improve the living conditions of the population.

Despite this humanitarian approach, the sanitary reform—which encountered strong opposition from powerful private interests—was deeply imbued with a moral and disciplinary dimension. Doctors and social reformers, such as Thomas Southwood Smith, maintained that a clean environment fostered virtues such as temperance, order, and honesty. Conversely, dirt and decay were thought to encourage behaviours deemed deviant, selfish, or promiscuous, and were considered harbingers of disease, decadence, and social disorder.

Cleanliness of the body and the home thus became a metaphor for and a tool of moral reform, in which physical hygiene was inseparable from social hygiene, and a clean body was conceived as a prerequisite for a sober, disciplined, and productive mind. Dust, in other words, functioned as a social marker, and the distinction between "clean" and "dirty" became a fundamental boundary for

mapping Victorian society. The ability to maintain a clean house and clear air was a hallmark of civilisation, refinement, and moral virtue for the middle class, while the London underclass—often forced to work in direct contact with dust—was frequently stigmatised with the contemptuous expression «the Great Unwashed», viewed as intrinsically "dirty" and, by extension, immoral[7].

Moreover, the term *dust* fell under the more general categories of *dirt* or *filth*. If we consider, as Ben Campkin and Rosie Cox argue, that notions of "dirty" and "clean" do not possess objective value but are produced within specific historical and cultural contexts[8], in the Victorian era, the fight against filth and hygiene problems was both a sanitary and an ethical commitment. The ability to maintain a physical distance from dirt was the true indicator of belonging to the bourgeoisie. Consequently, the hygienic reorganisation of the city often contributed to pushing the poorest classes toward marginal areas, preserving the sanitary and moral "purity" of bourgeois centres.

Therefore, despite the humanitarian rhetoric, the process of urban sanitisation also had exclusionary and segregative effects; it acted as a powerful tool for defining and consolidating the social hierarchies and morality of the era, as well as an instrument of spatial and social control. It was itself a kind of social sieve that, while seeking to filter physical impurities from the cities, simultaneously separated the "worthy" from the "unworthy", elevating the use of soap and water to a pillar of the nation's stability[9].

1.4 *Our Mutual Friend*

As seen in Eleonora Gallitelli's essay that opens this volume, Charles Dickens places the dust heaps at the centre of *Our Mutual Friend*, establishing them as a powerful narrative and visual metaphor of Victorian England[10]. In the London described by Dickens, the mounds of dust are an urban element that grows, engulfs, and risks overwhelming the very civilisation that generated it.

> THE train of carts and horses came and went all day from dawn to nightfall, making little or no daily impression on the heap of ashes, though, as the days passed on, the heap was seen to be slowly melting. My lords and gentlemen and honourable boards, when you in the course of your dust-shovelling and cinder-raking have piled up a mountain of pretentious failure, you must off with your honourable coats for the removal of it, and fall to the work with the power of all the queen's horses and all the queen's men, or it will come rushing down and bury us alive. (Book 3, Ch. 8)

Dust and waste can be interpreted as the residues of the process of capitalist accumulation. They represent what remains once the use-value has been consumed

and the exchange-value has been dissolved, allowing the pure materiality of the residue to emerge—a residue that nonetheless continues to occupy space and demand management. This is not a marginal accident of industrial progress, but a necessary product of it that reveals the internal contradiction of Victorian capitalism: while abstract value multiplies and circulates, degraded matter settles and becomes immobilised, making visible what the system tends to remove from the field of representation.

The dust heaps and the many poor who survive through the recycling of dregs are a tangible sign here of the failure of institutions that led to a distorted urban and moral development, founded on a negligent management of economic and social stratification. Indeed, the dust of the Dickensian *Great Dust Heap* is also a social dust—a product of misery and inequality, stratified like an archive of lives, memories, human and industrial waste, silent witnesses to the fragility of a society that perceives itself as triumphant.

These are true symbolic landscapes that speak as much of progress as of misery, of efficiency as of collapse, of wealth and degradation, of accumulation and corruption. They configure themselves as forms of material memory of modernity and anticipations, albeit in embryonic form, of twentieth-century reflections on the circular economy and recycling, on the relationship between waste, exploitation, aesthetics, and ecology, signalling how modernity has always lived in symbiosis with its own remains. They are places where the remnants of production and daily life accumulate in a monumental, visible, and tangible mound that forces the observer to confront the dark side of progress.

Dust and everything residual reveal the ethical contradictions of a world dominated by profit. They function as a metaphor for an industrial society that accumulates, alongside material dross, ethical, human, and social residues, revealing its structural contradictions and the inability to govern the consequences of its own progress.

At the same time, however, the recycling of waste clearly reveals how the new economic order is founded not on the intrinsic value of matter, but rather on the capacity to extract profit even from that which is socially and materially declassed. Waste can be reintroduced into the circuit of capital through recovery and recycling practices, demonstrating how capitalism is capable of assigning value even to what appears worthless. Moreover, as Michael Thompson summarized in his *Rubbish Theory*[11], what we call "refuse" depends on cultural conventions and the system of

values that determines what deserves to be preserved and what must be expelled. For this reason, what is waste for some can become a source of wealth for others.

Indeed, in *Our Mutual Friend*, dust constitutes the material foundation upon which Old Mr Harmon built his fortune. The recycling of waste—a marginal activity devoid of social prestige that no one else is willing to undertake—becomes the engine of a massive accumulation of wealth that commands respect even from the same elite that despises the activity from which it originates.

Mr Harmon's capital originates from what society removes, expels, and rejects; nonetheless, once converted into money, it becomes perfectly legitimate and, indeed, irresistible. It is no coincidence that the dust heaps are described simultaneously as "repellent" and "economically valuable". Through them, Dickens portrays the moral bankruptcy of a society founded on exclusively material values and obsessed with money, showing how the accumulation of wealth proceeds hand in hand with immersion in filth, both physical and symbolic. Emblematic is the description of Harmon's world as a territory composed entirely of dust—an artificial landscape that takes on the features of a geological formation: a mountain range raised like an ancient volcano[12], whose structure is not rock, but waste.

> [Harmon] lived in a hollow in a hilly country entirely composed of Dust. On his own small estate the growling old vagabond threw up his own mountain range, like an old volcano, and its geological formation was Dust. (Book 1, Ch. 2)

Dickens thus highlights the moral hypocrisy of the bourgeois order: that which is considered impure, degraded, or unworthy on a symbolic level becomes acceptable as soon as it assumes the abstract form of capital. In this sense, dust radically challenges the idea that what high society considers valueless is actually useless or insignificant. On the contrary, Dickens suggests that industrial capitalism founds its wealth precisely on the ability to transform waste into a resource, residue into profit, and ruin into accumulation. Dust is therefore not merely a moral metaphor, but also a structural figure of the modern economic system: that which remains, that which is left over, and that which no longer has an immediate function becomes the very basis for new forms of value.

Following Harmon's death, the transfer of the inheritance to Noddy Boffin further accentuates this dynamic. Boffin, like Harmon, is a figure lacking cultural refinement who leads a very modest life until money radically transforms his social position, leading him to be known as «The Golden Dustman». His sudden social ascent demonstrates how permeable the Victorian class system is to money, even

when it originates from the lowest levels of the material hierarchy. The dust heaps thus become a powerful allegory of the social mobility produced by industrial capitalism: a mobility that does not erase inequalities but reorganises them around the possession and management of economic value.

The positive value attributed to dust should therefore not be read as a naive celebration of industrial progress. On the contrary, it is here that its figurative power clearly emerges, no longer just "dispersed matter", but a symbol of an entire system of values based on accumulation, the transformation of waste, and the moral corruption that accompanies the process of valorisation, with a continuous generation of material, human, environmental, and moral residues. In this framework, dust becomes the point of contact between material economy and social critique—a metaphor that unmasks the ideological assumptions of bourgeois respectability and invites a reconsideration of what is defined as "worthy", "useful", or "socially legitimate". In this vision, human beings—just like waste and dust—are inserted into a cycle of exchange, in which individual destinies and economic fortunes depend on the movement and revaluation of what society expels. Dust is no longer a passive residue, but an active force that determines the place of individuals in the social world; it becomes a metaphor for social mobility only in an ironic sense, as it signals not so much a real social emancipation as the capacity of capital to continuously reorganise its own scraps, incorporating even the residue into the process of valorisation.

Thus, the dust heaps in Dickens can also be read as an archive of Victorian society. Within their layered strata are deposited the traces of marginal lives, social asymmetries, moral tensions, and the contradictions of industrial London. They constitute a true "archaeology of the present," transforming dust into a compact chronicle of modernity.

It is precisely because they function as an archive that Dickens directs his attention to the entire process surrounding dust: from accumulation to excavation, and from sifting to selection (Fig. 3). He represents not only the heaps themselves, but the full range of material and symbolic labour they entail—a process that is at once manual and interpretive, mirroring both the work of the scavengers and sifters and the interpretive task of the reader. The heterogeneity of dust, in its concrete and metaphorical dimensions, is what makes it precious and valuable; it is a substance that demands to be constantly sorted and interpreted just as the actual sifters sort through bones, refuse, and ashes to recover what may still hold worth, so must

readers sift through the text to extract, organise, and interpret its manifold meanings.

Fig. 3 – The Dust-heaps, Somers Town, in 1836.

2. *The Microscopic: The Redemption of Dust*

In any case, over the course of the Victorian era, a kind of redemption of dust took place: what had once been a cumbersome, dangerous, and physically repellent waste product was transformed into value. As early as July 1850, in the pages of *Household Words*, Richard H. Horne published an article—blending journalistic reportage with short fiction and sociological analysis—bearing the eloquent title *Dust; or, Ugliness Redeemed* (vol. I, 13 July 1850, pp. 379–84), which likely inspired Dickens years later in his conception of *Our Mutual Friend*. Horne's tale interweaves irony with moral reflection on the possibility of a symbolic redemption inscribed within the very matter of the dust heap: a potential "resurrection" not only of waste as part of a profitable recycling economy[13], but also of those who literally immerse themselves in it.

Horne offers a vivid portrayal of the life and activities surrounding these mounds of dust and refuse, yet these elements are framed within a fictional narrative, almost an allegorical parable, in which the protagonists search for a precious object hidden among the piles of dust. The discovery of a gold-framed miniature, wrapped in parchment, proves decisive, as the document it contains secures a substantial inheritance for a man named Mr. Waterhouse. Following a sudden legal reversal and the loss or theft of his property titles, he is quite literally

saved by the dust: when he risks death by drowning or exposure, it is the warmth of the ashes—into which he is buried up to his neck by three rescuers—that restores him to life. It is again through the dust that he subsequently regains his legal identity and, ultimately, his economic security, with dust thus configured as an active agent of both material and moral regeneration.

At the same time, the imperceptible matter of which dust is composed became a source of a new sense of stupor and wonder at the complexity of the infinitesimal, radically transforming the way Victorians perceived, constructed, and narrated their world.

Precisely in its microscopic dimension, dust is situated at one end of that Victorian fascination with the infinite that concerned not only the immensely large but also the immensely small. This was an infinite suggested and continually propelled by discoveries made possible by optical instruments capable of extending human vision beyond the natural limits of the eye[14].

Indeed, while sanitary reformers fought against visible dust, a more silent revolution was taking shape beneath the lenses of the microscope. It disclosed a world of wonder and beauty previously invisible because, until then, it had been «enveloped in the impenetrable obscurity of their own minuteness», making it evident that even the humblest matter could contain surprising complexities[15]. The evolution of optical technology allowed Victorians a deeper understanding of the invisible world and, above all, offered a new key for interpreting reality: a "new lens" capable of expanding the boundaries of the imagination and teaching that even «little things mean a lot»[16]. Thus, in this era of unbridled hygiene, of purification from dirt, and of absolute transparency, dust progressively ceased to be an enemy to be eliminated and was instead elevated to an elementary but indispensable matter through which nature shapes its own magnificence.

Researchers such as John Aitken (1839–1919) demonstrated that dust was an essential component for life itself. Aitken devised instruments capable of magnifying and counting the «gay motes that people the sunbeams»—an operation previously considered a bold act, almost a divine prerogative—discovering that a single cubic inch of air could contain millions of particles. In his article *On Dust, Fogs and Clouds* (1880), he argued that when water vapour in the atmosphere condenses, it necessarily does so around minute solid particles. Consequently, in the absence of dust and other particles suspended in the air, there would be no rain,

but only a perennial fog or continuous dew, as dust acts as the nucleus upon which water vapour condenses[17].

In the same way, in 1884, Aitken proposed the idea that the intense and brilliant colours often visible at sunset depend on the refraction of light caused by dust particles present in the upper layers of the atmosphere. This optical revolution, which expanded the capacity to see the "very small", led to a revaluation of dust and waste, a shift aided by Victorian writers and thinkers who recognised a surprising potential and richness of meaning in its inconsistent and wretched nature[18].

2.1 *John Ruskin and The Ethics of the Dust*

No one captured the moral and aesthetic potential of this new mode of vision more effectively than John Ruskin, who utilised science's ability to reveal the internal structure of matter to transform dust from a mere residue and image of decomposition into an emblem of life, order, and latent beauty.

In *The Ethics of the Dust* (1866), Ruskin refashions ten mineralogy lessons into the form of a Socratic dialogue between an elderly teacher, the Old Lecturer, and a group of young female pupils, the «little housewives». The treatment of crystallisation processes thus becomes the starting point for a wide-ranging pedagogical and ethical meditation. In this context, microscopic and mineralogical observation does not merely serve to describe natural processes, but to unveil their educational function: within the invisible mechanisms of matter, Ruskin identifies a moral order, translating the laws of natural transformation into a literal imperative for human conduct.

In Ruskin's work, dust is rescued from its connotation as waste or filth and elevated to the status of moral matter: it is not an inert residue, but a substance in perennial transformation, capable of organising and recomposing itself according to precise laws to generate ordered and splendid forms, such as crystals. The sciences of the microscopic—mineralogy and microscopy—offer Ruskin proof that what appears shapeless is not pure chaos at all: dust is composed of particles endowed with regenerative potential, and its very disintegration does not coincide with dissolution into nothingness, but rather with a transitional phase toward new configurations.

From this arises the powerful ethical allegory of *The Ethics of the Dust*: the process of crystallisation becomes a model for human conduct. The Old Lecturer invites his pupils to «always behave at least as well as dust» (Lecture 2), contrasting

the natural ability of atoms to find their place «quietly and at once, without running against each other» (Lecture 2) with the human tendency toward conflict, competition, and disorder. Where matter, when left free to follow its internal laws, spontaneously tends toward harmony, man often seems to require external constraints to achieve a form of moral order. If left to their own will, humans tend to fall back into chaos. The Old Lecturer thus uses this metaphor to invite the girls to find their place in society, to overcome selfishness, and to cooperate without conflict or friction, acting with the same precision and harmony as atoms in a crystal.

Even the vulnerability of dust assumes an ethical meaning within this framework. Exposed to wind and water, it appears weak and degradable, yet this very malleability constitutes the condition for its future strength. Dissolving and recomposing are not signs of defeat, but necessary phases of transition toward a higher and nobler form: the crystal, understood as redeemed matter, represents the triumph of order over chaos, of purity over contamination, and of cooperation over disintegration, offering a tangible model for human morality.

It is no coincidence that Ruskin turns to carbon particles, the constituents of soot, to formulate his most incisive moral principle: left to itself, it is merely dirt; but through the processes of ordering and the cooperation of crystallisation, it can become a diamond, the hardest and most luminous substance on earth. Thus, the vilest matter becomes the emblem of a possible ethical and aesthetic elevation. Even the most degraded of elements awaits its reconversion, and what appears vile and useless acquires value once more. Ultimately, Ruskin demonstrates that beauty and richness can arise even from waste, and that even in the humblest fragment of matter, there is hidden a principle of harmony capable of leading to a moral and social regeneration.

In 1898, the naturalist Alfred Russel Wallace published a study entitled *The Wonderful Century*, in which he dedicated an entire chapter to the importance of dust. Wallace acknowledged that dust in cities and homes can be not only a nuisance but also detrimental to health, so much so that he defined it as «matter in the wrong place», echoing the proverb popularised by the British Prime Minister Lord Palmerston in 1852. In Wallace's view, despite having valid reasons for wanting to eliminate it, dust hides a vital importance:

> though we can thus minimise the dangers and the inconveniences arising from the grosser forms of dust, we cannot wholly abolish it; and it is, indeed, fortunate we cannot

> do so, since it has now been discovered that it is due to the presence of dust we owe much of the beauty, and perhaps even the very habitability, of the earth we live upon. Few of the fairy tales of science are more marvellous than these recent discoveries as to the varied effects and important uses of dust in the economy of nature[19].

While acknowledging the paradoxical nature of dust—regarded simultaneously as a vehicle for disease and a generator of beauty, a residue to be disposed of and yet an essential element for the climatic conditions that make life possible—dust ultimately found a renewed scientific and symbolic legitimacy at the end of the nineteenth century. It established itself as a vital trace and an invisible principle of transformation, capable of joining hygiene and wonder, threat and potential, waste and knowledge.

3. *John Steinbeck and the Dust Bowl*

If the nineteenth century closed, despite everything, with an optimistic and positive vision of dust, the transition to the twentieth century marked a radical reversal of perspective. As early as *The Great Gatsby* (1925), F. Scott Fitzgerald returned to treating dust as an almost imperceptible residue that accompanies and infects the illusion of the American Dream, revealing its inevitable compromise in the face of material ambitions. The famous «foul dust» that floats in the wake of Gatsby's dreams («foul dust floated in the wake of his dreams», Ch. 1) represents everything that prevents the fulfilment of his aspirations; it is a moral grit that contaminates every ambition, a corrosive residue revealing the fragility of human desires when they yield to falsehood and vanity.

Furthermore, the symbolic «Valley of Ashes» is a desolate industrial zone dominated by dark, grey heaps of dust and ash, where human beings move about covered in dust, appearing as evanescent ghosts— figures who represent those forgotten or rejected by society. The valley stands in sharp contrast to the luminous opulence of West Egg and East Egg and is the materialisation of the moral, spiritual, and social decay of the 1920s, the physical manifestation of the rot generated by reckless and irresponsible wealth. Here, the American Dream reveals its darkest side, its own corruption, capable as it is of producing waste, ruin, and decay:

> This is a valley of ashes — a fantastic farm where ashes grow like wheat into ridges and hills and grotesque gardens; where ashes take the forms of houses and chimneys and rising smoke and, finally, with a transcendent effort, of men who move dimly and already crumbling through the powdery air. (Ch. 2)

The Valley is also the place where the most tragic and dark culminating events of the novel occur, including the death of Myrtle Wilson, whose blood, mixing with

the dust, is a sign of a violent and inevitable fate that strikes those who dared to dream too much.

However, it is John Steinbeck in *The Grapes of Wrath* (1939) who further radicalises the destructive and implacable nature of dust, portraying an element that is entirely irredeemable. It is no longer a waste product to be transformed into a resource as in Dickens, but a boundless mass of cosmic proportions—an almost living entity that chokes crops, invades homes, penetrates bodies, and annihilates any possibility of stability or redemption, becoming the material and symbolic hallmark of a systemic economic and environmental crisis.

As is well known, Steinbeck chronicles the Dust Bowl in his novel, one of the most severe ecological and anthropogenic disasters of modern history that struck the Great Plains of the central United States and Canada between 1931 and 1939[20]. The novel's opening—«but the dust came...» (Ch. 1)—introduces the massive and catastrophic irruption of dust that leads to the dissolution of a natural and social landscape (Fig. 4). It possesses the qualities of an impersonal force that abolishes the distinction between heaven and earth and annihilates every hope of human rootedness.

Fig. 4 – A dust storm approaches Stratford, Texas, in 1935.

> Now the wind grew strong and hard and it worked at the rain crust in the corn fields. Little by little the sky was darkened by the mixing dust, and the wind felt over the earth, loosened the dust, and carried it away. The wind grew stronger. The rain crust broke and the dust lifted up out of the fields and drove gray plumes into the air like sluggish smoke. The corn threshed the wind and made a dry, rushing sound. The finest dust did not settle back to earth now, but disappeared into the darkening sky. (Ch. 1)

Driven by an incessant wind that erodes the earth, dust here is a cosmic force that escapes all human control. It is a destructive and lethal force—not a residue, but a wave that submerges, invades fields, chokes crops, and erases the traces left by men by overwhelming or burying them. It tears families from their homes, driving thousands toward exodus, uprooting, and precariousness; it dissolves communities and the identity of entire territories. Everything literally unravels and disperses into the atmosphere.

It possesses nothing spiritual: it is the simultaneous material manifestation of human precariousness and social injustice, the tangible and devastating sign of an ecological crisis that transforms fertile soil into fine dust, leading to the pulverisation of an entire agricultural region (Fig. 5). This crisis was produced by the lethal interaction between intensive land exploitation, the use of monoculture, and climatic instability, but above all, it was triggered by the greed of a shortsighted and voracious agrarian capitalism. The fertile earth, reduced to dust and scattered by the wind, offers no possibility of redemption but instead imposes migration, precariousness, and loss.

Fig. 5 – Buried machinery in barn lot in Dallas, South Dakota, May 1936.

It is an agricultural dust, but in fact, due to the vastness and intensity of its manifestations, it takes on the characteristics of a sandstorm. Indeed, sand and dust seem to merge here and, as in the biblical tradition of the «house built on sand»

(Mt 7:21, 24-27), they share the same vocation for instability, as both are incapable of offering a firm grip and are destined to disperse or to submerge.

Steinbeck emphasises its ubiquitous nature: even when not visible, the dust is present, creeping into the most intimate crevices of the house, onto everyday objects, onto clothing, and even onto the skin.

> Now the dust was evenly mixed with the air, an emulsion of dust and air. Houses were shut tight, and cloth wedged around doors and windows, but the dust came in so thinly that it could not be seen in the air, and it settled like pollen on the chairs and tables, on the dishes. (Ch. 1)

In *The Grapes of Wrath*, dust is a diffuse and pervasive organism, a substance capable of engulfing everything in a suffocating monochrome. The image of the «emulsion of dust and air» joins two vital elements—earth and breath—into a deadly mixture, where the air itself becomes a vehicle for suffocation. This symbolic transition is crucial: if dust, in its microscopic state, evokes the idea of a hidden and infinitesimal cosmos, here it amplifies to the point of becoming a total landscape, altering light and obscuring the sense of temporal continuity.

> In the morning the dust hung like fog, and the sun was as red as ripe new blood. All day the dust sifted down from the sky, and the next day it sifted down. An even blanket covered the earth. It settled on the corn, piled up on the tops of the fence posts, piled up on the wires; it settled on roofs, blanketed the weeds and trees. (Ch. 1)

This renders the symbol profoundly different from the Dickensian *Great Dust Heap*, although in both cases vast quantities of dust are produced by the same forces: unbridled capitalism, unchecked industrialisation, and the relentless pursuit of profit. In Dickens, dust takes the form of a material mound and a social residue that may still allow for the possibility of redemption; in the Dust Bowl, by contrast, it becomes an atmospheric and apocalyptic force that offers no salvation. In Steinbeck's narrative perspective, dust is a silent protagonist that erodes the vitality of both the characters and the land itself, eventually forcing them into migration.

The analogy between the dust heaps and the Dust Bowl acquires particular relevance when read through the paradigm of the Anthropocene. Both phenomena demonstrate how human presence, in its economic and productive dimension, irreversibly alters environmental balances. Dust becomes the tangible sign of an economic and productive metabolism that disrupts natural equilibria and returns as residue what man has generated as excess. In the first case, the incessant production of residues creates artificial mountains that transform the city into a "living archaeology"; in the second, the excessive exploitation of the soil leads to the

desertification of entire geographical areas and the transformation of fertility into ruin. Two different scenarios, yet a single outcome: dust as the material testimony of the ecological cost of progress.

The dust heap and the Dust Bowl thus recount two versions of the same truth: nature is no longer external to man but is strictly interwoven with human productive practices until it generates waste that returns as a threat. Dickens records industrial modernity in a phase where residue can still be recovered, organised, and commodified; Steinbeck, by contrast, describes the moment when waste is no longer recoverable—where dust escapes all control and transforms into an environmental catastrophe that anticipates contemporary themes such as desertification, the climate crisis, and forced migration. Despite the temporal distance separating them, both episodes highlight the same nexus: dust is a non-assimilable residue, an exceeding matter that reveals the instability of the human order. Whether it accumulates menacingly in vast quantities or spreads devastatingly through the atmosphere, dust is the most tangible sign that human activities have irreversibly altered natural cycles and rendered the environment an archive of waste; it signals the fragility of ecological and social systems in the face of environmental disaster and serves as a manifestation of man's predatory relationship with the earth.

In this sense, reading the dust of the Victorian dust heaps and the twentieth-century Dust Bowl through the lens of the Anthropocene means recognising that both the industrial metropolis and the American agricultural frontier constitute scenarios of the same "geology of the modern"—made of scraps, erosion, and collapse. It signals the point of crisis where the ecosystem is no longer capable of regenerating itself, transforming into the physical testimony of historical and environmental crises and embodying the fragility not only of the individual, but of the entire social and natural order: the impossibility of separating human labour from the fate of the planet.

Furthermore, in both cases, dust retains a common trait: it reveals the fate of man in the face of the matter that overwhelms him. In Dickens, it unmasks the illusory nature of wealth and the instability of social values; in Steinbeck, it becomes a metaphor for collective destiny, the loss of stability, and the dissolution of social and natural orders—the fragility not only of humanity but of the entire system in which we live. Similarly, the dust we breathe today—composed of smog, industrial residues, desert sands lifted by climate change, and dispersed

microplastics—represents the materialisation of the increasingly inescapable and dangerous intertwining of the human and the non-human.

In the examples analysed here, dust, while maintaining its nature as a seemingly valueless residue, becomes a prism through which we can recount great historical crises or read broader cultural processes. Its very marginality constitutes its symbolic strength. Its continuous shift between residue and infinity, between transience and cosmic force, has ensured that literature finds in dust one of the most discreet and persistent motifs for contemplating the human condition, forever suspended between fragility and vastness.

Thus, through literature—from Dickens to Steinbeck, from postmodern and post-apocalyptic narratives to so-called *cli-fi*, from Don DeLillo to Cormac McCarthy, from Philip Pullman to Alison Stine, from Hugh Howey to Lawrence Osborne—dust continues to speak to us as both testimony and warning: it is what remains of us and what, perhaps, will survive us.

Notes

[1] M. Marder, *Dust*, New York, Bloomsbury, 2016, p. 46.

[2] In addition to the articles cited in this contribution, see: Archbutt, Leonard, *Dust. A Paper Read Before the Nomadic Club*, Derby, March 20th, 1891, London and Derby, Bemrose and Sons, 1891; H. P. Malet, *Incidents in the Biography of Dust*, London, Tribner and Co., 1877; J. G. McPherson, *Dust*, «Longman's Magazine», 18, 1891, pp. 49–59; *Dust and Hygiene*, «All the Year Round», 3rd series, 13, 1895, pp. 154–8.

[3] By "dust" we can also mean, by extension, earth and ashes, as it represents the most minute, nearly invisible state of both: earth, disintegrated and dried, becomes dust; ashes, when touched, rise like dust. Their association in the funeral liturgy—«Earth to earth, ashes to ashes, dust to dust»—has always drawn them together, allowing for easy figurative substitutions and equivalences. This explains why religious and literary texts often use "dust", "earth", and "ashes" interchangeably as symbols of human transience. Naturally, one can also identify differences. Unlike earth, which evokes fertility and the cyclicity of life—being fertile and generative—and unlike ashes, which are matter transformed by fire into a sterile remnant, a sign of irreversible finality that can be collected and preserved as an image of mourning and absence, dust is a sort of intermediate stage: a volatile material that cannot be gathered and which by its nature disperses, yet can return, being continually stirred up and swept away by the wind. Similarly, dust, in being a radical residue devoid of utility—the ultimate threshold of matter that can no longer be recycled or transformed into something new—represents the "excess" that accompanies every human act. Conceptually, it is linked to debris, scraps, dross, and refuse: that which society throws away and considers worthless, but which never entirely disappears. These are coarser fragments, whereas dust is the extreme

reduction of all these categories—the zero degree of matter, the final substance of the processes of consumption and decay, and the common denominator of every residue.

[4] Cfr. G. Calvert Holland, *Diseases of the Lungs from Mechanical Causes and Inquiries into the Condition of the Artisans Exposed to the Inhalation of Dust*, London, John Churchill, 1843; E. Oppert, *On Melanosis of the Lungs and Other Lung Diseases Arising from the Inhalation of Dust*, London, John Churchill and Sons, 1866; J. Tyndall, *On Dust and Disease*, «Fraser's Magazine», n.s. 1, 1870, pp. 302-10.

[5] One of the largest was the *Great Dust Heap* of King's Cross, later removed in 1848 to make room for the new railway station.

[6] E. Walford, *Old and New London: A Narrative of Its History, Its People and Its Place*, London, Cassell & Company, vol. 5, 1873, p. 368.

[7] Chadwick himself, in his famous 1842 report, denounced the accumulation of dust and dirt near the homes of the poor as the direct cause of the moral and physical degradation of the population.

[8] B. Campkin and R. Cox (eds.), *Dirt: New Geographies of Cleanliness and Contamination*, London, I. B. Tauris, 2007, p. 2.

[9] The sanitary reform promoted by Edwin Chadwick had consequences that reached far beyond the medical and infrastructural spheres, contributing to what has been defined as a true "transformation of the senses", where hygiene eventually imposed itself as a preliminary condition for artistic experience and aesthetic judgment. In this new paradigm, aesthetics—traditionally based on sight—was subordinated to a more radical sensory criterion: the "smell test." A fetid odour was no longer merely unpleasant but was interpreted as an index of biological and moral corruption, capable of nullifying any visual pleasure. From this perspective, even the contemplation of ruins and ancient monuments was compromised if associated with putrefaction: famous is the anecdote in which Chadwick criticized John Ruskin, arguing that his admiration for Venice was only made possible by an insensitivity toward its miasmas, for where there was the smell of decomposition, there could be no authentic beauty. Similarly, the shadows and darkness beloved by Renaissance and Baroque painting—the brown and sombre tones of Rembrandt or Salvator Rosa—began to be read as a literal «veil of perversion», a form of aesthetic filth that obscured the truth of nature. Even the patina of time, once appreciated as a sign of noble antiquity, was reclassified as an organic deposit and a potential health threat, becoming the subject of controversies related to cleaning and restoration practices. In this cultural climate, the eighteenth-century taste for the Picturesque—based on the allure of ruins, decay, and the indeterminate—was progressively discredited. What emerged instead was an ideal of clarity, luminosity, and formal precision. Cfr. E. Cleere, *The Sanitary Arts: Aesthetic Culture and the Victorian Cleanliness Campaigns*, Columbus, Ohio State University Press, 2014.

[10] In addition to Horne, the profound knowledge and critical perspective that Dickens developed on the subject of the waste industry were significantly shaped by the work of Henry Mayhew who, in his monumental sociological study *London Labour and the London Poor* (1861–1862), offered an objective and detailed account of the dust trade, providing Dickens with a fundamental theoretical and analytical framework for his works. Moreover, Dickens's understanding was enriched by direct personal experience: he had contact with several dust contractors and personally visited their depots, particularly the one located near the Regent's Canal and that at Nova Scotia Gardens.

[11] M. Thompson, *Rubbish Theory. The Creation and Destruction of Value*, Oxford, Oxford University Press, 1979.

[12] The image of the heap as a volcano is consistently employed by Mayhew, Horne, and ultimately by Dickens himself.

[13] Horne reveals that this same mountain of dust was later sold «for forty thousand pounds, and was exported to Russia to rebuild Moscow» (p. 384) following the fires caused by Napoleon's French troops.

[14] The almost feverish attraction of Victorians to seeing and to devices that allowed them to see more, better, or differently is well-known. This refers primarily to the birth and spread of the illustrated press and photography. Yet this passion for the visible did not translate solely into a naive trust in the transparency of the world: on the contrary, it also implied a growing interest in what escaped sight—the invisible—with the awareness that the invisible could be more suggestive than the visible. Indeed, the centrality of the gaze was reinforced by a proliferation of optical devices that transformed the perceptual experience into a field of experimentation: the magic lantern, the kaleidoscope, the stereoscope, the zoetrope, and other similar instruments were not mere amusements, but cultural objects capable of destabilizing the relationship between reality and representation, between materiality and phantasmagoria. Alongside these "popular" instruments, the telescope and especially the microscope helped show how much of what appears evident can prove to be incomplete or illusory. Within this complex cultural framework, dust emerges as a privileged object because it challenges the boundaries between visible and invisible, between purity and contamination, between waste and value.

[15] Revd. J. G. Wood, *Common Objects of the Microscope*, London, Routledge, Warne and Routledge, 1861, p. 3.

[16] Robert Browning, in the dramatic monologue *Mr. Sludge, "The Medium"*, writes:

> the world wears another aspect now:
> Somebody turns our spyglass round, or else
> Puts a new lens in it: grass, worm, fly grow big:
> We find great things are made of little things.

[17] This hypothesis was, however, downsized by C. T. R. Wilson in 1895, who demonstrated experimentally how ions produced by cosmic rays can perform the same function.

[18] Towards the end of the nineteenth century, with the refinement of lenses, the new capacity for microscopic vision led to revolutionary discoveries and, in some cases, the invisible became not only marvellous but also terrifying in a new way. For example, the transition from miasmatic theory to germ theory occurred, with dust identified as the refuge for invisible microorganisms that could only be observed through the microscope, transforming scientific wonder into a new type of sanitary anxiety related to the unseen. These discoveries had several consequences, including a change in Victorian furnishings—which made extensive use of overloaded decorative elements, carved frames, heavy curtains, and thick carpets—suddenly considered «dust traps», or actual breeding grounds for bacteria and disease. Design began to move towards smooth surfaces, white porcelain, and open spaces, giving life to a hygienic minimalism that would later influence the formal cleanliness of Modernism.

[19] A. R. Wallace, *The Wonderful Century*, London, Swan Sonnenschein & Co, 1898, pp. 68-9.

[20] The roots of this catastrophe, which struck Texas, Kansas, Oklahoma, Colorado, and New Mexico, lie in a lethal combination of post-war economic instability and deeply inappropriate agricultural practices, such as the extension of farming into marginal lands, the lack of crop rotation, and the adoption of deep ploughing that destroyed the grass cover essential for maintaining soil hydration. With the arrival of a severe and prolonged drought, the soil—now stripped of vegetative protection and reduced to powder—was lifted by impetuous winds. This originated massive "black clouds" that not only darkened urban centres like Chicago but even reached the Atlantic coast, affecting cities like Boston and New York and dispersing part of the fertile soil directly into the ocean. On certain dramatic days (such as "Black Sunday" on April 14, 1935), visibility was almost totally zeroed, turning day into night. The social repercussions of this disaster were devastating, triggering a forced exodus in which over half a million people lost their homes. It is estimated that between 300,000 and 2.5 million individuals abandoned their sterile lands and debt-foreclosed homes to migrate westward, particularly toward California.