Dipartimento di

Scienze della Comunicazione, Studi Umanistici e Internazionali (DISCUI)

CORSO DI DOTTORATO DI RICERCA IN: STUDI UMANISTICI

CURRICULUM: STORIA CONTEMPORANEA E CULTURE COMPARATE

CICLO

XXXVII

Telos: Science and Fiction in the Detective Stories of Doyle, Pynchon and Asimov

SSD: ANGL-01/B

Coordinatore: Ch.ma Prof. ssa. Liana Lomiento

Supervisore: Ch.mo Prof. Ian Marten Ivo Klaver

Co-supervisore: Ch.ma Prof. ssa. Alessandra Calanchi

Dottorando: Emilio Gianotti

ANNO ACCADEMICO
2023/2024

CONTENTS

Introduction

Le réel serait le tout dont ce que nous apercevons est la partie.
Et d'autre part c'est la notion vague de la possibilité de combiner,
de la possibilité de possibiliser, pouvoir apparent qui fait concevoir le "monde"
comme cas particulier au regard de "l'esprit" qui a causé la genèse des hypermondes.
Notre idée du monde est plus pauvre que le monde.
Mais de cette même idée, nous tirons sans effort une infinité d'autres idées de mondes.

Paul Valéry, *Cahiers* (1914)

- The Aim

Who hasn't found themselves comparing the content of a detective fiction work with reality? Certainly, Pynchon evokes this process when he takes the genres of American popular literature and, giving voice to the reader's thoughts, tells us, «[b]ut the world isn't like that»[1]. In our world lovers do not always end up together, the appeals to science in science fiction do not always meet the accuracy criteria of scientists, and investigations do not always lead to results. The detective genre has been known to prompt critics to question its relationship with reality this way. From the very first studies that took it as an object, the detective genre appeared to not only depict extraordinary events but also to rely on the highest forms of human rationality for their explanation, science being one of the most prominent. This is evident in its progenitors Edgar Allan Poe and Arthur Conan Doyle. Many scholars over the years have sought to confront the ensuing liminal sensation halfway between the aberrant and the rational, and to try to understand how the relationship between detective fiction and reality might work. Among the most famous examples of this tendency are the studies by

[1] THOMAS PYNCHON, *Is it O.K. to be a Luddite?*, in *New York Times Book Review*, 28 October 1984. < https://www.nytimes.com/1984/10/28/books/is-it-ok-to-be-a-luddite.html > 19/07/2024.

Régis Messac, who in 1929 sought to understand the historical traditions that filtered into the detective's thinking, and those by Umberto Eco and the editors of the collective volume *The Sign of Three* (1984), which analyzed the appeal to formal logic present in Poe and Doyle in order to test, in light of the actual workings of logic, the functioning of that of the detectives.

At the same time, in the field of studies on fiction, Sherlock Holmes is often considered the quintessential “fictional” character. This may seem paradoxical to some readers, as Doyle's fiction is among the most programmatically "realistic" of its kind. Doyle frequently relies on the scientific knowledge of his time to justify the remarkable abilities of his protagonist, draws inspiration from real figures, such as his professor Joseph Bell, and explicitly excludes any supernatural elements from its narratives. But if one looks more closely, as Messac and Eco did, much of detective fiction demonstrably relies on that irreducible element of the seemingly absurd, the absolutely unusual, and sometimes even gruesome, which challenges our ability to relate the reality of our daily lives to the reality within the narrative and which we often call “the sensational”. Thus, unbelievably intricated plans, woven by the minds of Machiavellian villains, are faced with the incredible intellectual prowess of extraordinary detectives. But there is more. The challenge to the reader's cunning to rationally explain the outlandish fictional facts, which has earned the genre its cultured readership, allowing it to be seen as a “pastime for intellectuals” like it was for W. H. Auden, has often acted as a hook that drew the faculties of the reader into the text, inviting them to put them into practice by trying to solve the case before the detective; to “predict”, so to speak, what the work is going to tell them. Meanwhile, Sherlock not only solves crimes, but tells us how the world works and shows us *how* he can reconstruct events from details. What happens then is that the readers can agree that the world works according to what the detective said and try to rationally predict the solution, or question it, and see where this leads them. It is perhaps the disappointment stemming from the inability to successfully predict certain plot developments, the identification of the occasional gaps in the narrative, or the presence of unrealistic or

scientifically inaccurate elements—along with the feeling that there could have been different rational solutions to the case than those presented—that captivated scholarly readers and engaged them in their quest to discern what is "real" or what "works" within the stories they read. The point would therefore have been to rationalize one's own defeat and understand whether the failure to predict who the culprit was stemmed from one's own mistake or from a fallacy in the logic of the text.

Once the logic of the detective plot was called into question, observations about its constructed nature have led many critics to sense more powerfully the arbitrary authorial will directing the fictional facts towards a predetermined outcome, which now seemed to want to stir the plot towards the chosen ending even at the risk of alienating the reader. Over time, this has caused critics to perceive detection plots as particularly contrived, especially in comparison to other narratives that were equally committed to a conclusive ending.

This perception arises more readily because detective plots seem to enforce their own logic within the texts, explicitly appealing to their own rationality and scientific credibility, which ultimately exposes them to scrutiny rather than shielding them from it. With this in mind, this thesis explores the concept of *telos* in detective fiction. Rather than questioning the apparent logic of the texts, the thesis seeks to uncover what it reveals about them, the worlds from which it develops, the movements that the characters make within them, the laws that govern their narratives (if any), and, ultimately, the conclusions it reaches. It will raise the question of whether it is possible, based on the scientific suggestions of the studied texts, to take this internal logic at face value (no matter if functional or flawed) and treat its peculiarities as reading data. Rather than stopping at Pynchon-like exclamations about what occurs or does not occur in the real world, and rather than challenging the logic of detective plots on scientific grounds, the focus of the thesis will be on what happens within the text as a symptom, and an effort will be made to explain it retrospectively from a narratological perspective, following the tradition of plot criticism that includes Genette, Brooks and Lotman. In other words, if some ways of knowing work in the texts while others do

not, or if there is something about the logic of the texts that fails when compared to an external logic, the aim is to understand why one was chosen over the other. Obviously, such an analysis cannot disregard each author's relationship with science, which often informed their plots from both within and outside the texts and ideally explained their twists and turns.

Moreover, the intent of my work is for a great part historical, since it includes a concern for the periodization of detective fiction in relation to the history of science. Many of the most reputable histories of detective fiction and textbooks tend to come to a halt after World War II and to treat the different subgenres that appeared around and after that period separately to better highlight their social milieu of origin, aesthetic intentions, and overall coherence of forms. In spite of the historical efforts to extract the detective genre from its state of inferiority compared to so-called "high" literature, in many great critical works one can still detect a tendency to separate literature that uses detective fiction as an instrumental form for philosophical reflection from lower forms predicated as commodity literature[2] drawing their fascination from mimesis, sensationalism and/or thrill. This engenders the fact that in many reference manuals the cultural landscape of detective fiction beyond the watershed of WWII is mostly described with an emphasis on experimentation and self-conscious use of forms. This territory is sometimes referred to, and not always unproblematically, as postmodern. On the fringes of this landscape, genres such as the thriller, the police procedural, and lesser-studied (yet increasingly popular) subgenres like science-fictional detective fiction are only marginally connected. This approach effectively excludes or segregates subgenres that share with their most contemporary experimentalists great part of their cultural humus, if not the exact same scientific influences.

Critics such as Rzepka, Malmgren, Spanos, Tani, McHale, Merivale-Sweeney, Ascari, and Dechêne (among others) either treat scientific influences but tend to stop their analysis around the fluid boundaries of this period, exploring the areas where forms of irrationalism are constantly and progressively woven into the positivistic roots

[2] CARLO BORDONI, *Il romanzo di consumo. Editoria e letteratura di massa*, Luguori, Napoli, 1993.

of the genre, or often relegate the influence of the advances in science on the minds of writers throughout the 20th century to the margins of their scholarship. A tangible example of this trend is that, within the bibliographic framework of this research, it has proven difficult to find open acknowledgement of the persistence of forms of positivistic thought in detective fiction after Borges in the scope of a large cultural history of the relationship of science with the genre.

Outside of our domain of inquiry, different branches of literary studies such as Genre Studies and Cultural Studies, which are part of many manualist approaches like Rzepka's, have significantly contributed to mapping large portions of this landscape, greatly expanding the scope of its histories, rewriting their past, fluidifying their boundaries, and including different perspectives and themes. Within our scope, the works of Ascari, Dechêne, and Merivale-Sweeney are exemplary in their efforts to rewrite the history of detective fiction, seeking formal tendencies pertaining to a *longue durée* and hinges of cultural change that influence its evolution. Among these influences, science, especially in Ascari, takes center stage. However, the picture still seems far from complete. There appears to be no large-scale critical connection in this domain between the worlds of late 19th-century detectives, the puzzle games of the turn of the century, and their experimental counterparts of the 1950s and 1960s onward, along with still-popular genres such as the police procedural and the science-fictional detective story. In a sense, one of the objectives of this thesis is to offer an example of this possible connection by comparing extracts from the Sherlock Holmes corpus to forms of post-WWII American detective fiction taken from different subgenres based on how science enters their fictional worlds. This, of course, creates challenges in terms of critical distance, necessitating a robust theoretical framework to effectively engage with objects that are so far removed in time. This leads to the choice of methodology for the thesis: applying *Possible Worlds Theory* (PWT) to detective fiction.

- **The Methodology**

PWT is a branch of the field of *Fiction Theory*, which seeks to analyze the forms and modes of the relationship between reality and fiction. The works of Thomas Pavel, David Lewis, Umberto Eco, Lubomir Doležel and Marie-Laure Ryan (among others) drew from analytic philosophy, and more specifically from some of Saul Kripke's suggestions in the area of modal logic, a set of tools that enable them to elaborate from the discourse on fiction as it had been approached by such great names as Maurice Blanchot, Roland Barthes and Paul Ricoeur. The underlying idea of this approach is that it is possible, *mutatis mutandis*, to analyze fictional worlds using similar tools to those employed to examine possible worlds in modal logic. Françoise Lavocat, Alison James, Akihiro Kubo, Ruth Ronen, and Richard Saint-Gelais, building on the theories of their predecessors, are the critics now recognized as representatives of the broader field of Fiction Theory.

The positions of Thomas Pavel, true forerunner of this line of studies, stood, at the beginnings of what we call PWT around the 1980s, against both a pan-ficionalist view of reality and against an impoverished view of literature as mere mimesis, in favor of a circumstantiated study of the relations between the empirical world and imaginary worlds. Today, through the studies of those who expand on the lines drawn by the forerunners of the method, and through organs such as the *SIRFF/ASIFF Société Internationale des Recherches sur la Fiction et la Fictionnalité/Association for Studies in Fiction and Fictionality*, this branch of studies continues to address these issues.

The philosophical literature concerning these topics, both analytical and continental, is vast. In this mare magnum, PWT studies particular instances in which, through the semantics and structural analysis of the texts (their plots, characters, objects and so on…) it is possible to outline a position for a specific piece of fiction within the wider context of its culture of origin, describing what, inside of it, could happen in relation to a historicized idea of what obtains in reality. This approach stems from Thomas Pavel's *Fictional Worlds* (1986), where, in a now famous example, he demonstrated how an understanding of historical religious beliefs influences our judgments about the truth and fiction of the content of medieval allegorical texts. In

our specific case, as Lavocat points out: «rares sont les histoires de la fiction qui prennent en compte les théories de la fiction»[3]. This thesis aims to constitute a very circumscribed attempt in this direction, addressing one issue (ideologies stemming from scientific progress) in a particular type of fiction (detective fiction). It is necessary, therefore, to clarify in advance how the application of PWT makes this thesis a thesis about the history of the relationship between the realities of science and their fictional counterparts.

In the words of great critics like McHale, Metaphysical Detective fiction, that is postmodernist detective fiction, deals with ontological issues related to world-making[4]. From our perspective, all detective fiction can be read through this lens. This is especially (and not less) true for those fictions like Sherlock Holmes that aim to be "mimetic" or "empirical"[5], and posit themselves as functioning in accordance with how the real-world works, with its historical rules and evolving scientific laws[6]. Positioning one's fiction with respect to reality is almost never this simple. As Thomas Pavel demonstrated, the ideas upon which we build our mimetic fictions are fluid, they change over time and are influenced by a wide range of factors, which allows medieval believers in miracles to have them happen within a story they tell without perturbing what one could naively call their "realism". The most diverse perspectives can come into play in this relationship, and the knowledge and positioning an author can claim towards the science of his or her time is one of them.

PWT, conceptualizing fictional worlds as similar to possible worlds, describes them using terminology borrowed from modal logic. Accessing the texts from this perspective, I will ask what aspects of the vision of how their fictional worlds operates

---

[3] FRANÇOISE LAVOCAT, *Fait et fiction: pour une frontière*, Seuil, Paris, 2016. Epub. p. 29.
[4] BRIAN MCHALE, *Postmodernist Fiction*, Routledge, New York, 1987. p. xii. Also cited in ANTOINE DECHÊNE, *Detective Fiction and the Problem of Knowledge: Perspectives on the Metacognitive Mystery Tale*, Palgrave Macmillan, London, 2018. p. 26. Who anticipates our extension of McHale's approach to the whole of detective fiction.
[5] See DARKO SUVIN, "On the Poetics of the Science Fiction Genre". in *College English*, Vol. 34, No. 3, 1972, pp. 372–82.
[6] MARIE-LAURE RYAN, *Possible Worlds, Artificial intelligence, and Narrative Theory*, Indiana University Press, Bloomington, 1991. pp. 33-45.

from an alethic, epistemological and axiological standpoint. The theories of PWT, such as those of Lubomir Doležel, will provide the tools for this analysis. By engaging with authors whose connections to the scientific discourse of their era are well-documented, I will focus on the similarities and differences between what image of the real world one can derive from their non-literary bibliography and how their fictional worlds regulate what is possible or impossible within them.

In the space of this thesis, I could not seek the logical rigor nor the broad generalizing focus that a philosophical reflection would ideally require of a treatment of this subject matter[7]. Its much more modest goal is to use the tools that the literary critics who founded this branch of study have developed to offer a line of interpretation of the literary works under consideration, and then to fashion these interpretations into a suggestion for a line of historical reflection. To do so, the more proper tools of literary criticism such as the comparative method, intertextuality among sources of the same author and the studies on their cultural milieu will be combined with PWT.

If it is true that science-in-literature is not the same thing as science tout-court, it is also true that sometimes writers are also scientists. It is the case of two over three authors treated in this thesis: Conan Doyle, Thomas Pynchon and Isaac Asimov. While the first and the last were trained scientists respectively in Victorian medicine and 20th century biochemistry, the second had begun his writing career while student of engineering physics at Cornell. A literary critic is certainly not a scientist the way Doyle or Asimov were, which prevents his or her criticism from getting into any depth concerning the breadth of the influence of actual scientific disciplines into their literature. The second-best choice the critic has is, on the one hand, to analyze how their *fictional* science works—how it is used or how it shapes the worlds of their fiction—and, on the other hand, to analyze how the authors themselves treated real scientific themes in their non-literary texts to look for differences or correspondences between the two. To such an extent, the comparative approach proves useful.

[7] Exemplary in such efforts is STUART BROCK, ANTHONY EVERETT (Ed.), *Fictional Objects*, Oxford University Press, Oxford, 2015.

Vulgarization texts and texts in which the authors declare their inspiration and sources are the main touchstones against which their literary work will be compared.

Many critics have had chance to point out how science, in its entering into literature, seems to have a way to transforming into a protean concept. No longer a clear methodology aimed at understanding the world, in its contact with the literary arts, science becomes a nexus of influences, inputs, turns of thought, suggestions, stimuli and even mythologies and religious-like beliefs[8]. As a tool in the hands of writers, science has proven to be a source of complex and multilevel metaphors and inspirations. Occasionally incoherent, sometimes merely instrumental, often spurious, these influences present a panoply of seemingly impossible exhaustion. No one could argue, however, with the fact that that this "fictional" science made of unsystematic fluxes, of suggestions and verbal formulations, once filtrated into literature (whether by choice or osmotically), does exercise an influence.

In Pierpaolo Antonello's words, «La letteratura allestisce micro-scenari osservativi, […] facendosi a tutti gli effetti strumento di indagine filosofica e scientifica quasi in senso proprio.»[9] "Quasi" here is a keyword. PWT, as a branch of the studies on fiction, departs from a basic assumption: that the world created by a work of art into the imagination of the reader is somehow more and less than the actual one. This somewhat tacit axiom of course entails the skirting of several philosophical issues while allowing the critic to analyze some relationships between science and literature within their inherent differences. Following Lavocat's example, this thesis departs from the theoretical assumption that «la fiction est un artefact culturel produit par l'imagination et non soumis aux conditions de véricconditionnalité fondées sur la référence au monde empirique» and that «la capacité de la fiction à référer au monde

[8] In this direction and for further bibliography I signal, without any particular allegiance of conclusions, LAWRENCE PRINCIPE, *Science and Religion*, The Teaching Company, Chantilly, Va. 2006.

[9] PIERPAOLO ANTONELLO, *Il* Ménage *a quattro*: *Scienza, filosofia e tecnica nella letteratura italiana del Novecento*, Le Monnier, Firenze 2005. p. 7. Antonello's hermeneutically strong definition can be compared with RYAN, *Cit*., *Ibid.* and GREGORY CURRIE, *Imagining and Knowing. The shape of fiction*, Oxford University Press, Oxford, 2020.

la soumet bien souvent à l'injonction, dans certaines circonstances, d'être conforme à d'autres versions du monde considérées comme véridiques»[10]. From this perspective, the literary works analyzed will be considered theoretically independent of the paradigms of truthfulness we apply in the real world. This allows us to observe how each text is constructed to align to some of them.

However, referentiality (or: the way realities enter fiction), is not the only issue in Fiction Theory. From the perspective of our methodology, fiction and reality enter in a complex relationship, capable of being studied in an ever-evolving game of positionings. This is where the concepts of *telos* and teleology in detective fiction enter the stage.

- **The Focus**

PWT allows for the treatment of the teleology of fiction in terms of the possibilities presented in the detective plot, which thicken or thin out over time until the plot concludes. This enables, on the one hand, a discussion of the structure of the plot in correspondence with what occurs or does not occur within it.

Generalizing: in the course of a detective story, a mysterious event occurs, and the characters must reconstruct its details. Various hypotheses from the different characters emerge and fade away as they are confirmed or refuted by the narrated facts. The abductive inferences of the detectives and their companions within a story generate possible worlds. Watson proposes one interpretation of the facts, Sherlock offers a different one and so on, until the story itself confirms one and excludes the others. Each interpretation is "possible" in the sense that it is true in a possible world which is believed by the character to be the true one. Which possible world coincides with the real world is eventually revealed by the story. This perspective, on the one hand, allows for the re-description of functions of the detective plot that were already identified by certain Russian formalists, such as that of Watson in Tomaševskij, whose incorrect inferences are excluded to enhance the effect of the final explanation. On the other

[10] LAVOCAT, *Fait et fiction*. *Cit*. p. 43.

hand, it invites the treatment of the very concept of possibility as part of detective plots, a factor also previously noted by other critics (like Spanos), but which in this way can identify types of narrative progression in the detective plot by highlighting the importance of the multiplication or reduction of possibilities within it. Classic mystery stories will then emerge as those in which possibilities thin out until a single possible world, usually that produced by the abductions of the detective, proves to be real. In different plots, deconstructive of this tendency, possible explanations of events are not excluded from the narrative but stack upon one another, generating reactions to the resulting uncertainty. Using these revised literary data, we can analyze the teleology of detective fiction as discussed by critics of postmodernist works, who, drawing on examples like Dürrenmatt, view their endings as closures of the broader structural and ontological systems within each narrative.

The center of this thesis will be an analysis of the Sherlock Holmes series (1887-1927), Pynchon's *The Crying of Lot 49* (1966) and Asimov's Elijah Baley-Daneel Olivaw sci-fi detective series (1953-1983). By comparing the works under examination, which were chosen in virtue of their (more or less) clear standing towards these issues, it is possible to reconstruct and historicize these macro changes in the specific terms of each author, bringing into play the relationship between science and literature. The basic contention is that, from a pluralist perspective of the reality-fiction relationship, one can identify correspondences between the scientific, para-scientific, pseudo-scientific, and religious viewpoints of the authors and the stances their characters and plots take regarding what is possible or impossible in their worlds, providing insights into the logic of these fictional realms. After the logical and the historical, this is the third line of reasoning of the thesis, which aims to bring to light peculiar forms of the reality-fiction relationship as reflecting the positioning of authors concerning real ideas of theology, teleology, scientific explanation, and their respective axiological issues.

There is one scientific branch that is associated with the historically cross-cutting idea of teleology in detective literature: cybernetics. This discipline formally began

with Norbert Wiener's 1948 publication, *Cybernetics; or, Control and communication in the animal and the machine*, in which he derived the name from the Ancient Greek word for "steering". We could define it as an interdisciplinary field focusing on the study of systems, control, and communication in both living organisms and machines. It seeks to understand how systems self-regulate and adapt, emphasizing parallels between biological and artificial ones. In cybernetics, the way entropy relates to information processing is of key importance. Entropy is the measure of disorder or randomness in a system, reflecting energy unavailability in thermodynamics and uncertainty in information theory. Effective systems work to reduce it by managing information flow and increasing order. The concept of feedback is also fundamental. It refers to the process by which a system receives information about its own performance and uses it to "steer" itself towards its goal. Feedback loops of information manage entropy, and thus allow machines and living beings to adapt to environmental changes. Through this concept, cybernetics historically aimed to reintroduce the notion of *telos* into the realm of science. Its proponents employed the term to convey the idea that all self-regulating systems could be interpreted as having objectives that direct their behavior. They posited that living organisms and machines were comparable in this regard, suggesting that both could be understood through similar principles of information processing, communication, and regulation. This comparison historically raised philosophical questions about will, consciousness, agency, and intelligence, as it blurred the lines between human and machine objectives, capabilities, and control.

As Geroulanos and Weatherby noted, cybernetics' influence permeates the humanities well into the 2020's, yet humanists often overlook its significance. Norbert Wiener's discipline provided both the vocabulary and the technological foundation for advancements throughout the early digital era. As the two critics note, cybernetics reflected and channeled developments in various fields, from manufacturing to physiology, from management engineering to computer science. Sociologists, historians, philosophers and other observers of the discipline (such as Daniel Bell, Hans Jonas, Heidegger, the collective Tiqqun, Alcibiades Malapi-Nelson, Jenni Andersson,

and others, all cited along the essay) have noted over time how disruptive was the impact of this science in the many branches of thought and practice it affected, sometimes provoking extreme assessments regarding the scope of its consequences, characterizing it as an ideology, a master narrative, or even the very death of philosophy. On the more popular side, discussions of "feedback", "information", and "patterns" permeate popular culture to this day and are only seldom connected to the discipline that more than others contributed to their diffusion and large scope of use[11].

Notable figures in cybernetics discourse included scholars that are well known in literary studies of the postmodern era such as Roman Jakobson, Margaret Mead and Gregory Bateson, with the latter producing cybernetics-inspired works that were important for the American counterculture like *Steps to an Ecology of Mind*. The relationship between structuralism, poststructuralism, and cybernetics has also been well documented, with ongoing influence from thinkers like Bernard Stiegler[12]. Tony Tanner and Brian McHale are among the earliest critics to outline its appearance as an influence and a source of regulatory metaphors in postmodernist literature, such as those of the universe's entropic dissipation and of human-machine homologation that were taken directly from Wiener's writings. A renewed interest in the topic began around three decades ago, when seminal studies by N. Katherine Hayles and Jean-Pierre Dupuy reintroduced cybernetics to the humanities to little following in the literary domain. Other theoretical explorations of digitally mediated or digitally inspired literature, include Patricia Warrick's *The Cybernetic Imagination in Science Fiction* and David Porush's *The Soft Machine* towards the end of the 1970s, the more recent *Cybertext* (1997) by Espen J. Aarseth[13], culminating in the spring 2023 special section of *New Literary History* entitled *Literary Cybernetics: A New Literary History Forum*[14] curated by Heather A. Love and Lea Pao. Some of these texts will be cited along the thesis.

---

[11] STEFANOS GEROULANOS, LEIF WEATHERBY, "Cybernetics and the human sciences" in *History of the Human Sciences*, Vol. 33, No. 1, Sage, New York, 2020, p. 4.
[12] *Ivi.* p. 6.
[13] *Ibid*.
[14]

Furthermore, cybernetics produced new insights into the political landscape. It often fostered a culture that wanted to transcend political and intellectual ideas, contributing to the development of post-ideological visions such as those of Daniel Bell, while also informing ideologically driven projects like Salvador Allende's futuristic *Project Cybersyn* directed by cybernetician Stafford Beer. Through its theory and technology, it provided frameworks for manufacturing policies, international relations, and even governmental decision-making. In recent times, especially within the domain of philosophy, a resurgence of politically charged views stemming from cybernetics was marked by a rediscovery of the work of the *Cybernetic Culture Research Unit* (CCRU) at Warwick University in the late 1990's, whose exponents Mark Fisher, Sadie Plant and Nick Land are now dominating entire niches of cybernetics-informed political philosophy, providing perspectives on revolutionary politics, gender issues, and questions of cybernetic power across the political spectrum. Despite this profound breadth and significance, the impact of cybernetics in literature remains underexplored. In the domain of detective fiction, however, one early case of cybernetics-inspired criticism exists.

François le Lyonnais, mathematician and founding member of the famous French literary collective Oulipo, in his introduction to the famous essay *Le Roman Policier, une Machine à Lire* by Thomas Narcejac (1975), wrote that the essay would represent a first and legitimate attempt to associate the detective genre with information theory and cybernetics, which, to his knowledge, had never been studied in those terms before. To le Lyonnais, "without exaggerating the analogy"[15], the physical concept of energy seemed to correspond, in the detective novel, to action and emotion, while information was linked to the mystery, "to the point that one could sometimes measure it in bits"[16].

Narcejac uses a metaphor from electronics and refers to the "machine à lire" of the mystery genre as a "closed circuit". At the moment of composition, following the tradition initiated by Poe, the authors of mystery stories know every turn of the plot

[15] «Sans exagérer l'analogie». FRANÇOIS LE LYONNAIS, *Préface*, in THOMAS NARCEJAC, *Une Machine A Lire : Le Roman Policier*, Denoël/Gonthier, Paris, [1974] 1975. p. 10.
[16] «[…] au point qu'on pourrait parfois mesurer cet derniére en bits.» *Ibid*.

and understand how the story will end. They therefore lend their rationality to the criminal, who commits his or her deed according to reason. The detective, in reconstructing the story in reverse, closes the circuit. The recursiveness of the process manifests in every part, as every inference made by the detective in the *fabula*, even the most daring, proves to be correct because it partakes in the same compositional principle of the *syuzhet*[17]. Narcejac concludes: «Si auteurs et critiques ont tellement hésité, devant le roman policier, c'est pour une raison très simple : la cybernétique n'était pas encore inventée.»[18]

To Narcejac and le Lyonnais cybernetics could intervene in fiction in different ways. In a pure and "dehumanized" detective novel, the problem should be able to be solved automatically by computer, which to Narcejac means not cybernetically. The feedback loop that makes it cybernetic is represented by the misinterpreted clues that arise along the way. Like Watson's wrong inferences in Tomaševskij, they are used by the authors in their way towards the final goal by diverting the reader's path to delay the discovery of its solution. Like a feedback system, the narrative corrects itself through the reader's engagement. The reader's emotional response is crucial, like the "energy" of the system cited by le Lyonnais, it fuels the narrative's progression and keeps the "machine" of the story running. Without this emotional energy generated by the mystery itself (a kind of metaphorical difference of potential), the detective story would stagnate, becoming a mere plotless riddle. Then enters the concept of entropy. The mystery, initially presented as highly improbable, emotionally energetic, "obeys the law of entropy" and so it "diminishes as intelligibility increases".

> Arrive le moment où il disparait complétement et ou l'ordre habituel des choses est rétabli. On est allé de l'état le moins probable vers l'état le plus probable, de l'exceptionnel vers le banal[19]

[17] THOMAS NARCEJAC, *Une Machine A Lire : Le Roman Policier*, Denoël/Gonthier, Paris, 1975. p. 53. The formalist terminology is my addition.
[18] *Ivi.* p. 223.
[19] *Ivi*. p. 231.

This process of clarification, of progressive heat-death of the story, leads to a resolution that often feels disappointing as it returns the reader to a state of normalcy, stripping away the initial intrigue.

The anachronism in the critics' analysis is evident. The legitimacy of the use of such a model cannot rely on mere structural analogies, especially not when the correspondences are made arbitrarily, it requires reference. From our perspective, no matter how much early detective fiction writers like Conan Doyle tried to imitate Poe's backward compositional technique, it cannot be said that they did so with a *"cybernetic" idea of telos* in mind. This leads to a central aspect of this thesis: the notion that while it is possible to observe a structural return of a characteristic plot element, such as a conclusive ending toward which the plot possibilities tend, this must be motivated by a reconstruction of each author's influences. This does not mean that cybernetics should be excluded as an implicit regulatory principle in detective fiction, but rather that one must find evidence of its presence within an author's *oeuvre* to account for the extent and way in which it manifests.

At the end of the 1970s, cybernetics was gaining traction in American literary criticism through figures like Porush and Warrick. The discipline served as a tool to explain the works of influential literary figures such as Burroughs, Vonnegut and Clarke, but also Asimov and Pynchon. Although these critics do not specifically focus on detective fiction, their analyses reveal some ontological and formal implications of cybernetics in literature. Reflecting a continuing trend, cybernetic literature was described both as a platform for cybernetic "objects" (such as robots, cyborgs, and supercomputers) and as a self-conscious type of literature that treated itself reflexively as a communication machine. This duality encouraged narrative forms like puzzle and conflict-driven plots to explore the relationship between the human and the non-human. In studies of postmodern detective fiction, this perspective is often missing. Many critics, sharing Lyotard's view on postmodern skepticism of grand narratives, often qualify the influence of the historical transition of the scientific paradigm in the first half of the century on detective fiction as corresponding to a crisis in the detectives'

ability to understand the world around them, establishing a form of new realism of indeterminacy that stands in opposition to the ambitions of positivism.

By analyzing the opinions of authors in relation to cybernetics, and to science in general, more detailed positions emerge. It is in fact possible to observe that after the development of cybernetics, a renewed (though sometimes conflictual) belief in the predictive power of science can be witnessed in detective fiction. Historically, as Lyotard recognized, the postmodern era experienced a significant drive for "positivist" efficiency. However, the philosopher regarded what he termed "postmodern science"—the science of indeterminacy and quantum physics—as a formidable challenge to this drive. Positivism could only survive as a totalizing myth, striving to mathematize and control even the social sphere, like a revival of Laplace's Demon, which, with perfect knowledge of a given state, could infer everything that has occurred before and predict all future events[20]. Norbert Weiner's turrets built to predict the trajectory of the Luftwaffe planes over London by adapting to the decisions of the pilot in real time, had indeed opened the imagination of writers to a world in which machines seemed to predict supposedly "free" human behavior as if was itself machinic, blurring the lines between human and non-human.

In this sense, if we connect the presence of specific endings in the plot to the influence of science on each author, we cannot regard any ending of a detective story as simply "conventional". Instead, there are only endings that correspond to varying intentions and impulses, generating potentially different effects each time. It is with this spirit that, adopting PWT, I intend to reintegrate this generalizing perspective within the context of each author's sources, seeking, within a more purely literary theory, the principles that Narcejac highlighted through the anachronistic application of cybernetics to genres that could not have been influenced by it, and look for experiences of its influence in the words of the authors who knew it. In doing so, I will look for instances where the studied authors exhibit principles or interpretations that

[20] JEAN-FRANÇOIS LYOTARD, *The Postmodern Condition: A Report on Knowledge*, University of Minnesota Press, Minneapolis, 1984. p. 55.

can be traced back to cybernetics. Simultaneously, I will explore how cybernetics appears to possess its own "literature" of reference and a unique "literary" mode of self-narration, particularly since Wiener himself often employed metaphors from literature in his engagement with the discipline[21]. By examining these intersections, I aim to give insights into the structures and thematic concerns present in the works of the authors studied, while also reflecting on the narrative qualities inherent in cybernetic discourse.

However, a certain degree of retrospection cannot be avoided. Indeed, if we examine the narratives that cybernetics itself embodies through Wiener, we see it consistently employing the theological language of omniscience, omnipotence, and eschatology. The connection with Laplace's Demon and the teleological eschatology of the cybernetic narrative is part of the explanation why our first chapter deals with Conan Doyle. Ascari has already noted that, at his introduction, the character of Holmes embodies a realized form of the myth of the rationalist demon, which Laplace himself dismissed as a limiting myth. Instead of explaining the endings of Sherlock Holmes in the terms of cybernetics, where Lyotard saw the return of the Demon, we will instead turn to the eschatology inherent in Doyle's spiritualism, where a destiny exists that punishes the wicked, sometimes going as far as to render the detective superfluous.

Pynchon's case serves as an example of an author deeply influenced by advancements in cybernetics, who nevertheless employs his fictional worlds to challenge its totalizing principles. Rather than simply expressing skepticism about its possibilities, he aims to present humanity with a wealth of unexpected opportunities that the discipline's predetermined, entropic and post-political futures appeared to exclude.

[21] I share this intuition with Love and Pao who write, perhaps a little too daringly, that cybernetics itself often «seems a *literary* movement (generating copious textual production and drawing frequently on analogies to the arts) […] after all, cybernetics' central figures wanted to be experts in letters *and* in sciences (a fact that suggests a humanistic core to the broader cybernetics project)» HETHER A. LOVE, LEA PAO, "Literary Cybernetics: History, Theory, Post-Disciplinarity", in *New Literary History*, Vol. 54, No. 2., Johns Hopkins University Press, Baltimore, 2023. p. 1196.

Asimov instead will be shown to adopt a conservative approach to the structure of his endings, only this time shaped through the advancements in both the sciences of indeterminacy and cybernetics. In his work, Asimov sometimes openly challenged the misunderstood notion of postmodernism which suggested that it could deconstruct science's possibility for narrating the world. In the saga of his detective Elijah Baley, who collaborates with the humanoid robot Daneel Olivaw, success in detection is always ultimately achieved. However, while Baley's cases are central to the story, they often involve stakes that go beyond merely solving the crime. They are framed within a broader concept of progress, featuring enlightened individuals who become historical heroes within their worlds. These characters confront the stubborn resistance of the masses, symbolizing the dignity that comes from embracing and adapting to scientific-driven change.

In our contemporary context of extreme interest in technology, studies on cybernetics and its ideology flourish. Ronald Kline, Mathieu Tricot, Thomas Rid, Geroulanos-Weatherby, Klaus Krippendorff and Daniel Bates have found space to analyze the ideas that emerge from this discipline, revealing how cybernetics carries with it an idea of politics and reflections on freedom, the capacity for scientific prediction, epistemology, and determinism. The main idea that emerges is that, in some way, the rationalization of humanity brought forth by cybernetics often evoked (not without the input of its discoverer) scenarios of inevitable futures in the minds of writers to which they felt called to give voice, adapt, or against which they ought to rebel. Critics of American culture and literature such as McHale, Tanner and Porush – along with Leslie Fiedler and Leo Marx – had already noted these trends, often tracing the technophobic push against them back to figures like William Blake, Thomas Carlyle and Henry Adams, and considered them an important key to interpreting the culture of the post-war period.

While the police procedural and the new paradigms of visualization in recent versions of crime fiction such as *C.S.I.* and *Dr. House* have qualified themselves easily as emergences of iterations of a mythology of science, in the often-called post-modern

era between the 1950s and the 1960s, the works of Pynchon and those of Asimov offer tassels for a more detailed mosaic. The treatment of Isaac Asimov as a detective fiction writer ended up being confined outside of these broad-stroke historical approaches. His position as a radical atheist and staunch defendant of the scientific method as the main epistemological tool to understand reality offers a still unexplored angle on his use of plot points that, to this day, are either considered to be mostly proper of Victorian and early 20th century detective fiction or of genres that do not interest themselves with broad epistemological themes. This essay points toward an integration of Asimov works into a larger view that no longer excludes writers whose belief in scientific progress was unshaken by the traumas of the 20th century and who nonetheless decided to adopt mixed genres of fiction such as science fictional detective fiction that do not aim at direct mimesis but still seek to speak truths about the world.

Pynchon and Asimov can be shown to deal with sciences that give indeed the feeling of being able to explain the world. A treatment of Weiner and Asimov's vulgarization essays on the matters of control and of the ability of science to explain the world is important to elucidate the rapport between writers and their detective stories, informing a reading that focuses on the contradictory feelings of understanding how the world "really" works, and the potential fear instilled by the prospect of machinic hyperbolic knowledge, the specter of human-machine homologation and perfect future predictability. It will be addressed how Wiener himself had tended spontaneously to divine analogies when treating of his matter in a scientific popularization setting. All of his most famous essays, with which both Pynchon and Asimov had come in contact firsthand, contain reflections on divine (and demonic) knowledge and control. The essay will concentrate on these issues, trying to draw as many connections as possible between the authors in question, and tracing the development of the relationship between subject and world throughout their fictional representations in detective fiction.

The work will be divided into three chapters, one for each author. In the first chapter PWT will also be presented and argued for as a tool to our ends. In the choice

of materials many angles and points of view had to be excluded for reasons of economy.

- **What Has Been Left Out**

Before discussing the lines of study that have been excluded from the thesis, it is important to clarify a point. The broad scope of the concepts addressed has necessitated a treatment of the materials through primary and secondary bibliographies that transcend national boundaries. The decision to adopt a largely comparative method has resulted in dedicating the first chapter to a character that, although published almost simultaneously on both sides of the Atlantic, remains irredeemably British rather than American: Sherlock Holmes. One reason is that it has appeared more frequently in the bibliographies of the other two authors studied than his American predecessor and source of inspiration: Poe.

Secondly, this thesis will not be about Crime Fiction in general, but rather about Detective Fiction, understood as the mystery genre that portrays a character who embodies the relationship of the ideal man with the world from an epistemological standpoint. This definition, admittedly broad, stems from reflections on genre by Tani that will be addressed in the second chapter. In the studied cases, this strong protagonist will be central, while the concept of crime itself, along with its emotional, legalistic, social, and theological consequences regarding the existence of evil, will be less emphasized.

Notably, the thesis will lack any detailed treatment of the hard-boiled subgenre which, while important for both Asimov and Pynchon, will remain as a possible future line of development of our discourse.

Furthermore, most perspectives that emerge from detective fiction texts are markedly chauvinistic in many points, and in general bear the heavy mark of the sense of the absolute subject of the enlightenment, of the white-cis-male as universal point of view of the story even through non-white, female or even non-human characters. For reasons of space, cultural problematics of this kind will be addressed only in

passing within the scope of this essay, even if their dynamics are in general unavoidable to correctly contextualize passages in either Doyle, Pynchon or Asimov[22]. Therefore, in the first chapter, especially in the section dubbed *Interlude*, issues of race, ethnicity, skin color and passing will be addressed in relation to ideas of nature and of naturalness in Conan Doyle. In the second chapter, issues of gender will contribute to the historical description of Oedipa Maas as an anti-detective. In the third chapter, issues of sexuality, promiscuity and incest in Asimov will be touched upon as they relate to his concept of rationality and to his fictional sociologies.

Another obligatory cut is the selection that had to be made of the works of Isaac Asimov. But in general, the works of all the authors have been selected based on relevance and limited in scope to avoid exceeding the boundaries of a readable thesis. The sheer number of contributions by the scientist-divulgator only is overwhelming. The quantity of articles, volumes and collections is exorbitant, the number of letters fluvial. A selection was made based on online archives and collected works published by and for Asimov in his lifetime and postmortem[23].

Asimov himself boasted that he could type 10,000 words a day; his endless output bears witness to this tenacity bordering graphomania. This is perhaps the reason why many critics avoid his otherwise insightful essayistic production, which I will instead interrogate extensively. While these essays may be judged simplistic from a literary criticism perspective, they are important for understanding how Asimov conceived of his own literature. The selection was mostly conducted thematically favoring texts that concerned epistemology, the history of science, writing (of both scientific dissemination and fictions), robotics, cybernetics, mystery stories, science fiction

---

[22] Asimov especially was a known molester. See LAUREN LEHMANN, "Isaac Asimov: dark side of a bright history", in *Nature*, Vol. 579, No. 343, Springer, London, 2020. Texts on the issues relating to Conan Doyle and Pynchon will be cited along the essay. On the same themes I want to mention two older works: ANDREW PEPPER, *The Contemporary American Crime Novel. Race, Ethnicity, Gender, Class*, Edinburgh University Press, Edimburgh, 2000. And KATHLEEN GREGORY KLEIN, *The woman detective: gender & genre*, University of Illinois Press, Urbana, 1988.

[23] The two main archives used for this work are JOHN J. JENKINS, *Jenkins' Spoiler-Laden Guide to Isaac Asimov*,< https://www.asimovreviews.net/index.html> 19/09/2024. SEILER, EDWARD, *Asimov Online*, <http://www.asimovonline.com/asimov_home_page.html> 19/09/2024.

works that shared some puzzle-solving plot development mode, autobiographies, essays on literature and on the Bible, and essays in general that each time seemed to be relevant to the research. Most of the works on biology and chemistry, school manuals, space travel, alien civilizations and stories in which it was less easy to identify a detective figure were discarded.

Due to the broad scope of the themes addressed by these forms of detective fiction, an inevitable tendency has emerged to treat them in political terms, conceptualizing possibility as the problem of freedom[24]. The authors themselves, in their treatment of their subject matter, can be observed adopting this viewpoint to stage their ideas on how society moves or should move in relation to reality and on how science introduces rhetoric of open possibility or seemingly inescapable futures, particularly concerning technology. Therefore, an effort has been made to provide as concise a treatment as possible of the materials mobilized, in the hope of highlighting how issues of possibility and teleology in these narratives become junctions that connect various aspects of the authors' thought, and that their description in terms of the evolution of literary forms can draw extensively from the philosophy that these forms mobilize. As I have anticipated, and as I hope will emerge from my analysis, literature has the well-known ability to converge disparate trends into a fluid amalgam, in which fears, expectations, perspectives, and limits of thought can help regulate a plot, intertwining and interacting with the characters portrayed and the themes evoked within it.

[24] On this topic, a confrontation with the important work of Gary Saul Morson had also to be excluded for reasons of space. See GARY SAUL MORSON, *Narrative and Freedom: The Shadows of Time*, Yale University Press, New Haven, 1994.

Chapter 1
The Worlds and the Detective:
The Spiritualist *Telos* of Arthur Conan Doyle

Farewell, Sherlock! Farewell, Watson, too.
First to last, you've been loyal and true.
Of the human totality
Who've lived in reality
There've been none quite as real as you.

Isaac Asimov, *Sherlockian Limericks, The Adventure of the Retired Colourman* (1978)

1.I. A Possible Detective

Fiction Theory has a notable affinity for using a specific fictional character as an example in its discussions: Sherlock Holmes. Saul Kripke famously deployed Holmes in *Semantical Considerations on Modal Logic* (1963), which contributed to establishing possible world semantics as a field of study. Kripke's sentence «Holmes does not exist, but in other states of affairs, he would have existed»[25] has become synonymous with the branch of Fiction Theory called *Possible Worlds Theory of Fiction* (PWT). This formulation involved one of the fundamental principles of the theory, accessibility. A world is considered accessible from the actual world if a proposition that is true in that world would be possible in the actual world without incurring in contradiction. Marie-Laure Ryan summarizes it as follows:

[25] SAUL A. KRIPKE, "Semantical considerations in Modal Logic", in *Acta Philosophica Fennica*, Vol. 16, North-Holland, Amsterdam, 1963, pp. 85. In the *querelle* around nominalism he then recanted this statement which nonetheless remains famous. See SAUL A. KRIPKE, *Naming and Necessity*, Harvard University Press, Cambridge, MA, 1980. pp. 157-158. On this topic see also BEN CAPLAN, "The Extraordinary Impossibility of Sherlock Holmes*"*, in *Res Philosophica*, Vol. 93, No. 2, St. Louis University Press, St. Louis, MO, April 2016, pp. 335–355.

> According to Kripke, possibility is synonymous with accessibility: a world is possible in a system of reality if it is accessible from the world at the center of the system. […] According to the strictly logical definition of possibility, a world in which Napoleon dies on St. Helena and successfully escapes to New Orleans is not possible, since it entails "Napoleon did and did not die on St. Helena." But there is nothing inconsistent about either one of these facts taken individually, and both are verified in some logically possible world (the second in a drama by the German expressionist playwright Georg Kayser).[26]

In logical terms, from the real world, the world in which Napoleon escapes to New Orleans is thus accessible, the one where he both escapes and dies on St. Helena is not. From a literary perspective, while Holmes may not exist in our world, it is conceivable that he could exist in another world like ours, making his world accessible and consequently, at least initially, possible in relation to it. Following Kripke's example, various logicians, philosophers and literary critics working on the concept of fiction have chosen to use Holmes as a prime example to analyze the status of fictional characters. The list includes Francis E. Sparshott (1967), John Searle (1975), David Lewis (1978), Terence Parsons (1980), Richard Rorty (1982), Thomas Pavel (1986), Marie-Laure Ryan (1991), Ruth Ronen (1994), Lubomir Doležel (1998) and Richard Saint-Gelais (2010).

For all these scholars, the non-existence of Holmes in the actual world is generally treated as a given, taken as a commonsense premise, deriving from the fact that he was originally created as a character in a work of fiction. The possible problem that he appears to live in a real city at a real address is more of a spark of their elaborations than a limitation to the acknowledgement of his fictionality. A paraphrase of Tarski's material adequacy condition can be used to explain this point. The sentence "Sherlock Holmes exists" would be true if and only if Sherlock Holmes existed. Since there is no evidence that Holmes was ever a historical character, and since there is evidence of the contrary, scholars can "safely" state that he is a fictional character. Within the domain of literary criticism, PWT, setting itself against both formalism and the theory of literature as pure mimesis, seeks to regard the worlds of fiction as both separated from

[26] MARIE-LAURE RYAN, *Possible Worlds, Artificial intelligence, and Narrative Theory*, Indiana University Press, Bloomington, pp. 31-32

reality and in productive interplay with it. Fictionality in this theory is not something generated solely by properties of the texts. It is instead treated as a type of speech situation, a positioning of an object-story within a culture or discourse, and a type of logic of narration. This way, the theory can rely on concepts borrowed from philosophical logic and study the peculiarities of fiction that differentiate it from other forms of creation such as dreams and lies. In many essays in PWT, the fact that Holmes is said to live in London engenders a series of reflections on what is fictional or "real" in a literary work and how elements of the "real world" filter into fiction. "Is Holmes' London the *real* London? Is it a *fictional version* of the real London?" This is the type of question asked within the framework of PWT[27].

However, while PWT scholars are known for employing Holmes as an interesting example for questions of fictionality, PWT itself has seldom been applied as a tool for analyzing detective fiction within the domain of literary interpretation. As anticipated, this thesis is offered as an essay in this endeavor. More specifically, it addresses the relationship between the internal logic of different types of detective fiction with the influence of certain scientific and pseudo-scientific disciplines on their authors. As Thomas Pavel demonstrated in the domain of the historicity of the category of fictionality[28], Fiction Theory can be used in conjunction with the analysis of the materials of the "*hors-texte*" that influence fiction. This essay will treat certain ideas concerning science as sources of such influences using PWT as a framework for its study.

[27] PWT «reserves its strongest criticism for the ancient but persistent doctrine of mimesis, a theory of fictionality that claims that fictions are imitations or representations of the actual world, of real life. […] Mimetic reading, practiced by naive readers and reinforced by journalistic critics, is one of the most reductive operations of which the human mind is capable: the vast, open, and inviting fictional universe is shrunk to the model of one single world, actual human experience». LUBOMIR DOLEŽEL, *Heterocosmica: Fiction and Possible Worlds*, The Johns Hopkins University Press, Baltimore, 1998. p. x. See also LUBOMIR DOLEŽEL, "Mimesis and Possible Worlds", in *Poetics Today*, Vol. 9, No. 3, pp. 475-496. FEDERICO BERTONI, *Realismo e letteratura: Una storia possibile*, Einaudi, Torino, 2007, pp. 79-113. And RUTH RONEN. *Possible Worlds in Literary Theory*, Cambridge University Press, Cambridge, 1994. pp. 18-30.

[28] *Cfr.* THOMAS PAVEL, *Fictional Worlds*, Harvard University Press, Cambridge, MA, 1986.

Within detective fiction studies, the influence of scientific thought has always been paramount. One doesn't have to go further than the texts of Poe and Conan Doyle, universally recognized staples of the genre, to find that the influence of science has been one of the strongest elements in the creation of the detective character and its worlds. Right from the beginning, the study of detective fiction involved an examination of scientific thought as the most important explanation of the success of the detective character, motivating its plots and shaping its persona, and contributed to providing an insight on the sense of accuracy many find in some forms of the genre. This interest is shared by Fiction Theory.

In this chapter, I thus set out to examine a series of reader-driven phenomena that relate to the fictionality of the Sherlock Holmes series by Arthur Conan Doyle. My goal is twofold: firstly, to demonstrate the potential of PWT as a literary hermeneutic tool in detective fiction studies, and secondly, to provide a foundation for comparing the American authors under scrutiny, both of whom, as we will later discuss, were readers of Conan Doyle. We also aim to demonstrate the usefulness of Fiction Theory in the field of science-literature relationship, with a focus on its PWT branch and its narratological insights. Specifically, drawing on the theories of Thomas Pavel, Ruth Ronen, Peter Brooks, Marie-Laure Ryan, and especially of Lubomir Doležel and Umberto Eco, we will set to highlight the implicit rules, limits and boundaries of the narrative worlds that give shape to detective stories by regulating their plot, their endings, their delivery, the positioning of their narrators and the formation of their characters. We will then compare these data with the scientific (and pseudo-scientific) influence that previous critics have found in these texts to underline how the vision of how the actual world is from the perspective of their authors can be said to penetrate, inform and regulate the texts.

1.II. An Impossible Snake

In contrast to the common sense of logicians, a phenomenon of reader reception emerged in response to Conan Doyle's famous detective saga, wherein some readers

behave as if Sherlock Holmes were a real person. In 1985, Richard Lancelyn Greene compiled a selection of letters sent by readers of Sherlock Holmes to The Abbey National Building Society in London, whose addresses included the famous 221b Baker Street. The letters included marriage proposals, offers as a consulting beekeeper for the detective's retirement, and offers of a temporary housemaid for the holidays, among other communications and, notably, questions. «Was he left- or right-handed? Did he dislike gooseberry jam? Did he once wound Mrs Hudson in the foot while cleaning a revolver? And did Mycroft Holmes wear glasses?»[29] This phenomenon has a history. It was inaugurated by Monsignor Ronald Knox when he published his *Studies in the Literature of Sherlock Holmes* in 1911. In this essay the scholar ironically justified the inconsistencies found in Doyle's texts by attributing them to the insertion by their writer Watson of invented stories alongside the "real" ones he witnessed firsthand. This way, the fictionality of Doyle's stories was effectively negated, his authority as a writer exauthorized, and Holmes saw himself be treated as a real person for the first time[30]. It was the beginning of what came to be known as *The Game*, i.e. «pretending [...] that Conan Doyle never existed, that Sherlock Holmes truly lived, and that new stories can always emerge from Watson's trunk»[31]. This special relationship between fiction and readers continues to baffle critics. To this day, Sherlockian and Holmesian societies—as they are called on both sides of the Atlantic—endeavor in this performative and self-conscious display of suspension of disbelief. As is evident from the origins of the phenomenon, it is in the space of imagination generated by the inconsistencies and gaps in the texts that the ironic treatment of Holmes' stories as documentary evidence is played out.

---

[29] RICHARD LANCELYN GREENE, *Letters to Sherlock Holmes*, Penguin, New York (New York) 1985, p. 7.

[30] MAURIZIO ASCARI, *A Counter-History of Crime Fiction: Supernatural, Gothic, Sensational*, Palgrave McMillan, New York, 2007. pp. 157-158.

[31] «Fare finta […] che Conan Doyle non sia mai esistito, che Sherlock Holmes sia vissuto davvero, e che dal baule di Watson possano uscire sempre nuove storie.». ALESSANDRA CALANCHI, *Dal Sacro Canone al Grande Gioco: per una teoria degli apocrifi*. *Fictions. Studi sulla narratività*, a cura di Maurizio Ascari e Francesca Saggini, Fabrizio Serra, Pisa - Roma, anno X, 2011. pp. 83-84. My translation. See also ALESSANDRA CALANCHI, "*Chiamatemi Watson*. Nuove frontiere degli 'apocrifi' angloamericani", in *Linguae &*, *I mille e uno Sherlock Holmes*, No. 2, 2007, pp. 93-106.

A very basic supposition one might make regarding the Sherlock Holmes series is that to believe the detective to be a historical character, one must believe that his stories take place in a world that works with the exact same rules of our own, at the very least in the laws of nature[32]. How does the knowledge the reader has of science enter in this relationship? Logician David Lewis, in his effort to define truth in fiction, is one of those critics who deployed the example of Holmes. He cites the episode in the story *The Adventure of the Speckled Band* (1892) in which a snake that Holmes recognizes as a "swamp adder" crawls up a rope to commit a murder on behalf of the villain who calls it using a low whistle[33]. This story, which was considered one of the most successful of the series both by the public and by their author[34], is one of the most criticized on the domain of scientific accuracy. Concerning this passage, herpetologist Carl Gans had criticized the text on the ground that the denomination "swamp adder" was historically never used to define any snake. He then solved this inconsistency by inferring from his knowledge that the animal presented in the story was actually a Russell's viper. Lewis cites him:

> In "The Adventure of the Speckled Band" Sherlock Holmes solves a murder mystery by showing that the victim has been killed by a Russell's viper that has climbed up a bell rope. What Holmes did not realize was that Russell's viper is not a constrictor. The snake is therefore incapable of concertina movement and could not have climbed the rope. Either the snake reached its victim some other way or the case remains open.[35]

[32] This is notably implied in Marie-Laure Ryan's schema of types of fiction, in which Historical Fiction and History share many criteria of identification, notably the laws of nature. RYAN, *Possible Worlds*, *Cit*. p. 34.

[33] As we will see, such issues are common topics of discussion among Sherlockians, who constantly try to argue for their realistic or "mimetic" resolution. Ian Marten Ivo Klaver had noticed a similar episode in his review of the 2005 edition of the *Annoted Sherlock Holmes* in a discussion concerning an orchid. For the sake of our argument, the orchid and the snake are equivalent. See IAN MARTEN IVO KLAVER, *Of Orchids and Sherlockians*, review of Leslie S. Klinger (Ed .), Arthur Conan Doyle, The New Annotated Sherlock Holmes, (2 Vols .), W.W. Norton, New York, 2005 and Leslie S. Klinger (Ed .), Arthur Conan Doyle, The New Annotated Sherlock Holmes: The Novels, W.W. Norton, New York, 2006, in *Linguae&*, Vol 1., 2006. pp. 87-90.

[34] JAMES F. O'BRIEN, *The Scientific Sherlock Holmes: Cracking the Case With Science and Forensics*, Oxford University Press, Oxford, 2012. pp. 159-160.

[35] DAVID LEWIS, "Truth in Fiction", in *American Philosophical Quarterly*, Vol. 15, No. 1, University of Illinois Press, Champaign, IL, January 1978, p. 43.

Under the lens of scientific realism, however, the situation of the episode is even more complicated. As Leslie S. Klinger, Sherlockian and curator of *The New Annotated Sherlock Holmes*, notices: «[t]he identity of the breed of snake termed a "swamp adder" by Holmes […] is debated widely, and no candidate seems to possess all the characteristics described»[36]. Literary critic John A. Hodgson goes even further:

> Conan Doyle's deadly serpent […] is not merely farfetched, but epistemically impossible. Even granting Holmes's […] fantastic knowledge, unshared by all zoologists then and since, of a snake of such unprecedented poisonousness, a snake that can survive (apparently for more than two years, […]) in an iron safe, a snake that drinks from a saucer of milk, still we cannot grant those additional premises upon which all of Holmes's conjecture depends-that the snake could hear a low whistle and could climb back up a Victorian bellpull. No snake, however exotic, could do these things, any more than it could fly.[37]

So it seems that there are many scientific inconsistencies involving the swamp adder. This suggests that if the serpent truly exists within the story, the latter logically takes place in a world different from our own, where its existence would not constitute, in Hodgson's words, an "epistemic impossibility". Gans' observation is also interesting from our point of view as it goes one step further. If the snake within the work of fiction can do something it cannot do in the real world, he argues, then the reconstruction of the detective within the story could be fallacious. Lewis, following Gans' hypothesis, comments:

> The story never quite says that Holmes was right that the snake climbed the rope. Hence there are worlds where the Holmes stories are told as known fact, where the snake reached the victim some other way, and where Holmes therefore bungled. Presumably some of these worlds differ less from ours than their rivals where Holmes was right and where Russell's viper is capable of concertina movement up a rope. Holmes's infallibility, of course, is not a countervailing resemblance to actuality; our world contains no infallible Holmes[38].

---

[36] He then lists: «The key traits that must be considered are (a) a fast-acting (neurotoxic) venom, rather than a slow-acting (haemotoxic) venom, (b) an inclination to climb up and down a rope and to "rear," (c) an appearance described as a "yellow band with brownish speckles," a "squat, diamond-shaped" head, and a "puffed" neck, and (d) a probable Indian origin.» LESLIE S. KLINGER (Ed.), *The New Annotated Sherlock Holmes*, (2 Vols.), W.W. Norton, New York, NY, 2005, p. 259.

[37] JOHN A. HODGSON, ""The Recoil of "The Speckled Band": Detective Story and Detective Discourse", in *Poetics Today*, Vol. 13, No. 2, Duke University Press, Durham, NC, (Summer, 1992), p. 312.

[38] LEWIS, "Truth in Fiction", *Cit*., *Ibid*.

In the essay the logician uses this argument to recognize the importance of readers' prior knowledge and belief in evaluations of the truth of propositions contained in fictions, underlining the fact that the lack of correspondence between the actual capacities of the snake and its fictional representation informs our judgement about their fictional truth. The fact that the text never explicitly states that Holmes is right in the aspect of the snake climbing the rope opens, according to Lewis, to the contemplation of multiple possible worlds. In some, more like ours and therefore devoid of swamp adders, Holmes is wrong. In others, more distant from ours, the snake exists and can do what Holmes predicates about it in the text. If the question stopped at Gans' observations, Lewis' reading would be correct; Holmes may simply have been mistaken about the dynamics of the murder. But if we consider all the inconsistencies that accompany the exotic snake the question becomes more serious and its stakes higher. The more the existence of the snake is proven not to be possible in the real world, the more its evidence in the text becomes blinding. In other words, either we accept that within the story the snake exists and did what the detective says it did or the whole meaning of the plot must be rediscussed. Lewis assumes the first perspective with reserve: too specific or obscure knowledge is not computable in fiction interpretation[39]. To the average reader who (I assume) knows nothing about snakes, the existence of the swamp adder poses no problem and is accepted as such. Does then the lack of scientific accuracy about the snake affect the coherence of the text?

As Hodgson argues, doubts over the snake's existence and capabilities happen in the space of encounter between what is stated in the text and the scientific knowledge of the reader even at simpler levels than Gans'. Concertina movements are only one of the possible problems one might encounter in trying to taxonomize the swamp adder with actual scientific criteria. Some candidate snakes lack the speed of the venom, other the titular speckled band, others the Indian provenance[40]. In any case, as Hodgson

[39] *Ivi.*, pp. 43-44.
[40] KLINGER, *Annotated*, Cit., pp. 259-261.

makes clear, some of the actions attributed to the swamp adder are impossible for any real snake to perform.

Even if we apply a kind of arbitrary Knoxian shift and say that Watson invented such snake we are forced to admit that the doctor's report seems to insist it did exist and gives it multiple witnesses. Given that the detective is presented as triumphant in the end, Lewis ironically takes the reasoning backwards: is it because the detective is infallible that the snake can retroactively move in ways it couldn't in the actual world? In our world that lacks infallible detectives, he concludes, we cannot use infallibility as an argument to bend the rules of reality. In fiction, however, this might happen if one wished so.

Aside from extreme cases of pedantry, an argument like this is usually not made for fantasy texts in which magical creatures are real. Few would broach a discussion on the evolutionary impossibility of dragons and unicorns except for entertainment purposes. The special status of Holmes' fiction is that it is perceived to take place in the real world, and thus involves a confrontation between a reader's knowledge of actuality and statement brought forth by a world of fiction.

Critics over time have found many similar inconsistencies in the series[41]. Saint-Gelais has no problem in recognizing that Conan Doyle «se préoccupe peu d'éviter les contradictions»[42]. Psychoanalytic criticism has made a tradition of leveraging on such inconsistencies to argue in favor of interpretations that seek conflict within the text. Pierre Bayard, for instance, has argued that if we apply a detective method to the texts of detective fiction (and to murder stories in general including Hamlet and Oedipus Rex) many fictional culprits might end up acquitted[43]. The legitimacy of such practice is debated and has – in the case of Bayard – a strong creative and playful component

[41] See Note 9. Another example is in JULIAN SYMONS, *Bloody Murder - From the Detective Story to the Crime Novel: A History*, Penguin, Harmondsworth, 1974, p. 80.
[42] RICHARD SAINT-GELAIS, *Fictions transfuges. La transfictionnalité et ses enjeux*, Seuil, Paris, 2011, p. 107.
[43] See PIERRE BAYARD, *Qui a tué Roger Ackroyd?*, Minuit, Paris, 1998 et « Reprise », 2002 . PIERRE BAYARD, *Enquête sur Hamlet. Le Dialogue de sourds*, Minuit, Paris, 2002. PIERRE BAYARD, *L'Affaire du chien des Baskerville*, Minuit, Paris, 2008. PIERRE BAYARD, *Œdipe n'est pas coupable*, Minuit, Paris, 2021.

that goes with the analytical[44]. Many of these readings are based on the idea that underlying the inconsistencies of Holmes' stories is the widely documented conflict of Conan Doyle with his character, which arose from his higher literary ambitions clashing with his economic needs and the demands of his fans, forcing him to continue writing even after the character's fictional death.

According to these theories, the author would have—consciously or unconsciously—inserted inconsistencies in the stories to undermine the "case-solving" narrative effect at the base[45]. In some cases (some of which will be reported later) Holmes indeed does get notions wrong that could be considered common knowledge in Victorian times, such as the reading of a mercury barometer. These instances could play into the sabotage interpretation. However, in other cases, Holmes demonstrates a knowledge of science that is perfectly consistent with the actual notions of his time. This certainly rules out, at least on a scale, the hypothesis of conscious sabotage, which would have certainly been more effective if systematic. The question that will be posed, therefore, is: why does Holmes sometimes base his inferences on "true" information and at other times on "false" information? In the context of this work, then, instead of placing the focus on the contradictions between the text and the actual world to attribute them meaning, we will concentrate primarily on what the text superficially authenticates, holding that in a work of fiction it is «impossible to use an expression to

[44] STEFANO MONZANI. "La fiction théorique de P. Bayard", *Cahiers de psychologie clinique*, vol. 55, no. 2, DeBoek, Louvain-la-Neuve, 2020, pp. 39-65.

[45] Some objections can be made against this view. One is that analytic practice cannot be done through the reading of works of art, for it requires the presence of the patient and the traversing of the transference relationship to guarantee this kind of diagnosis. Lavagetto for example relies on Lacan's seminar *Désir et son interpretation*. MARIO LAVAGETTO, *Lavorare con piccoli indizi*, Bollati Boringhieri, Torino, 2003. pp. 52-54. Similar objections, this time concerning the reading of Poe made by Marie Bonaparte, are found in ELIZABETH WRIGHT, *Psychoanalytic Criticism: Theory in practice*, Routledge, New York, NY, 2003. pp. 38-45. Eco also recognized this critique, attributing it to Derrida's reading of Poe in *Le facteur de la verité,* in contrast with that of both Lacan and Bonaparte. UMBERTO ECO, *Limits of interpretation,* Indiana University Press, Bloomington, 1994. pp. 57-58. Originally in UMBERTO ECO, *Lector in Fabula*, La Nave di Teseo, Milano, [1979] 2020. The Italian version of the text is worth comparing. UMBERTO ECO, *I Limiti dell'Interpretazione*, Bompiani, Milano, 1990.

make its own content disappear»[46]. In other words, we will accept that despite the incongruity of its scientific taxonomy, the swamp adder can be argued to exist within its fictional world by means of the text's authenticative power; and we will analyze how the comparison of authenticated and unauthenticated hypotheses within this same world brings out similarities and differences between fictional and real historical epistemologies.

We will assume, in essence (and according to PWT), that arbitrariness is at the basis of the creation of the swamp adder and ask ourselves what logic lies behind this act of fictional creation. To address this theme in detail, however, it is necessary to provide the reader with the analytical tools that will be used in this endeavor and only later circle back to the matter at hand. For this reason, in the next subsection, we will discuss how PWT can become a tool for the analysis of detective fiction and how it combines with other plot theories, before moving on to its relationship with studies on science and literature.

1.III. Possible Worlds Theory and Detective Fiction

In their endeavor to overcome the simplifications of the vague principle of *mimesis*, critics such as Thomas Pavel and Lubomir Doležel took up Kripkian modal logic and, with it, Leibnitz's theory of possible worlds. With these philosophers came the idea of a world which is not realized but nonetheless describable, which was then applied to the idea of Fictional World that pertained to the domain of literary studies[47]. A Fictional World could be then conceived as something like a possible world, that is a system of utterances connected to the actual world by accessibility relations and rules of logic[48].

---

[46] In this quote, Umberto Eco was using the term "disappear" referring to the impossibility of the mythical *Ars Oblivionalis*, or the art of forgetting by one's own will or through the use of a specific mental technique, here we twist the term to mean that we cannot "ignore" one line in the polysemy of a text (say, its most superficial meaning) even if other readings deconstruct it, superpose to it or contradict it. UMBERTO ECO, MARILYN MIGIEL, *An Ars Oblivionalis? Forget It!*, in *PMLA*, Vol. 103, No. 3, Modern Language Association, Baltimore, MA, (May, 1988), p. 259.

[47] PAVEL. *Cit*. pp. 9-10.

[48] One difference between a fictional world and a possible world lies in its incompleteness and integrability. A possible world is by definition a maximal state of affairs in which every sentence one can make about is either true or false. In a fictional world I can add sentences that do not contradict

One of the traditional features of the definition of possible world in logic is its *completeness*[49]. A possible world in logic, to be such, is defined as a maximal state of affairs. It is internally coherent, contains no contradiction and comprises every possible statement that can be predicated of it within its limits. In contrast to this view, PWT scholars have noted over time how fictional worlds have instead the characteristic of being *incomplete*. Lubomir Doležel, drawing on Umberto Eco, explains this characteristic as follows:

> A necessary consequence of the fact that fictional worlds are human constructs is their incompleteness […]. It would take a text of infinite length to construct a complete fictional world. Finite texts, the only texts that humans are capable of producing, are bound to create incomplete worlds.[50]

Consequently, one cannot account for the truth value of every proposition that constitutes a fictional world. This is manifest in the common phenomenon of gaps occurring in literary texts. As Ruth Ronen notes, for the sake of affirming what is true or not inside of a work of fiction: «fictional worlds only contain what is directly claimed or implied by the text»[51]. Therefore, we cannot attribute any truth value to statements regarding states of affairs that are not addressed within it.

> We will never know how many children had Lady Macbeth in the worlds of Macbeth. That is not because to know this would require knowledge beyond the capacity of human beings. It is because there is nothing of the sort to know[52]

Fictional worlds are then bound to contain voids of information, which include everything that happens outside the limits of what is described or narrated. Everything that happens to the characters before or after the story, the secret lives and points of view of the most secondary characters, and everything that happens elsewhere while the protagonist is living its action, are all part of this void space. The potential of this

---

the narrative and their status as true or false can be perfectly undecidable. An example is «Emma Bovary was born on a Friday». This does not contradict the source texts in any point but whether it is true or not is undecidable departing from the text itself and its truth-in-fiction is therefore undecidable. See SAINT-GELAIS, *Fictions transfuges, Op. cit.,* p. 51. See also DOLEŽEL, *Heterocosmica, Op. cit.* p. 22.

[49] DOLEŽEL, *ibid.*

[50] *Ivi.* p. 169.

[51] RUTH RONEN, *Cit.* p. 93.

[52] DOLEŽEL, *Cit.* p. 22.

void, which surrounds and limits fictional worlds, is to stimulate the imagination of the reader who might seek to fill it with many forms of derivative texts such as sequels, prequels and parallel stories[53]. Addressing this feature, Doležel comments that negating the constitutive incompleteness of fictional worlds by asking questions about their voids «is tantamount to treating them as real entities»[54]. This is analogous to the phenomenon of readers asking Lady Machbethian questions about Mycroft's glasses. It is easy to take the reasoning backwards. To the Sherlockian reader, one might say, if Holmes is real, then there is, somewhere within or without the text, an explanation for every inconsistency, an answer for every question raised by its reading. Hence the long-standing issue of why precisely the character of Holmes has been the subject of the "realizing" cult of *The Game*[55].

Such readers as the Sherlockians Holmes fans are more similar, in Umberto Eco's terminology, to *users* of the text, who bend what they read to functions that transcend it[56]. They imply in their reading a filling of the gaps of the incomplete world by use of their encyclopedia, a reading of the text that challenges the staging of the text itself, leading to the impasses we have seen. They appear to want the swamp adder to be an actual snake in a story in which there is no need for it to be the case. To take the

[53] See SAINT-GELAIS, *Fictions transfuges, Cit.*
[54] DOLEŽEL, *Heterocosmica*, *Cit.* p. 23.
[55] It is hard to argue against the inherent pleasure of a game of make-believe, which is the basis of theories of fiction such as that of Kendall Walton. See KENDALL WALTON, *Mimesis as Make-Believe: On the Foundations of the Representational Arts*, Harvard University Press, Cambridge, MA, 1990. This issue concerning Holmes specifically will here be addressed only incidentally, however, one can find information on its structuring in CALANCHI, *Per una teoria degli apocrifi*, *Cit*. and of some of its possible reasons in BAYARD, *Sherlock Holmes was wrong*, *Op. cit*. pp. 103-147.
[56] See ECO, *Lector in Fabula*, *Op. cit.* An example given by Eco is once again Bonaparte's interpretation. See also pp. 244-245. In which Eco discusses the mutual exclusivity of the "realizing" stance with any kind of interpretation and connects it with the very origin of the theory of possible worlds in semantics. «se tutto quello che il testo dice *è* o *è stato il caso* nel mondo detto "reale" – allora su […] ogni testo […] ci sarebbe ben poco lavoro cooperativo da fare. […] [È] proprio per uscire da queste secche che la semantica logica ha elaborato la nozione di *mondo possibile* […]. Dire che un testo ci propone una data proposizione come vera in un mondo possibile […] significa dire che il testo attua delle *strategie discorsive* per presentarci qualcosa come vero o come falso, come oggetto di menzogna o reticenza (segreto), Come oggetto di credenza o come proposizione asserita per *far credere* o per *far fare*.» This, which in eco corresponds to the issue of veridiction in Greimas, is part of the underlying theory of our argument on narratorial authentication.

herpetologist's perspective as factual-in-the-text rather than as counterfactual, one would have to demonstrate philologically or by other means that Doyle intended the swamp adder to be a Russell's Viper (or any other specific snake) and therefore infer that he meant to undermine the veracity of his own detective while at the same time representing him as successful. However, in the literary study of fictional worlds, incompleteness is not seen as a «lack to be remedied», as «[o]pen-endedness [and] ambiguities can be considered a merit in texts»[57].

One important point of PWT in this perspective is the illocutionary power of fictional statements. Not only they provide information about the fictional situation they address, but they also create it at the same time. Every proposition (or absence of it) can be used instrumentally to *establish* a truth, a falsity, or a strategic indeterminacy inside a world of fiction. From a PWT perspective, Sherlock Holmes never existed before his appearance on the page. Nonetheless, once he appears on the page, he can be said to exist in another world, a fictional world, which is accessible through the text and held together by rules. Conan Doyle, in his act of writing, creates not only a character but the entire fictional world in which the character lives. This world, which is expanded and limited by the propositions contained in each text, can entertain complex relationships with the "real" world to the point, in certain occasions, of making it seem like they coincide. Saint-Gelais adds an important feature: «[u]n texte de fiction [he writes] fait, simultanément, deux choses : il "crée" (instaure) des données diégétiques (personnages, situations, etc.), *et il adopte une perspective sur ces données*.»[58] The perspective through which the text represents the fictional world is thus of key importance. The literary critic is invited to ascertain not only what is created by the text but also to reconstruct the various connotations that accompany it, the narrative posture the text adopts and the way it is positioned in relation to our world. Umberto Eco called this an «atteggiamento proposizionale»[59], a modal stance towards its utterances. The text thus became «una sorta di 'macchina' proposizionale che

[57] RONEN, *Cit*. p. 93.
[58] SAINT-GELAIS, *Fictions Transfuges*, Op. cit. p. 160. *My emphasis.*
[59] The view later inherited by Saint-Gelais and others. ECO, *Lector in Fabula*, *Op. cit.* p. 152.

produce un mondo alternativo a quello attuale, cioè un insieme finito di individui forniti di proprietà e passibili di cambiamenti, governato da determinate regole, modalità e restrizioni»[60]. A world that, according to modality, can be believed, dreamed of, desired, foreseen, etc.[61]

Authentication, a word we already employed, is the name that Doležel gives to the performative or illocutionary faculty of texts. In his book *Heterocosmica: Fiction and Possible Worlds* (1998), authentication refers to the various techniques and narrative devices that writers employ to establish the coherence of their fictional worlds or the lack thereof. Doležel argues that for readers to engage with a fictional world, they are forced to come to terms with whatever is authenticated by the text that delivers it, that is with whatever is "given as true" within it. This category is used in the treatment of phenomena such as suspension of disbelief, where readers willingly accept that the events and characters portrayed in the fiction are plausible within the established rules and logic of that world, even if they differ from those of the actual world.

There are several strategies that writers can employ to authenticate their fictional worlds. These include consistent world-building, adherence to an internally logical framework, and the creation of believable characters and settings. Writers can establish a sense of coherence through detailed descriptions, explanations of the fictional world's nature, and the portrayal of relatable emotions and motivations on the part of the characters; but they can also add fictional entities that are (either by design or not) subject to the doubt of the reader. Choosing to loosen authentication may create texts that rely on their own incompleteness for engagement. Doležel emphasizes the role of the point of view of the narration, whether it be first-person, third-person, or a combination thereof, which can significantly impact how readers perceive what is real within the fictional world. In his framework, if something is successfully stated within a fictional text and never contradicted or put in doubt at any level, ideally that statement

[60] BERTONI, *Cit*. p. 102.
[61] *Ibidem.*

makes it true within the world of fiction. In his view, the omniscient narrator holds the highest authority of authentication, the coherence of the reactions of characters to situations also holds great force, an unreliable narrator holds the least, and incongruences between the views of the characters and heavy doses of connotation stemming from their psychology can generate indeterminacies. In the example of the children of Lady Macbeth, where there is no authenticative force employed in the text to solve the question of how many children she had, this piece of information is considered by Doležel (like Ronen) to be outside the domain of the fictional world.

Concepts such as authentication provide spaces for comparison between what is said to happen in a fictional world and what happens in the world outside the text. Knox, finding inconsistencies within the texts of the series, ironically assumes that some of them did happen in the real world, attributing mistakes to the inventions of their authenticator Watson. This, coherently with Doležel's observations, allows him to fill in the gaps and solve the truth value of the doubtful ones by secluding some to the realm of invention.

PWT historically integrated Frege and Searle's view of fiction as a form of pretense. According to Frege, fiction allows us to create a separate realm of existence where the rules and boundaries of reality can be suspended. Similarly, Searle argues that fiction involves a conscious act of pretending. The author pretends to make an assertion and then the readers then engage in a game of imagination where they willingly suspend their judgments on what is real in the text. Marie-Laure Ryan calls this process on the part of the readers "recentering"[62]. Reality and fiction are then separated into, AW (the actual world) and TAW (the textual actual world, that which is taken to be real inside the work of fiction) and one can study differences between them and every other possible world cast by the beliefs, dreams or foresight of the characters[63].

[62] RYAN, *Cit.* pp. 13-31.
[63] *Ivi.* p. vii.

In this context we can use Doležel's method of reading fictional texts according to the modal "restrictions" that regulate what he calls the *storyworld* (which contains what we called TAW plus all the other possible worlds that can emerge from a text and can host infinite potential stories that accept the same restrictions) and connected it to the reading of the plot. One particularity of these restrictions is that like Lotman's, Genette's or Brooks's plot-figures, they are only observable retrospectively at the end of the fruition of the text, and only then they function for the sake of analysis as pre-narrative presuppositions[64]. If, for example, there are dragons in a given series of stories and this instance is authenticated with sufficient force at any point in the story, this fact is considered as a given, and this datum is then computed in the final analysis of the series in question as if it had been a "rule" of construction of the world. An utterance such as "In x given world there are dragons" is extracted and then treated as a characteristic of the fictional world. Characters then engage their actions and thoughts in connection to this rule, for example believing that dragons are extinct and discovering with the reader that they are not, like it happens in the popular series *Game of Thrones*.

This system entails, as Doležel observes, that«[f]iction thrives on the contingency of worlds […]: every world and every entity in the world could be or could have been different from what it is»[65], which makes it all the more relevant as, in each different fiction, it ends up being as it is. This is what we mean with "arbitrariness" of the texts. Doležel divides fictional world's restrictions into groups according to modal operators. They are M, P, G and K:

1) Alethic: M Possible, ~M Impossible, ~M~ Necessary.
2) Deontic: P Permitted, ~P Prohibited, ~P~ Obligatory.
3) Axiological: G Good, ~G Bad, ~G~ Indifferent.
4) Epistemic: K Known, ~K Unknown, K_0 Believed.[66]

---

[64] See. JURIJ LOTMAN, *Culture and Explosion*, Grishakova, M., Clark, W. (Ed.), Mouton de Gruyter, Berlin, [1992] 2009. pp. 123-133., GERARD GENETTE, *Narrative Discourse: An Essay in Method*, Cornell University Press, Ithaca, NY, [1972] 1980. p. 76., PETER BROOKS, *Reding for the Plot: Design and Intention in Narrative*, Harvard University Press, Cambridge, Ma, 1992. p. 29.
[65] DOLEŽEL, *Heterocosmica*, *Cit.* p. 222.
[66] Doležel lumps together the Epistemic sphere (concerning knowledge) with the Doxastic sphere (concerning belief) which are sometimes treated as separated. *Ivi.* p. 114. For a treatment of this

There are typical plot types associated with these categories. When it comes to illustrating scientific representation, two modalities take precedence: Alethic and Epistemic. The Alethic category dictates what is real within the fictional world: its possibilities, impossibilities, natural laws and necessities. «Worlds are constructed as natural or supernatural by codexal [meaning «validated by a supraindividual source»[67]] alethic modalities, restrictions imposed on the world as a whole.»[68] The presence or absence of dragons would be part of the Alethic domain. The Epistemic category also concerns what exists in a world of fiction but, more specifically, it governs the characters' understanding and knowledge of the fictional world as well as what is generally known or believed by the communities within it. Whether a certain character or community of characters knows of the existence of dragons within their *storyworld* is part of the Epistemic domain.

In the study of the Alethic domain, an author is assumed to be able to alter the laws of AW to introduce inexistent or even impossible objects within the realm of fiction. Some examples are «a) physically impossible beings, b) Selected natural-world persons [that] are granted properties and action capacities that are not available to ordinary persons of that world, [and] c) Inanimate objects [that] are personified»[69]. *Alethic endowments* is the name Doležel gives to these restrictions when pertaining to a character.

> A subjective M-operator determines which actions it is possible for a person to perform. The operator regulates not the opportunities for doing but a person's "knowing-how-to-do competence" […]. If for a certain person seeing or swimming is possible, then this person has the capacity to see or to swim, […]. Supernatural persons (except for the omnipotent deities) also have their circumscribed alethic endowment, […].[70]

What a person can or cannot do can be treated as a character-specific part of how the whole fictional world is described. Doležel gives the example of H. G. Wells's narrative

---

issue see JAAKKO HINTIKKA, *Knowledge and belief: An introduction to the logic of the two notions*, Cornell University Press, Ithaca, NY, 1962. pp. 48-51.

[67] *Ivi.* p. 257.

[68] *Ivi.* p. 118.

[69] Adapted from DOLEŽEL, *Heterocosmica*, *Op. cit.* p. 116.

[70] *Ivi.* p. 118.

The Country of the Blind (1904), in which every person in a valley is blind except for the protagonist and observes how the encounter between the individual and the community revolves around this peculiar difference in alethic endowment. As he generalizes, «[t]he tension between fixed macroconditions and unruly subjective potentialities is the source of a large family of alethic stories»[71].

For the Epistemic domain, on the other hand:

> The modal system of knowledge, ignorance, and belief imposes epistemic order on the fictional world. Codexal epistemic modalities are expressed in social representations, such as scientific knowledge, ideologies, religions, cultural myths. Subjective K-operators define a personal epistemic set, an individual's knowledge of and beliefs about self and the world. The subjective epistemic set includes selected and synthesized pieces of "internalized" social knowledge and beliefs[72].

At the macroscopic level, epistemic restraints also set the limits of global knowledge in the world of fiction such as the general state of scientific knowledge or the overall information the characters have within the culture represented, at the individual level they concern what a single character knows or believes. Typically Epistemic plots include the *mystery story*, in which:

> Epistemic modalities release their story generating energy because of uneven distribution of knowledge among the fictional persons. […] [S]omething that happened in the fictional world remains unknown to (some of) its inhabitants, or they have false beliefs about it. The structure of the mystery story was described by Sklovskij (1929), who perceived it not only in detective stories but also in Dickens' *Little Dorrit* […]. Rutherford distinguishes three stages of the enigma: its posing, its intensification through a series of partial, delayed, and suspect answers, and its solution. He points out that some genres (such as the detective story) provide "simple, definitive and absolute" solutions, while others (such as the psychological novel) might suggest a "plurality" of solutions (1975, 208).[73]

Apart from the "energetic" metaphor that evokes that of Narcejac, this definition can be read as a PWT equivalent to Barthes' hermeneutic code[74], in which the withholding of information creates a tension that is released by the final tying of the knots. This passage is of interest to our analysis because it exemplifies the procedure we are adopting. It suggests that different turns of the plots, when associated with different

[71] *Ivi.* p. 119.
[72] *Ivi.* p. 127.
[73] *Ivi.* pp. 126-127.
[74] *Ibidem*.

variations in a modal domain (in this case the epistemic), can lead to broad observations on genre (detective story vs. psychological novel) and thus work as differential data for literary analysis.

For this sake, to this basic description of the detective story's relation between the K-operator and plot, which fits to Holmes' stories, we can extract from Brooks an important addition concerning what he calls the "double logic" of narrative:

> [A]t certain problematic moments story events seem to be produced by the requirements of the narrative discourse, its needs of meaning, rather than vice-versa, as we normally assume. In other words, the apparently normal claim that *fabula* precedes *sjužet*, which is a reworking of the givens of *fabula*, must be reversed as problematic, challenging moments of narrative, to show that fabula is rather produced by the requirements of *sjužet*: that something must have happened because of the results that we know[75].

Or, more specifically regarding the genre at hand:

> The detective story, as a kind of dime-store modern version of "wisdom literature," is useful in displaying the double logic most overtly, using the plot of the inquest to find, or construct, a story of the crime which will offer just those features necessary to the thematic coherence we call a solution, while claiming, of course, that the solution has been made necessary by the crime[76].

Performing this reversal and coherently with Doležel's quoting of Rutherford, Brooks notes how the very kernel of a detective story in the classical sense is its solution, of which the explanation and relative plot provides instruments of reading rather than an actual causal chain. This passage is consistent with Poe's "backward" composition regime, which in the 1970s inspired the teleological reading of the detective plot in Narcejac. Elsewhere Brooks writes:

> […] what is at stake [in the plot of *The Musgrave Ritual*, a popular Sherlock Holmes Story] is a gain in knowledge, a self-conscious creation of meaning. But in every case of narrative, it seems fair to say, there must be enactment in order to produce transformation: the plotting-out of initial givens […] so that their uses may be transformed. Plot […] is the active interpretive work of discourse on story[77].

From this perspective, the "plotting-out of initial givens" will consist in developing the pre-narrative conditions (alethic and epistemic) of a detective story and treat the result as a voice within a larger "discourse" on science. Different initial givens (alethic,

[75] PETER BROOKS, *Cit.*. p. 28.
[76] *Ivi.* p. 29.
[77] *Ivi.* p. 27.

epistemic and so on) are plotted out differently to different endings. They can be compared to critics' observations and models of scientific thinking to reconstruct what kind of science is at work within the world of fiction, and to try to decipher what are its objects, objectives, actors, methods and outcomes as a piece of literature in the real world. The features of the detective's "science" may differ from any given model of the actual one.

The field of science-literature relationship studies shares with PWT the fact that it deals with the relationships between propositions formulated about the real world and propositions that constitute works of fiction. As Andrea Battistini points out, there is a substantial difference between the scientific message, denotative in nature, and literature, which actively seeks evocative suggestions, emotional and rational associations at the same time. The literary world is positively ambiguous, while in science there is no language more dangerous than that which fosters ambiguity[78]. Drawing on this Mariarosa Loddo warns against the risk of assimilating the two languages. In the context of literature even the most neutral term can carry a connotative effect[79]. Even from an historical point of view, she writes, context is no stranger to misunderstanding. Apart from when it is possible to find sources attesting to scientific knowledge, critics often gloss over on the dynamics of influence, often assuming that the writer passively assimilates the science of his time, absorbing it from his surroundings through newspapers, conversations and media.[80]

The call of Loddo is to precision in identification: how, where and why, stylistically, thematically, philologically and (from a PWT perspective) logically, science enters a work of fiction and how it is modified in this process are subjects to be treated in unison. The relationship between a work of fiction and reality is not fixed,

---

[78] ANDREA BATTISTINI, *La terminologia medica nei vocabolari e nella letteratura italiana: qualche errore da evitare negli studi di Medical Humanities*, in *Narrare la medicina*, Anselmi, G.M., Fughelli, P. (Ed.), Università di Bologna, Bologna, 2017. p. 21.

[79] MARIAROSA LODDO, *Passaggi di frontiera: note sulla parola scientifica in letteratura*, in *Letteratura e Scienza: Atti delle Rencontres de l'Archet Morgex, 16-21 settembre 2019*, Pubblicazioni della Fondazione «Centro di Studi storico-letterari Natalino Sapegno – onlus», 2021. p. 259-260.

[80] *Ibid.*

propositional attitudes are potentially limitless. Once we extract regularities within the texts we can compare them to different visions of actual science and therefore situate them into the dimension of scientific discourse at large. A detective story is obviously different from a treatise of epistemology. On the one hand it has multiple influences that are in interplay within it, both scientific and not, on the other, it provides connotation and underlies original positionings with respect to the representation of the world it creates, both luxuries that actual science cannot allow. Its epistemology is a fictional epistemology, but its rules can be extracted and compared with actual ones.

1.IV. Scientific Thinking in the Sherlock Holmes Series

The influence of the scientific method in Conan Doyle's writing career has been object of numerous studies. His medical training, his explicit statements of inspiration, and his detective's own voice are data that foreground how a strong epistemology comes into play in the construction of his stories, influencing their plot:

> I had been reading some detective stories, and it struck me what nonsense they were, to put it mildly, because for getting the solution of the mystery the authors always depended on some coincidence. […] the detective ought really to depend for his success on something in his own mind and not on merely adventitious circumstances, which do not, by any means, always occur in real life. […] Then I began to think, suppose my old professor at Edinburgh were in the place of one of these lucky detectives, he would have worked out the process of effect from cause just as logically as he would have diagnosed a disease, instead of having something given to him by mere luck, which, as I said just now, does not happen in real life. […] I steeled constructing a story and giving my detective a scientific system […]. Intellectually that had been done before by Edgar Allan Poe with M. Dupin, but where Holmes differed from Dupin was that he had an immense fund of exact knowledge to draw upon its consequence of his previous scientific education. I mean by this, that by looking at a man's hand he knew what the man's trade was, as by looking at his trousers leg he could deduce the character, of the man. He was practical and he was systematic, and his success in the detection of crime was to be the fruit, not of luck, but of his qualities."[81]

[81] ARTHUR CONAN DOYLE, *A Gaudy Death: Conan Doyle tells the True Story of Sherlock Holmes's End,* in *The final adventures of Sherlock Holmes: completing the canon,* Warner, London, 1993. pp. 189-190.

In this passage Conan Doyle proposes that providing his own detective with a "scientific education" and "an immense fund of exact knowledge" he would write stories that would not need coincidence to close their plots. Thus, in his account, his stories would rely on the ability of the detective like those of Poe, whom he admired. Stephen Knight and Maurizio Ascari note how the resolution by coincidence of the plots was the most common structure of one of the earliest and most popular sources of Victorian crime stories, *The Newgate Calendar*, in which criminals were often brought to justice by chance, under which the critics elicit providential ideology[82]. It was then an immaterial element, influenced by religion, that held together the logic of the conclusion of the plot. The very motto "truth will out" generated over this Christian belief that providence would sooner or later provide retribution for the wicked[83]. The novelty of Conan Doyle was that he offered an alternative that saw in the talents of the individual, shaped by method and informed by massive amounts of knowledge, a fixed point around which it was possible to write coherent plots that supposedly need not rely on chance nor providence[84]. As a man of science, an embodiment of modern *ratio*[85], his detective could rely on himself to understand the world and could carry the believable justification of the conclusion of the plot. In the passage quoted above, Doyle, as Pynchon will do much later, insists on how contrived chance-plots "do not always occur in real life" and how a skilled scientist with a method such as his mentor's was instead much more believable as a rationale for the closing of a plot, reducing, we assume, the distance between his fictional world and the actual world as he saw it.

James O'Brien, in his *The Scientific Sherlock Holmes: Cracking the Case With Science and Forensics* (2012) offers an overview of the many ways actual science enters the world of Holmes. Science in the series is elaborated, filtrated, even

[82] STEPHEN KNIGHT, *Form and ideology in crime fiction*, Indiana University Press, Bloomington, 1980. ASCARI, *Op. cit.* pp. 34-37.
[83] KNIGHT, *Ibid.* p. 12.
[84] *Ivi*. p 68.
[85] SIEGFRIED KRACAUER, *Il Romanzo Poliziesco*, Editori Riuniti, Roma, [1971] 1997.

anticipated, its most important Victorian figures are cited, and its value is foregrounded as a magnetic force for the engagement of the reader[86].

In his review of the correctness of scientific statements in Holmes' adventures, O'Brian engages with a similar practice to that we have seen in Gans. He compares Holmes affirmations and forensic practices to actual scientific facts and procedures. In one case, setting up an argument against Isaac Asimov himself, he defends Holmes on many issues, one being the definition of what an *acetone* is. In *The Adventure of the Copper Beeches* (1892), after having been submitted a case, Holmes declares that he should postpone his study of acetone*s*[87], plural. Asimov, in several essays dating to the early 1980's[88], had criticized this affirmation by pointing out that the term *acetone* does not refer to a class of molecules but to a specific single molecule. O'Brian, however, by means of philological resources, found out that at the time Doyle was writing, the term acetones in the plural was indeed used to indicate a class of molecules, those we now call ketones[89]. It so happens that when Doyle was able to provide Holmes with accurate pieces of scientific information, he had no problem inserting them into the narration according to his declared narrative principles that wanted his detective to possess a great amount of "exact knowledge". However, O'Brian's review does not fail to call out Holmes on his shortcomings. He references a misuse of a concept of meteorology in *The Boscombe Valley Mystery* (1891, 1892). In this story Holmes deems a barometer reading of twenty-nine as a "very high" one while every Victorian might have known that it is indeed very low. O'Brian writes:

> Who should we blame for the bad science here? Was Sherlock Holmes ignorant when it came to meteorology? Was Arthur Conan Doyle? Shall we accept that ingenious explanation offered by Schweichert […] that the barometric pressure was so low that Holmes's (and everyone else's) perceptions were altered leading to the misstatement? Sherlockians have a tendency

[86] O'BRIEN, *Cit*., p. 161.
[87] ARTHUR CONAN DOYLE, *The Adventure of the Copper Beeches*, in The New Annotated Sherlock Holmes, *Op. cit*. p. 362.
[88] ISAAC ASIMOV, "The Problem of the Blundering Chemist", in *Science Digest*, Vol. 88, No. 2, 1980, pp. 8-17.
ISAAC ASIMOV, "Thoughts and Sherlock Holmes", in *The Baker Street Journal*, Vol. 37, No. 4, 1987, pp. 201-204.
[89] O'BRIEN, *Op. cit*., pp. 108-112.

> never to blame Holmes. They might very well attribute the remark to an error by Watson as he wrote up the case for publication. As with all Holmesian issues, you are free to form your own opinion.[90]

It is evident from the call upon the Sherlockian *Game* that neither the perfection of scientific statements in the Sherlock Holmes canon nor their adherence to actuality can be considered the primary interest in Conan Doyle's mind. Further argument for this could include recalling that it is reported that *The Speckled Band* with its swamp adder ranked first among Doyle's favorite Holmes' short stories in a list he published in 1927[91]. Now, if it is not in direct correspondence of statements regarding scientific problems, if science is to exercise an influence, one might want to search for it elsewhere.

The polysemic nature of literature prevents us from studying the influence of science in perfect laboratory conditions. Any influence that one might find in a work of fiction is forced to coalesce with many others and crystalize along with them. It emerges from works such as Maurizio Ascari's *Counter-History of Crime Fiction* (2007) and Brian McCuskey's *How Sherlock Pulled the Trick: Spiritualism and the Pseudo-Scientific Method* (2021) how science, pseudoscience and multiple forms of faith contributed to complexify both the Victorian weltanschauung and Holmes's stories. What remains then of the "scientific" appeal of the stories?

Brian McCuskey offers an interpretation: Holmes' «performances make a *show* of science»[92]. Like O'Brian conceded, whenever we find his conclusions wrong, «[b]ecause everybody also knows that he is fictional, we humor those leaps and lapses. […] When reading fiction, there is no harm in suspending one's critical faculties, but reality is another story.»[93] In McCuskey's view, one might say, the scientificity of Holmes's method is an effect produced by the text, a performance, a "show" that does

[90] *Ivi.* p. 157.
[91] *Ivi.* pp. 159-160.
[92] BRIAN MCCUSKEY, *How Sherlock Pulled the Trick: Spiritualism and the Pseudo-Scientific Method,* Penssylvania State University Press, University Park, PA, 2021. p. 6. My Italics.
[93] *Ibid.*

not hold when confronted with reality but which nonetheless is capable of successfully pose as science in the mind of unquestioning readers.

From these passages by critics outside PWT, it still emerges clearly how the integrity of Holmes's fiction was thought to engage with the actual scientific knowledge of his readers. McCuskey's study, which does not believe in this integrity at all, offers as an interpretive key to the detective's abilities not the scientism of his creator, but rather his pseudoscientific and religious beliefs. This interpretation has a long-standing tradition. To understand the literary devices behind the effect of the "show of science" we shall first look at the history of the thought of the detective.

One of the very first full length works that treat the influence of science on detective fiction is Régis Messac's *Le «Detective Novel» et l'Influence de la Pensée Scientifique* (1929)[94]. In his effort to trace a history of what he sees as a tendency towards a model scientific enlightenment, Messac is compelled to observe that rationalism and irrationalism coexisted in many ways throughout the history of the genre and developed in relationship with one-another. In Messac's terms, a first definition of the genre is: a «mystère […] dévoilé, "détecté" […] grâce à la volonté intelligente d'un homme employant des méthodes dites scientifiques»[95]. The use of a method "said to be scientific" is so important in Messac's reading that it serves, from the first pages of his essay, as a discerning characteristic that allows for the differentiation between a mere mystery and a proper detective story[96]. Any critical approach to this matter, however, requires a definition of what Messac sees as "scientific".

---

[94] Other than being one of the first in Europe to treat the theme of Detective Fiction as a legitimate academic field of study, Messac was also one of the first to treat the theme of utopia. A quote from Valérie that constitutes the exergue of my introduction is the source of the title of his collection of sci-fi stories *Hypermondes*. REGIS MESSAC, *Le «Detective Novel» et l'Influence de la Pensée Scientifique,* Slaktine Reprints, Geneva, [1929] 1975. See also OLIVIER MESSAC, *Brêve histoire des hypermondes, 1935-2021*, Éditions ex nihilo, Paris, 2021. ALBERTO DEL MONTE, *Breve storia del romanzo poliziesco*, Laterza, Bari, 1962. Del Monte doesn't cite Messac as one of his sources. Many of our arguments here following, were already put forward by LAVAGETTO, *Op. cit.* pp. 17-47.

[95] *Ivi,* p. 5.

[96] Minus the masculine pronoun *d'époque*.

In his self-consciously unsystematic yet historical approach[97], Messac seems to point towards a web of analogies between systems of thought in literature and scientific popularization that inform the method of the canonic detective. He juxtaposes a series of concepts and works that, added one upon the other, ideally amount to said method. He traces the origins of this way of thinking back to Voltaire's *Zadig*[98], which to this day is considered a key node of the historical view of the genre[99]. Its influence manifests in two ways: it informs the model that Messac calls *récit à mystère expliqué*[100] (which involves the plot structure of these stories from the mystery to the explanation) and its more peculiar formal trait: the explanation of the solution of the mystery by the detective character at the end of the narrative arc[101].

He cites the episode of the palfrey and the bitch, in which Zadig infers in detail the characteristics of the two animals without having seen them, relying solely on the tracks they left on the ground. In Messac's reconstruction, the concepts of divination, intuition, inference, and individuation that we see in *Zadig* are summarized in the Muslim concept of *Firasah*[102]. In the critic's definition, *Firasah* is what we may call a form of enlightened insight[103], formalized literarily as the ability of extracting pre-

[97] MESSAC, *Cit*. p. 140.
[98] This historical node is attributed by Messac to Locard and has since become a standard procedure in the history of detective fiction. We find it everywhere in the history of criticism, from Del Monte, to Eco, Truzzi, Sebeok and Ascari. It suffices to think about the importance Umberto Eco gives to the text, to the point of making a pastiche of it at the beginning of *The Name of the Rose*. See EDMOND LOCARD, *Policiers de roman et de laboratoire*, Payot, Paris, 1924.
[99] And to the possible Arabic, Italian, Jewish, Indian and Persian sources of the French text. MESSAC, *Cit*., pp. 17-29.
[100] *Ivi*, p. 51.
[101] *Ivi*, p. 70.
[102] Messac derives this concept from Muslim theology and in this receives the avail of historian Carlo Ginzburg. CARLO GINZBURG, *Clues, Myths and the Historical Method*, Johns Hopkins University Press, Baltimore (Maryland) 1989, p. 213. It is impossible for us, as it was for Messac, to ascertain the definitive philological source of this concept, nor give of it any definition that holds any anthropological, historical or theological value. My reference to *Firasah* is thus to be read as a conceptual node, borrowed and deriving entirely from Messac, and capable of a certain versatility, its main value being the association between inference and spiritual enlightenment. It is nevertheless worth noting that the most culturally connotated of the inferences of the sources cited by Messac, the ones most connected with *Firasah*, are removed in Voltaire's version of the famous episode of the palfrey and the bitch.
[103] RÉGIS MESSAC, cit., pp. 33, 41.

existing hidden truths from the observation of exterior signs. This applies, in the source texts analyzed by the critic, to traces left by animals as well as to the inferring of the character of an individual from their likeness. Connecting the narrative form of the explanation of the mystery by inference to the concept of *Firasah*, he elicits its double nature as a divine gift of discernment displayed as proficiency in logic and intuition regarding cause-effect relationships. Rationality and the supernatural work both at the service of "the subtle princes": the enlightened, distinguished detective characters like Zadig[104]. This trait is associated by the critic with what Horace Walpole famously called *serendipity*, derived from the provenance of the princes of Serendip. These figures, who served as sources for Voltaire's Zadig, exemplify his logic, evoking the happy coincidences that allow him to «always mak[e] discoveries, by accidents and sagacity, of things which they were not in quest of»[105] .

The history of this logic has since been studied by Carlo Ginzburg, who in his essay *Clues* (1986, 1989)—which takes Messac into account—traces the origins of both magic and scientific thinking from pre-history to 19th Century science and beyond. He writes:

> […] over the shoulder of Monsieur Lecoq feverishly crossing an "expanse of earth, covered with snow," dotted with the tracks of criminals, comparing it to "an immense white page upon which people we are in search of have written, not only their movements and their goings and comings, but their secret thoughts, the hopes and anxieties that agitated them," we shall see emerging authors of physiognomy treatises, Babylonian soothsayers deciphering messages composed by the gods on rocks or in the heavens, and Neolithic hunters[106].

The core idea outlined by the critics is that traces and clues are the effect of a cause whether supernatural or natural, either written by God for a priest to read, left by a prey for a hunter to hunt, or generated in nature for a scientist to understand. The ever evolving but ever-present metaphor of the "book of nature" and of the elected individuals capable of reading it.

---

[104] *Ivi*, p. 83.
[105] HORACE WALPOLE, Letter to H. Mann of 28 January 1754, cited in *Ivi*. p. 160.
[106] CARLO GINZBURG, cit., p. 117.

Ginzburg connects this idea to the methods of Lecoq and Sherlock Holmes, of Sigmund Freud and of art-connoisseur Morelli who endeavored in unveiling counterfeit paintings:

> In each case, infinitesimal traces permit the comprehension of a deeper, otherwise unattainable reality: traces — more precisely, symptoms (in the case of Freud), clues (in the case of Sherlock Holmes), pictorial marks (in the case of Morelli)[107].

In the eyes of the skilled reader, details point toward a more profound truth that emerges through them[108]. Ginzburg's analogy, connecting the method of the detective to medical semeiotic (approach to which Doyle, a medical doctor, was undoubtably accustomed), would then receive the approval of Eco, Sebeok and Umiker-Sebeok[109], who added that the most scientific among the practitioners of this *evidentiary paradigm* are then to face the burden of proof, which leads us to the other contribution of Messac.

Messac's second critique of the detective mode of thinking consisted in fitting it into the category of induction. This connection, that by declaration he shares with his closest predecessor Locard, is thought as a response to the famous Sherlockian claim that his mental process is deductive. However, Messac and Locard's idea of induction, for large part of the work, is not to be taken as the proper logical category but more as a loose approach to knowledge. Namely, that which departs from empirical objects to formulate its theories rather than relying, as it happened for *Firasah*, on religiously-

---

[107] *Ivi*. p. 101.

[108] Coherently with this view, in Barzun, a shift in the history of thinking influences the known character of fictional clues as objects that contain their history. «What happens in modern detective fiction is that objects — and more than one in each tale — are taken literally and seriously. They are scanned for what they imply, studied as signs of past action and dark purpose. This search for history in things is anything but trivial. It reflects the way our civilization thinks about law and evidence, nature and knowledge. Our curiosity about objects has grown since the Greeks; we call the results science. By a parallel evolution of literature, the dominant kind of fiction is the prose narrative stuffed with material fact which we call the realistic novel.» JACQUES BARZUN, *Detection and the Literary Art*, in *Detective Fiction: A Collection of Critical Essays*, Winks, Robin, W. (Ed.), Prentice-Hall, Englewood Cliffs, NJ, 1980. p. 145.

[109] See UMBERTO ECO, *Horns, Hooves, Insteps: Some Hypotheses on Three Types of Abduction*, in *The Sign of Three: Dupin, Holmes, Peirce*, in Eco, Umberto, Sebeok Thomas (Ed.), Indiana University Press, Bloomington, 1980. THOMAS A. SEBEOK, JEAN UMIKER-SEBEOK, *"You Know My Method": A Juxtaposition of Charles S. Peirce and Sherlock Holmes,* in *The Sign of Three: Dupin, Holmes, Peirce*, in Eco, Umberto, Sebeok Thomas (Ed.), Indiana University Press, Bloomington, 1980.

connotated endowments and informal world-wisdom. In Messac, this idea of induction is the kernel of the comparison between the thought of the detective and that of what he calls the "inductive sciences"[110], which in his terminology are the empirical sciences such as paleontology[111]. In Messac's view, the method of Cuvier – which corresponds to the then already discarded theory of the *loi de corrélation organique*[112] —shares this form of empiricism with Zadig. The connection between Holmes and Cuvier is easily traced to the famous quote from the Sherlock Holmes story *The Five Orange Pips* (1891, 1892), in which the detective cites the paleontologist as follows:

> As Cuvier could correctly describe a whole animal by the contemplation of a single bone, so the observer who has thoroughly understood one link in a series of incidents, should be able accurately to state all the other ones, both before and after[113].

This formulation is interesting as a philosophical tenet. It brings forth the idea that the world is so mechanically interconnected that having the full knowledge of a state of things could allow the thinker to fully reconstruct the past and the present and predict the future[114]. Ascari notes how this idea is analogous to another concept, belonging to

---

[110] RÉGIS MESSAC, *Cit.,* p. 34.

[111]Giovannoli finds the same diagnosis in Gramsci, Deleuze and Pàstena. RENATO GIOVANNOLI, *Elementare, Wittgenstein! Filosofia del racconto poliziesco*, Medusa, Milano, 2007. p 31. Messac declares to get this rather loose idea from 1837 *History of the Inductive Sciences, from the Earliest to the Present Times*, by William Whewell, important poet, polymath and inventor of the word "Scientist". Reconstructing the history of his idea of induction is of little importance to this work and there is by no means shortage of bibliography on the subject. See JOHN LOSEE, "Whewell and Mill on the relation between philosophy of science and history of science", *Studies in History and Philosophy of Science*, vol. 14, no. 2, June 1983, pp. 113–126, MENACHEM FISCH, *William Whewell Philosopher of Science*, Oxford University Press, Oxford, 1991. for further bibliography on the subject. VIRGINIA RICHTER, *Literature After Darwin: Human Beasts in Western Fiction 1859-1939*, Palgrave Macmillan, London, 2011. GILLIAN BEER, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*, Cambridge University Press, Cambridge, 2010.

[112] RÉGIS MESSAC, *Cit.*, p. 34-35.

[113] ARTHUR CONAN DOYLE, *The Five Orange Pips*, in *The New Annotated Sherlock Holmes*, LESLIE S. KLINGER (Ed.) (2 Vols.), W.W. Norton, New York, NY, 2005. p. 150.

[114] This is essentially the theory that was refuted by what we commonly call Chaos Theory, where minimal variations in dynamic systems lead to unpredictable (yet still deterministic) results. How far this perspective on Cuvier is attributable to Doyle himself can be verified by comparing it with the portrayal of Cuvier's thought in Foucault. MICHEL FOUCAULT, *The Order of Things: An Archeology of the Human Sciences*, Routlendge New York, [1966] 2002. pp. 287-305.

an even earlier form of science, that of Laplace's Demon, a mind which its theorist deemed impossible to attain in the real world[115]:

> We may regard the present state of the universe as the effect of its past and the cause of its future. An intellect which at a certain moment would know all forces that set nature in motion, and all positions of all items of which nature is composed, if this intellect were also vast enough to submit these data to analysis, it would embrace in a single formula the movements of the greatest bodies of the universe and those of the tiniest atom; for such an intellect nothing would be uncertain and the future just like the past would be present before its eyes[116].

This passage opens the possibility that a superior intellect, provided with the right information, could be in such a connection to the determined world outside itself as to know it all, in all detail, throughout time. In a perfectly rational world a perfectly rational mind, provided with perfect knowledge of a state of affair could reconstruct everything fully.

Stephen Kern, in his later account of different literary representations of cause-effect relationships, summarizes what he calls the Galilean-Newtonian view of the world as such:

1) determinism ("cause *c* is always followed by effect *e*"),
2) predictability (extremized by Laplace's Demon),
3) continuity (there is no hole in the chain of causes and effects),
4) objectivity ("the causal knowledge of physical behavior […] is objective")
5) visualizability (one can visualize the micro in terms of the macro)[117].

In Messac, this horizon of hyperbolic rationality fosters a connection between Holmes and the *Firasah* of the subtle princes. As the history of the genre goes on, it is not holy enlightenment that is said to sustain the discernment of the character in the economy of its world, but a form of perfect rationality coupled with a perfect knowledge and the predictability and interconnectedness of the world itself. However, while the will of God seemed to have been ruled out in Holmes's world, science and pseudo-science,

---

[115] MAURIZIO ASCARI, *A Counter-history of Crime Fiction*, Cit., p. 44.
[116] PIERRE-SIMON LAPLACE, *Philosophical Essay on Probabilities*, Dale, Andrew I. (Ed.), Springer-Verlag, New York, [1814–25] 1995. p. 2.
[117] STEPHEN KERN, *A Cultural History of Causality: Science, Murder Novels, and Systems of Thought,* Princeton University Press, Princeton and Oxford 2004, pp. 360, 362, 366. Parentheses, when not in quotation marks, are mine.

connected by this core concept of causal rigidity, influence the method of the detective[118].

As Ascari noted, «we tend to think of positivism as the triumph of the scientific method and a materialist approach to reality, but this cultural phase was ambivalent, involving an interest in the spiritual and in the occult», often intended as integral part of the material world[119]. For Ascari it is then not on a specific epistemology but on the mixing of the fascination of mystery and its dissolution in explainability that lays the origin of the detective story[120].

This superposition of intents finds its earliest appearance in Greek tragedy (i.e. *Oedipus Rex*), where the public, hungry for mystery but informed by tradition, already knows its solution but enjoys its masterful, gradual unveiling[121]. It is in an episode in Vitruvius in which Archimedes unmasks a fraudulent jewel maker using his famous principle that Messac finds an early association between the scientific character of "discovering a new truth" with the police-heroic feature of "righting something wrong" [122], an idea that seems to the critic analogous to the 17th century Christian tales of revealing a false miracle. These stories, in which the truth of God triumphs against a sacrilegious one, share with the earlier ones the conclusive plot and revelatory tension of every other form of the *mystère expliqué* which goes on to trace the future developments of the genre over the Atlantic. The world of charlatans, heretics, Simonians and false prophets that appears in this Christian tales, returns in the 18th century crime pamphlets about fake doctors and magicians that belong to the picaresque model alongside thieves, spies and adventurers anticipating the tropes of early 20th century magazine detective stories like Nick Carter's[123]. Compared to this push toward conclusive plots in which truth and justice triumph, the "scientificity" of

[118] RÉGIS MESSAC, *Cit.*, p. 86.
[119] MAURIZIO ASCARI, Cit., p. 66.
[120] *Ivi*, p. 47.
[121] REGIS MESSAC, *Cit.*, p. 50.
[122] *Ivi*, p. 54.
[123] *Ivi*, p. 107.

Holmes' method seems less central, looking, to Messac as well, more akin to a degraded science or to a pseudo-science.

> Malgré la date récente de l'épopée sherlockholmesque, la science et la philosophie qu'on y trouve ne sont pas très supérieures à ce que nous avons trouvé depuis longtemps chez bien d'autres, ni très différentes : oripeaux depuis longtemps abandonnés par la science moderne, vénérables antiquailles […], conceptions désuètes et théories surannées.[124]

Once again, what seems to remain is the idea that to keep Sherlock on track in his fictional world is not adherence to the actual scientific world that surrounded Conan Doyle but a different form of science that draws elements from earlier disciplines and traditions. However, if we follow Messac's suggestion, this form of science seems devoted almost ideologically to a specific kind of conclusive plot. In his famous debate with Noam Chomsky, Michel Foucault synthesizes:

> The history of science, until recent years, consisted essentially in showing the way that *an individual*, whether Newton or Mendel, *had actually been the creator or rather the discoverer of a truth that was inscribed into things and the world and that no one would've discovered before*. The postulate that I think is at the core of the traditional history of science is that *truth is there to be known* […] The history of truth would be essentially its delay,[…] the disappearance of the obstacles which have impeded it until now from coming to light. […] the "common thought, the prejudices" of the "myths" of a period, constituted the obstacles which the subject of knowledge had to surmount or to outlive in order to have access finally to the truth[125].

What if Doyle, by creating stories in which an exceptional individual is the discoverer of truths, was setting a literary enactment of this implicit "Newtonian-Mendelian" premise in his view of science? This would be coherent with Knight's view about the Victorian trust in the scientific method as the new source of empowerment for the individual. There is a world of things outside the character, this world has a truth inscribed into it and the role of the exceptional individual is to unveil this truth, surpassing the fallacious views of his peers like a saint revealing a false miracle. What

---

[124] *Ivi,* p. 617.

[125] I am partly transcribing the subtitles to the video interview as found at <https://www.youtube.com/watch?v=F5Wpe65sky8> 10/04/2023, the italics are mine. Unfortunately, the first part of this passage is missing from the published transcription NOAM CHOMSKY, MICHEL FOUCAULT, *The Chomsky-Foucault Debate: On Human Nature*, The New Press, New York 2006. p. 16. Carlo Ginzburg also reports diffused ideas of eschatology and teleology in enlightenment historiography CARLO GINZBURG, *Il Filo e le Tracce: Vero, Falso, Finto*, Feltrinelli, Milano, 2006. pp. 249, 253.

Foucault does not add here[126] (and Ginzburg does) is that this argument could be valid for Holmes as it could for the more supernatural endowments in Messac, constituting a potential long-standing connection among science, pseudo-science and religion within their narrative frameworks.

This is our contention. Once transposed into literature, the long-standing ideology of the man of knowledge (both divine and scientific) as discoverer of hidden but solid truths is what turns the genre into what Malmgren defines as «a plot-dominant form [in which] the signs comprising its world and its characters, however obscure they may seem, are finally grounded and decipherable»[127]. It is around this kernel and in dialogue with it that different forms of detective fiction can be said to have developed, substituting different principles regulating the rapport between their characters and their world, mediated by the historical epistemologies that belonged to different authors.

Throughout his work, Messac frequently draws a connection between travel books, Utopias and science vulgarizations, in that they share the same blended functions of divulgation of knowledge and speculation. Cyrano de Bergerac and Denis Veiras are cited as embryos of the detective novel[128], examples of *Mystère Expliqué* and, in the case of de Bergerac, as direct influences of Poe, true formalizer of the genre in the western context[129]. In these texts, science fiction, utopia, the popularization of science, rationality, fictional worlds, and divination were interconnected and coexisted, much like in the world of *Firasah* and the early forms of Ginzburg's evidentiary paradigm. This context provides a backdrop for studying detective fiction in the age of

[126] He does in *The Order of Things*: «In an episteme in which signs and similitudes were wrapped around one another in an endless spiral, it was essential that the relation of microcosm to macrocosm should be conceived as both the guarantee of that knowledge and the limit of its expansion. It was this same necessity that obliged knowledge to accept magic and erudition on the same level.» FOUCAULT, *The Order of Things,* Cit. p. 35.
[127] CARL D. MALMGREN, *Anatomy of Murder: Mystery, Detective, and Crime Fiction*, Bowling Green State University Popular Press, Bowling Green, OH, 2001. p. 131.
[128] Veiras' *Histoire of Sévarambes* is now also commonly recognized as one of the earliest forms of Science Fiction.
[129] MESSAC, *Cit*., p. 78.

secularism as a space for projecting science into a fictional realm, where it can blend with a taste for the irrational in the form of the sensational[130].

The fictionality of detective fiction can perhaps be said to find a connection to science-fiction precisely in its sensational and rhetorically charged projection of an idea of science. The question, in Messac's view, lies, one might say, in the dosage of rationality in the mix. In this context the words of Darko Suvin on science fiction are partly coherent with PWT's idea of accessibility and are equally similarly applicable to the idea of detective fiction we construed so far. In his view, the novelty elements of science fiction do not necessarily have to correspond to "real possibilities" in the world in which the author writes, it suffices that they are "ideally possible" in the sense of «a conceptual or thinkable possibility the premises of which are not in themselves or in their consequences internally contradictory».[131] The existence of the swamp adder is absurd in our world but it nonetheless conceivable for the sake of *Mystère Expliqué* if we suspend our critical judgment and refrain from asking too many questions. Moreover, as we have anticipated with Ronen, contrary to the view of Suvin, even points in which literature present us with impossibilities are not only viable options but interesting ones from the point of view of fiction studies.

1.V. Scientific Restrictions

Let us finally apply what we have seen so far. In the case of Sherlock Holmes stories, the discussion over what is real in the fictional world is thematized textually. By looking at the confrontations between Sherlock and Watson on the method of the

[130] On the side of the Hard-Boiled, even Chandler's account of what a "realist" detective fiction must be in *The Simple Art of Murder* is played on a confrontation between his ideal reader and the fictional world of a detective story of the "puzzle tradition". What is written by the writer and seen by the reader as successful as a method to find truth within the fiction is the hinge on which Chander too wants the history of the genre to develop. This testifies to the centrality of the rapport between received images of the actual world mediated by historical epistemologies and the fictional worlds within detective stories. See RAYMOND CHANDLER, *The Simple Art of Murder*, in *The Simple Art of Murder*, Random House, New York, [1939] 1988. pp. 1-18.

[131] DARKO SUVIN, *The State of the Art in Science Fiction Theory: Determining and Delimiting the Genre*, in *Science Fiction Studies*, Vol. 6, No. 17., March 1979. < https://www.depauw.edu/sfs/backissues/17/suvin17.htm > 27/06/2024.

detective, we can try to construe Doyle's attitude towards his world-creation. In the first story of the series, *A Study in Scarlet* (1887), in the chapter tellingly entitled "The Science of Deduction", Watson finds an article in a magazine:

> Its somewhat ambitious title was "The Book of Life," and it attempted to show how much an observant man might learn by an accurate and systematic examination of all that came in his way. It struck me as being a remarkable mixture of shrewdness and of absurdity. The reasoning was close and intense, but the deductions appeared to me to be far-fetched and exaggerated. The writer claimed by a momentary expression, a twitch of a muscle or a glance of an eye, to fathom a man's inmost thoughts. Deceit, according to him, was an impossibility in the case of one trained to observation and analysis. His conclusions were as infallible as so many propositions of Euclid. So startling would his results appear to the uninitiated that until they learned the processes by which he had arrived at them they might well consider him as a necromancer. From a drop of water," said the writer, "a logician could infer the possibility of an Atlantic or a Niagara without having seen or heard of one or the other. So all life is a great chain, the nature of which is known whenever we are shown a single link of it. […] "What ineffable twaddle!" I cried, slapping the magazine down on the table; "I never read such rubbish in my life." […] let the enquirer begin by mastering more elementary problems. Let him, on meeting a fellow-mortal, learn at a glance to distinguish the history of the man, and the trade or profession to which he belongs. Puerile as such an exercise may seem, it sharpens the faculties of observation […] It irritates me, though. It is evidently the theory of some armchair lounger who evolves all these neat little paradoxes in the seclusion of his own study. It is not practical.[132]

The article claims to offer a technique of observation and reasoning that allows for a systematic examination of every state of affairs, granting its practitioner the powers of Messac's *Firasah* or something like the abilities of Laplace's Demon. The passage, in the voice of Watson, showcases a juxtaposition of concessions and sudden outbursts of impatience. It describes the work as a combination of shrewdness and absurdity, while also noting its close and intense reasoning. Its inferences are deemed far-fetched and exaggerated, yet the conclusions are compared to "infallible" propositions of Euclid. An initiated individual may comprehend the process, but until then, the author of the article may be viewed as a necromancer, not just a practitioner of magic, but of dark magic. The article engenders an unsettled response from Watson, who slaps the magazine on the table and declares it impractical. As a Victorian man of science, he doubts the applicability of a method he perceives to be grounded on too theoretical

[132] ARTHUR CONAN DOYLE, *A Study in Scarlet*, *Cit*., pp. 20-21.

premises. A few lines below, the doctor openly challenges its conclusions by claiming that he would bet against its use, only to be silenced by Holmes, who calmly states, «You would lose your money. […] As for the article, I wrote it myself.»[133]

By the time Watson reads the article, he has already had the chance to present Holmes' limits in knowledge in a very schematic way. Holmes holds a singular mental hygiene in which he keeps out everything he might learn that is not useful for him to solve cases. The results are notorious. Apart from discovering that Holmes does not know that the earth revolves around the sun, Watson presents the encyclopedia of the detective schematically, as follows.

> Sherlock Holmes—his limits.
> 1. Knowledge of Literature.—Nil.
> 2. Philosophy.—Nil.
> 3. Astronomy.—Nil.
> 4. Politics.—Feeble.
> 5. Botany.—Variable. Well up in belladonna, opium, and poisons generally. Knows nothing of practical gardening.
> 6. Geology.—Practical, but limited. Tells at a glance different soils from each other. After walks has shown me splashes upon his trousers, and told me by their colour and consistence in what part of London he had received them.
> 7. Chemistry.—Profound.
> 8. Anatomy.—Accurate, but unsystematic.
> 9. Sensational Literature.—Immense. He appears to know every detail of every horror perpetrated in the century.
> 10. Plays the violin well.
> 11. Is an expert singlestick player, boxer, and swordsman.
> 12. Has a good practical knowledge of British law.[134]

Were it not for the review of Holmes's knowledge performed by critics like O'Brian, such a formulation would save us the effort of building a model for its initial epistemic state[135]. The skepticism of Watson is kindled by such strict encyclopedic regimentation. As everybody knows, Holmes appears like an eccentric, whose theories are

[133] *Ivi.* p. 21.
[134] *Ivi.* p. 18.
[135] Which however changes to fit different situations throughout the series. Holmes' skills and epistemic knowledge actually adapt to situations. In further stories in the series, he will show to possess knowledge in the fields marked by Nil. An amount of internal variation can be counted as obvious since the series was not conceived in one sitting, and instead developed in dialogue with its previous instances and in relationship to its public.

complexified by his idiosyncrasies. As he shows with his judgment of impracticality and with his bet on its applicability, Watson's criticism of the theory hinges on empiricism. He would like to see this method applied in his world before his eyes in order to believe it works. A chance to test it comes swiftly. Shortly after the episode of *The Book of Life*, a man arrives at the apartment door. Holmes, as anticipated in the article, swiftly infers his occupation as a marine sergeant based on his tattoos, age and posture. This prompts Watson to reconsider his position:

> I confess that I was considerably startled by this fresh proof of the practical nature of my companion's theories. My respect for his powers of analysis increased wondrously.[136]

The definitive approval of Watson is earned on the field of plot, by giving practical answers to questions within his world. This has implications on the detective's theory. Its fictional truth depends on the proof of applicability he is capable to give to support it. Instead of being universally valid because of its inherent logic, assuming that Watson understood what he was reading, Holmes' method needs conclusive, authenticated plot points in which the detective correctly recounts the facts behind a state of affairs to be considered truthful and applicable. The more the fictional world responds to the theory of the detective, the more his method is convincing as a science. In a Victorian context concerned with empiricism, the rationalist's theory alone is not sufficient, so much so that Watson rejects it as magic as, we argue, many would do when confronted with such broad claims.

It is worth asking what the actual logic behind this method is that it does not grant Watson's approval right away. Like Messac noted, if we confront the detective on the ground of the form of his inferences (deduction vs induction), a series of doubts emerge. Umberto Eco, in an essay now considered indispensable in the field, took the designation "Science of Deduction and Analysis" seriously and tested it, taking up the studies of semiologist Charles Sanders Peirce on the definition of deduction in logic[137]. The result he drew was that Holmes' method, rather than proceeding deductively

[136] CONAN DOYLE, *A Study in Scarlet*, Cit. p. 25.
[137] This had been done already by MESSAC, cit., and is part of the collective effort of the volume *The Sign of Three* appearing in most of the essays. See ECO, *Horns, Hooves, Insteps*, *Cit.*

proceeds “abductively”. Abduction is a type of inference that consists, given a situation, in providing an overarching narrative that, if verified, explains said situation easily and elegantly. By itself it provides no truth value to its conclusions, but it is important within the scientific domain as the rational form of educated guesses that prompt the research of empirical proofs to a statement. Within the scientific method as we know it, abductions serve the purpose of formulating hypotheses and nothing more. The key difference between abductions in Homes and real abductions is that in the fiction, Holmes’ abductions seem to be proven swiftly and consistently true by themselves, despite any possible skepticism. Eco gives the example of *The Adventure of The Cardboard Box* (1893) in which Holmes, echoing a famous episode in Poe[138] and some aspects of *Firasah*, «detects what Watson was mumbling to himself, reading his train of thought through his features»[139]. Eco comments: «[t]he fact that the train of thought Holmes imagined coincided perfectly with Watson's actual one is the proof that Holmes invented "well" (or in accordance with a certain "natural" course). Notwithstanding this, he did invent».[140]

There are several types of abduction. Eco attributes to Holmes (and to detectives in general) a specific type of abduction that he calls meta-abduction, which «consists in deciding as to whether the possible universe outlined by our first-level abductions is the same as the universe of our experience».[141] In the example of *The Cardboard Box*, Holmes performs a series of first-level (or preliminary) abductions departing from facts. «Watson threw down his paper and then fixed the picture of the General Gordon. This was undoubtedly a *fact*. That afterward he looked to another (unframed) portrait was another *fact*».[142] The connection between these (we would say authenticated) facts is a matter of what Eco calls “undercoded” abduction that is an abduction based on previous knowledge, or in this case «based on Holmes's knowledge of Watson's interest

[138] In am referring to the episode at the beginning of *The Murders of the Rue Morgue*.
[139] ECO, *Horns, Cit.*. p. 215.
[140] *Ibid*.
[141] *Ivi.* p. 207.
[142] *Ivi.*, p. 216. Emphasis in the original.

in interior decoration».[143] Holmes' conclusion: «You were thinking that if the portrait were framed, it would just cover that bare space and correspond with Gordon's picture over there»[144], is a guess, there is no logic to grant for its truth, but it is true and Watson, astonished, confirms it.

As Eco continues, «Watson could have started from an episode of the American Civil War to compare the gallantry of that war with the horrors of slavery. Or he could have thought of the horrors of the Afghanistan war, then smiled because he realized that his wound was, in conclusion, an acceptable toll to pay for surviving».[145] Eco's guesses are at least as educated as Holmes', but they are irremediably counterfactual with respect to the story. Meta-Abduction intervenes when:

> […] in the universe of that story ruled by a sort of complicity between the author of his characters Watson could not have thought but what he actually did think, so that we have the impression that Holmes isolated the only possible features of Watson's stream of consciousness. But if the story's world were the "real" world, Watson's stream of consciousness could have taken many other directions. Holmes is certainly trying to imitate the way Watson should have thought […] Holmes invented a story. It simply happened that that possible story was analogous to the actual one.[146]

By means of Meta-Abduction, Holmes speculates that the hypothetical possible world in which his initial abductions are real, and his actual world (TAW) are one and the same. This is then corroborated by Watson himself. Eco's counterfactuals highlight the arbitrary nature of this process. Therefore, Eco concludes, from our perspective of readers the stories abducted by Holmes lack a definitive and indisputable explanation for why they are proven true. In Truzzi's words,

> Holmes's uses of the observable differences which he notes and conveys to the reader are often fantastic and hardly predictable in the "real world" outside the pages of the canon. […] The simple fact is that the vast majority of Holmes's inferences just do not stand up to logical examination. He concludes correctly simply because the author of the stories allows it so.[147]

---

[143] *Ibidem.*
[144] ARTHUR CONAN DOYLE, *The Adventure of the Cardboard Box*, in *The New Annotated Sherlock Holmes*, *Cit.* p. 426. and SEBEOK, UMIKER-SEBEOK, *Cit.* p. 37.
[145] ECO, *Horns, Cit.* p. *216.*
[146] *Ibid.*
[147] MARCELLO TRUZZI, *Sherlock Holmes: Applied Social Psychologist*, in *The Sign of Three*, *Cit. Ivi*., pp. 68-70. See also p 60.

Eco says that he “invents”, and he says so inasmuch as «[e]tymologically, "invention" is the act of finding out what already existed somewhere»[148]. As far as detectives are concerned, critics like Truzzi[149], Grella[150], Barzun[151] and Sebeok[152] agree: despite what the detective himself declares, his inferences are often only suppositions, perfectly orchestrated so that they seem plausible in the text. Only the complicity of the “author’s will” can hold up these inferences, which, in other words, come true because they are designed to be true, because it can be deliberately decided that they do.

Whatever the character imagines as true in an abduction need to be authenticated to be read as true-in-fiction. Whether Holmes’ abductions are true or not is entirely

---

[148] ECO, *Horns*, *Cit.*, pp. 215-216.

[149] TRUZZI, *Cit.* p. 70.

[150] George Grella’s reflection fits in our view in more than one way: «Again like other forms of English fiction, the whodunit assumes a benevolent and knowable universe. In part imitating Conan Doyle’s ability to illuminate and transform the ordinary details of life, detective novelists liberally sprinkle charts, diagrams, timetables, maps, plans, and other concrete evidence throughout their books, indicating the English tradition of empirical thought. This penchant for the tangible implies a world that can be interpreted by human reason, embodied in the superior intellect of the detective. […] Finding a meaning in the tiniest clue enables the detective to know the truth; thus, his universe seems explainable, […] *Though the whodunit lacks verisimilitude, it practices the specific literary realism of its major tradition, not so much true to all observable life, as true to its stylized segment of life and its own assumed vision*.» GEORGE GRELLA, *The Formal Detective Novel*, in *Detective Fiction: A Collection of Critical Essays*, *Cit.*, p. 101. My emphasis.

[151] Barzun finds in some Conan Doyle’s works a «lifelike looseness, the illusion of uncontrived actuality» which, to him, connects them to the tradition of the realistic novel which works, similarly to what Barthes would have wanted, through «the physical objects that surround action. *These become literary substance when the detective imagination has chosen and arranged them so that some are clues while others produce atmosphere, verisimilitude, suspense.*» […] All the objects that furnish the fictional world, «descriptions of houses and their furnishings, we are greedy for the contents of posthumous pockets, we long to master time tables, speeds of vehicles, and procedures for collecting evidence» those Grella talked about in the previous note, are written to «conform to the common standards of credibility. That [, he writes,] is the reason why many years ago Father Ronald Knox laid down as one of the laws of detective fiction: “There must be no Chinamen.” For this cryptic rule, which its author said he could not explain, is in fact the principle of the realistic novel*: the world of magic and mystery yields to a sense of reality based on the persuasiveness of things.* […] Only in the detective tale is the hero demonstrably as bright as the author says he is.» JACQUES BARZUN, *Cit.* p. 149. My emphasis.

[152] «Holmes's powers of observation, his "extraordinary genius for minutiae," as Watson puts it, and of deduction are in most cases built on a complicated series of what Peirce would have called guesses. In the preceding example, for instance, Holmes can only guess that Watson actually entered the post office, rather than having merely walked in front of it. Furthermore, Watson might have entered the post office to meet a friend rather than to conduct some business, and so forth. […] What makes Sherlock Holmes so successful at detection is not that he never guesses but that he guesses so well.» SEBEOK, UMIKER-SEBEOK, *Cit.* pp. 21-22.

question of fictional *facts*, and thus entirely arbitrary and relying on authentication. The confirmation, provided by Watson, that certain objects or events were as Holmes described (Watson's own thoughts, the swamp adder, the visitor's profession etc..) is a plot point, albeit minimal, and serves to authenticate that the world invented by Holmes and TAW coincide.

This situation is not always the case. Partly contradicting this view, Giovannoli (going against Eco) argues that in many cases Holmes' inferences are, in fact, deductions. To defend this position, he notices how they often hinge on the presupposition of exact knowledge on the part of the detective that allows him to recognize objects individually and unambiguously. He gives the example of an episode in *The Sign of Four* (1890) in which Holmes, recognizing the color of a mud stain unequivocally, does not need to guess where Watson has been via abduction, he knows by deduction that Watson has been in contact with that specific mud[153]. This view, which was deemed interesting by Eco, reinforces our idea that the epistemic world of the detective can be changed arbitrarily to fit any inference we set to make him have. If it is not the validity of the inference, nor the confirmation of another character, it can be the infinite amount of "exact knowledge" about TAW that Holmes has pre-narratively that makes Holmes' "possible universe" match reality. As we have seen Doyle did so purposefully to make his character "practical" and "systematic". If it is not the plot that justifies unreliable inference, it can be the epistemic sphere, informing the character with arbitrary amounts of exact knowledge whenever needed. «Holmes' knowledge tends to identify itself with the understanding of the distinctive characteristics of every possible clue»[154]. There is a "complicity" of the narrative itself with the character. Even if certain inferences are indeed deductive, they are still so by virtue of fictional facts[155]. To put Eco's position in Doležel's terms, this process

[153] GIOVANNOLI, *Cit.* p. 63.
[154] *Ibidem.* My translation.
[155] *Ivi.*, pp. 42,62-64, at p. 74 the syllogism: «Major premise: All and only those who have been to the post office on Wigmore Street have dirtied their shoes with a certain reddish mud. Minor premise: You have shoes dirty with that reddish mud. Conclusion: You have been to the post office on Wigmore Street». My translation. Apart from the principle of indiscernibles, Giovannoli consequently applies

involves *not only the epistemic world but also the alethic world*; or, in a sense, it involves *the epistemic world as it is inextricably connected to the alethic world*.

The way knowledge-gathering and cognitive processes are represented can be studied as any other condition in the creation of a world of fiction. Easy examples of this alethic nature of a detective's method are fictions in which the detective has literal superpowers like in Flaxman Low stories in which the protagonist is a psychic[156]. In a world in which the paranormal is alethically confirmed, a detective may be a psychic and gather knowledge of spirits through his own paranormal powers. In Holmes' case, in which the supernatural is excluded[157], the character nevertheless possesses a certain connection with the world that makes even his less rigorous inferences, like abduction, consistently truthful. TAW itself repeatedly aligns with the possible worlds of his narratives. Consequently, Holmes can convince the uninquisitive reader that his method is a science because the evidence that grants truth value to the abduction can be arbitrarily provided whenever it is wished to validate the detective's correctness.

We can attempt to extract a Doleželian "rule" from these observations. In *A Study in Scarlet* what actually happens in (TAW) and the set of worlds that are inferred by the detective (K[158]) tend to coincide *in accordance with a certain "natural" course*. We can call this rule (*Rule M*) after the name of the alethic operator and as the initial letter of the word "method" and of Eco's "meta-abduction". If we accept this perspective, the detective's meta-abductive ability represented by *Rule M* aligns with Doležel's definition of alethic endowment. Without the need for this to be declaredly the case like in Flaxman Low's stories, a posteriori of the narrative one can affirm the detective

---

a restriction on the people which have frequented the post office. If that mud is discernible from *every* other mud, it is unique and thus the syllogism works as a deduction. Here Giovannoli is debating his mentor UMBERTO ECO, *I Limiti dell'Interpretazione*, Bompiani, Milano, 1990. pp. 250-252.

[156] See HESKETH HESKETH-PRICHARD, KATE O'BRIEN RYALL PRICHARD, *Ghosts Being The Experiences of Flaxman Low*, Arthur Pearson, London, 1899.

[157] See ARTHUR CONAN DOYLE, *The Hound of the Baskervilles*, in *Sherlock Holmes: The Novels*, Cit. pp. 245-408 and ARTHUR CONAN DOYLE, *The Adventure of the Sussex Vampire* in *The New Annotated Sherlock Holmes*, *Cit.* pp 1555-1575.

[158] Following Ryan we call these worlds projected by Holmes K-worlds. «The meaning of the operator of knowledge is fairly straightforward: a character "knows" a p, when he or she holds it for true in the reference world and p is objectively true in this world.» RYAN, *Cit.* p. 115.

possesses unique capabilities, verified on the alethic domain. His knowledge and methods can be likened to superpowers or predetermined elements of the story that function within the fictional setting and can be convincingly adapted to fit any situation for a conclusive plot in which the detective is successful. From this standpoint, the skill of the writer lies in effectively concealing the arbitrary nature of this internal construct trying to ensure that readers accept the logic of the detective as scientific as easily as possible[159].

As we could see in the words of Watson, it is a sense of dark possibility, a suspense bordering the supernatural that Holmes dispels with his words and his acts along the plot, demonstrating with fictional facts powers of intellect that Watson initially deemed belonging to a gothic world of necromantic magic. It is commonly believed among critics that Sherlockian readers are meant to ally themselves with Watson and gradually develop an admiration for Holmes, falling in love with the quirks that made him seem unreliable at first. From our perspective, we could say that a secondary epistemic narrative arc emerges beside the larger epistemic quest of finding out the solution to the mystery, one that focuses on Watson's limitations in terms of knowledge and understanding.

Its arc, in Doležel's terms, could be formalized as $\sim K_0$: "Watson *does not believe* that Holmes's theory corresponds to the world in which he lives" to K_0 "Holmes puts his theories to practice and informs Watson with facts, at a plot level, thus pushing him to believe." Watson bets on his own knowledge of the world and loses. His commonsense produces a counterfactual hypothesis that goes against how his world works. For the sake of the story, the success of Holmes' "deductions" constitutes the

[159] Genette calls upon the formalist concept of motivation to explain this process imbued in narrative: «the term "motivation" (*motivacija*) - like that of "function" - has been felicitously introduced into modern literary theory by the Russian Formalists to designate the way in which the functionality of a narrative's elements is dissimulated under a mask of causal determination: so that the "content" can only be a motivation, in other words an *a posteriori* justification for the form that, in fact, determines it […]. Motivation then is the causalist appearance and alibi that is given to the finalist determination that is the rule of fiction: the because appointed to make one forget the why - and so to naturalize, or to realize (in the sense of: to make pass for real) fiction while dissimulating what has been "pre-arranged" in it». GÉRARD GENETTE, DAVID GORMAN, ""Vraisemblance" and Motivation", in *Narrative*, Vol. 9, No. 3, Ohio State University Press, Columbus, OH, Oct. 2001, p. 253.

empirical confirmation of his theorical declarations. Once they are proven by the story, Watson can unproblematically recognize due merit. So whatever conjecture about the world and the possible worlds of the detective's abductions not coinciding - such as Watson's (K_0), which negates *Rule M* - is potentially overturned from the beginning. At the macro level we still go from the mystery to the solution, but at the micro epistemological level, Watson's initial state is that he does not know how the world really works, but having to accommodate the fact that Holmes' inference *actually* coincide with TAW (which is our *Rule M*), Watson, if he is an honest thinker, will have to change his mind and agree that the world indeed goes according to Holmes' theory. If we add Brook's theory that a detective fiction plots out a preconceived *sjužet*, we have the reason why Narcejac believed detective fiction to be mechanic, because at each step it veered towards a solution that was already decided and, thus, for cybernetic principle, it had a *telos*.

Tomaševskij also observed this recurring tactic of employing Watson's failed attempts to abductions as *détours*, intended to divert the reader's attention away from the true solution, which is often designed to be an unexpected revelation[160]. Each possible world proposed by Watson is either proven wrong (dis-authenticated[161]) by the detective's inference or by fictional facts. These stories, in Tomaševskij's perspective, need Watson to be wrong to buttress the effect of the ending. This is what happens in our epistemic subplot: Watson is skeptical of Holmes until the detective is

[160] « Des accessoires et des épisodes peuvent être introduits pour détourner l'attention du lecteur de la véritable intrigue. Ce procédé figure très souvent dans les romans policiers où un certain nombre de détails est donné afin d'amener le lecteur (et une partie des personnages, par exemple chez Conan Doyle - Watson ou la police) sur une mauvaise piste. L'auteur nous laisse supposer un faux dénouement. […] Le subterfuge se dévoile à la fin et le lecteur comprend que tous ces détails ont été introduits à la seule fin de ménager un dénouement inattendu.» We are approaching this quote of Tomaševskij from a PWT perspective. Each false motivation creates a possible K-world, their progressive elimination not only offers the surprise of an irregularity within a convention (like the Russian formalist wants) but it also structures the entire story around its own falsification. The end of the story could perfectly be the one put forward by Watson, but it is not. Fictional facts prove it. The plot structure that emerges is what I call the "pruning of possible worlds". BORIS TOMASEVSKIJ, *Thematique*, in Todorov, Tzvetan (Ed.), *Théorie de la littérature : textes des formalistes russes*, Éditions du Seuil, Paris, 1965. p. 284.

[161] DOLEŽEL, *Heterocosmica*, *Cit.* p. 150.

proven right by the story. The reticence and ambiguity of the use of the term necromancer outline a glimpse on a dis-authenticated possible world. In Holmes' *storyworld*, as we know, there is no necromancer, no supernatural hound in the land of the Baskervilles nor any vampire in Sussex. As it happened in the tradition evoked by Messac and Foucault, possible worlds serve as delays in the narrative and are pruned until only the one produced in the mind of the detective is proven true.

The position of Watson within the narration, however, is not neutral. Not only he is the sidekick of the detective: he is also the narrator of his stories. The alethic and epistemic domains are the most closely connected to authentication. Only what is authenticated by the text, and therefore not only possible but true within the world of fiction, can consequently be known by the characters. The problem lies in the fact that in the Holmes' series the narrator is (mostly[162]) internal. His presence as the authenticator of the performances of Holmes is also underlined by Eco.

> Watson (narratively) exists just to verify [the detective's] hypotheses. […] [He] represents the unquestionable guarantee that Holmes's hypotheses cannot be any longer falsified. It is a privilege Karl Popper does not have, though this lack of privilege gave him the chance to elaborate a logic of scientific discovery. Whereas in criminal stories an omnipotent God verifies the hypotheses forever, in "real" scientific inquiries (as well as in real criminal, medical, or philological detection) meta-abductions are a frightening matter[163].

The textual element provided by Watson in this view is his confirmation of Holmes's inferences, both as a character and as a narrator, both by confirming what he infers, buttressing it with his own failures and by fictively reporting them on the page. This, along with the conclusion of the plot, leaves every reader who is not a herpetologist with the sense that, at the end of the story, the desired epistemic state K is achieved. Recurring to modal logic, Eco often reiterates the arbitrariness of the detectives' situations and how understanding the workings of the world around them becomes valid literary data for analysis:

---

[162] There are moments in which Watson forfeits his role as the narrator. One is notably the long analepsis on the past of Jefferson Hope in *A Study in Scarlet*. Two short stories are narrated by Holmes himself: *The Adventure of the Blanched Soldier* and *The Adventure of the Lion's Mane*; and two others are narrated by an external narrator: *His Last Bow* and *The Adventure of the Mazarin Stone*.
[163] UMBERTO ECO, *Horns*, *Cit.*, pp. 218-219.

> [Q]uando il detective, o lo scienziato, o il critico o il filologo fanno un'Abduzione, essi debbono scommettere che la soluzione che hanno trovato (il Mondo Possibile della loro immaginazione ipotetica) corrisponda al Mondo Reale. E per questo debbono fare altre verifiche e altre prove. Nei romanzi polizieschi, da Conan Doyle a Rex Stout, queste prove non sono necessarie. Il detective immagina la soluzione e la "dice" come se fosse la verità: e subito Watson, l'assassino presente, o qualcun altro, verificano l'ipotesi. Essi dicono: "era proprio così!" E il detective è sicuro di avere indovinato. Nei romanzi polizieschi l'autore (che agisce al posto di Dio) garantisce la corrispondenza tra il Mondo Possibile immaginato dal detective e il Mondo Reale.[164]

In the passages here quoted Eco recognizes that for such a world to work logically, a superior force must come into play, something like a God grants for the pre-established order that allows for the correspondence between the mind and the states of affairs that is at the heart of our *Rule M*. If Eco is right, Holmes' epistemology takes on a somewhat more ambiguous character.

1.VI. Empiricist Spiritualism

From a literary criticism standpoint, Eco attributes the connection between detective and world to a particular historical philosophical framework:

> To shift from a creative abduction to meta-abduction is typical of a rationalistic mind, in the vein of seventeenth- and eighteenth-century rationalism. In order to reason as Holmes does, one must be strongly convinced that *ordo et connexio idearum idem est ac ordo et connexio rerum* […]. For Leibniz the expression can be similar to the expressed thing if a certain analogy between their respective structures is observed, since God, being the author of both things and minds, has engraved in our soul a thinking faculty that can operate in accordance with the laws of nature […] Holmes can try his meta-abduction only because he thinks that his creative abductions are justified by a strong link between mind and external world. […] In a universe ruled by an innate parallelism between *res extensa* and *res cogitans* (or by a preestablished harmony) the complete concept of an individual substance implies all its past and future predicates […]. Holmes has no doubts in meta-betting that the possible world he has outlined is the same as the "real" one. Just as he has the privilege of living in a world built by Conan Doyle to fit his egocentric need, so he does not lack immediate proofs of his perspicacity. [165]

For the story of Holmes to be understood one must "recenter" into a certain vision of the world. The plot of the stories is sustained by a philosophy that draws from forms

[164] UMBERTO ECO, *L'Abduzione in Uqbar*, in *Sugli Specchi e altri saggi*, Bompiani, Milano, 1985. pp. 169-170. See also UMBERTO ECO, *I Limiti dell'Interpretazione*, *Cit.* pp. 252-255.
[165] UMBERTO ECO, *Horns. Cit.* pp. 217-219.

of 16th and 17th century rationalism that filter into a positivist idea of applied science. What Eco is implying here is that once we extract a feature of the text by comparing it to dis-authenticated counterfactuals, it is possible to explain said feature by analogy with historically defined philosophical ideas. An implicit recuperation of seventeenth- and eighteenth-century rationalism, in the view of the semiologist, is what allows for Holmes to do what he does; it is what Doyle infuses in his fictional world by making the alethic and epistemic domains expand and retract until they coincide in what I called *Rule M*. Following Eco's example, we could try to apply it ourselves again. Although the logic behind the rapport between the detective and his world is certainly rationalistic, and does seem to logically work as Eco describes, there is little trace of Doyle being interested in seventeenth- and eighteenth-century rationalism[166]. It is instead a well-known fact how Doyle was a follower of spiritualism.

In 1887, the same year of publication of *A Study in Scarlet*, Doyle had written a letter to the spiritualist magazine *Light* in which he confessed not to be able to find an explanation for the phenomena he had witnessed during a séance but that he deemed them empirically sound. Interestingly from the point of view of detective fiction studies, he connected this to an idea of justice. Making an appeal to the reader to be open to the suggestions of spiritualism he writes:

> Let a man realise that the human soul, as it emerges from its bodily cocoon, shapes its destiny in exact accordance with its condition; that that condition depends upon the sum result of his actions and thoughts in this life; that every evil deed stamps itself upon the spirit and entails its own punishment with the same certainty that a man stepping out of a second floor window falls to the ground […] the law is self-acting and inexorable. This, I take it, is the lesson which Spiritualism enforces, and all phenomena are only witnesses to the truth of this central all-important fact.[167]

---

[166] Although two extremely interesting examples of citations of Spinoza, Kant and Descartes date back to the years before the first Holmes' stories, one in connection with Hypnotism. ARTHUR CONAN DOYLE, *The Youngest of the Sciences*, 1887-1891. Found at <https://www.arthur-conan-doyle.com/index.php/The_Youngest_of_the_Sciences> 30/10/2024. ARTHUR CONAN DOYLE, *The Man from Archangel*, 1885. Found at https://www.arthur-conan-doyle.com/index.php/The_Man_from_Archangel 31/10/2024.

[167] ARTHUR CONAN DOYLE, "A Test Message", in *Light: A Journal of Psychical, Occult, and Mystical Research*, 2 July 1887. Found at <https://www.arthur-conan-doyle.com/index.php/A_Test_Message> 28/06/2024.

In this passage the law of nature embodied by the law of gravity and the laws of morality connected to the human soul are associated within spiritualism. The idea of providence that Knight saw in early crime writing has not disappeared, it only changed its connotation, becoming something like a law of nature. More so, it became "the truth" behind "all phenomena" reminding us of Foucault's observations. The idea of an afterlife is what grants for the value of one's deeds in their life. Cause and effect relationships of a natural order as well as of a moral order coincide in their rigidity. The corruption of the soul that follows evil deeds works as unfailingly on the body as the consequences of attempting suicide by stepping out of a second floor. In this daring homology, we find that the connection of the method of the detective to pre-established harmony could be extended to the axiological sphere. The detective, accordingly, could be said to do the work of the law of nature and of spiritual justice at once, "self-acting and inexorable" as long as he works in connection to this (meta)physic sphere. In this light, Holmes might very well claim, as he does in *The Adventure of the Copper Beeches* (1892), to be only interested in science and not in himself. «If I claim full justice for my art, it is because it is an impersonal thing—*a thing beyond myself*»[168], he says. For it is not just his skill that grants for his success but rather the method, the science, the way his world works. He is merely a good follower of the well-established rules of the world.

This form of Providence takes many forms in the Holmes saga, from the very first adventure, in which the criminal Jefferson Hope is an avenger convinced that he is acting as an agent of a higher order. In the attempt of taking his second victim he offers him two pills, then he appeals to the authority of God: «'Let the high God judge between us. Choose and eat. There is death in one and life in the other. I shall take what you leave. Let us see if there is justice upon the earth, or if we are ruled by chance.'»[169] Both the homicidal technique he uses and his demise, in which the avenger is removed

[168] ARTHUR CONAN DOYLE, *The Adventure of the Copper Beeches*, in *The New Annotated Sherlock Holmes*, *Cit.* p 351. My italics.
[169] ARTHUR CONAN DOYLE, *A Study in Scarlet*, *Cit.* p. 118.

from earthly justice and summoned before a divine tribunal[170], is staged as a test of the very functioning of the world. Either there is a higher justice or only "chance". At the proof of fictional facts, the wrongdoer dies. Is the text on the side of the avenger as well?

If we compare these passages with the author's statements about how metaphysical justice works, a gap is produced. Doyle does believe that there is a higher force that punishes the wicked but, in his account, it is not traditionally providential in nature. The call to "do God's will", after all, belongs in the novel to the avenging murderer as much as to many of his Mormon enemies. The thing that distinguishes them is their positioning, as Ascari subtends, on either side of a revenge play, in which the avenger's violence attracts public adherence at the expense of that of the corrupt[171]. Jefferson Hope is still wrong, but somewhat less wrong than his corrupt victims.

Furthermore, there is an episode in which Doyle spoke at the Mormon Tabernacle in Salt Lake City. There, against the beliefs of those present, he «insisted on the truth of spiritualism: "It is an absolute fact that when we do communicate with these emancipated souls they all tell us of a fate very different from any which we learn from the Churches."»[172] His concept of providence does not belong to any organized religious creed. In a sense, Doyle elaborates the "pre-positivist" providential influences in light of his pseudo-scientific beliefs. In the reported passage from *Light* he represents the spiritual fate of the evildoer as destined for punishment by spiritual law, a law that has the force of the laws of nature. Not so much a personified divine will but a necessity given by the conditions of the world itself, which govern both the natural and the moral-spiritual sphere. From our perspective, such are the laws that filter into his *storyworld*. Within it, the evildoer who was supposed to die, dies, just as the criminal who the detective was supposed to catch is ultimately caught. From this perspective perhaps it comes to no surprise that Holmes has nothing to say about the "natural sentence" of his

[170] «A higher Judge had taken the matter in hand, and Jefferson Hope had been summoned before a tribunal where strict justice would be meted out to him.» *Ivi*. p. 122.
[171] ASCARI, *Counterhistory, Cit.* p. 16-30, 65.
[172] MCCUSKEY, *Cit.,* p. 37.

prey. His only concern at the time of the arrest remains over the details of the crime and the arrogance of the official police in wanting to claim for themselves a success that belongs to him and to Jefferson Hope as agents of Justice as such. For that matter, at the time of Hope's arrest, in spite of the herculean strength that Hope showed, Holmes is the only one who trusts the murderer when the latter asks that his legs be untied so that he can follow the officers of his own accord, as if the detective knew that justice was now done and the criminal would not escape it, no matter what.

In the domain of the studies on the positivistic nature of spiritualism, Andrea Porcarelli[173] identifies two principles relevant to this argument. One is the "rule of phenomenalism", the principle according to which being coincides with appearing, and any form of knowledge, to be valid, must be rigorously supported by empirical data, the other is the "rule of the fundamental unity of knowledge methods" which entails a homologation of cognitive processes among different fields. As the critic summarizes, in the pursuit of "positive science", every spiritualistic understanding of reality was criticized as "dogma" or "metaphysics" only to be then reintegrated in a different form. There was a conflict between "intellectual positivism" (which disregarded religious matters and sometimes leaned towards materialism), and "religious positivism", which aimed to establish a genuine religion based entirely on rational discoveries and free from dogma. The issue for both was to ultimately provide satisfactory answers to fundamental questions about the purpose of humanity and the afterlife, which posed a significant challenge for materialism, as they were sought for by many at the time. Spiritualism found its place within this positivist cultural context by attempting to address these questions and doing so in a manner aligned with a positivist mindset. Positivist thinking then resolved to demand "experimental evidence" of the survival of the soul after death. The task was to create a theoretical framework that experiments could either confirm or debunk. Spiritualism integrated this mindset and adapted. Out of this came the need for "manifestations" of life beyond death through mysterious

[173] ANDREA PORCARELLI, "I «Fondamenti» Teorici Dello Spiritismo e le Inquietudini della Cultura di Oggi", in *Divus Thomas*, *L'incontro con Dio: Gli ostacoli odierni: materialismo ed edonismo*, Vol. 96, No. 1, Edizioni Studio Domenicano, Bologna, Gennaio-Aprile 1993, pp. 66-103.

knocks, possessed writing, and visual apparitions. The empiricism within positivism demanded that intelligible effects must have intelligible causes. Mediums were sought for as apparent centers of the manifestation of these phenomena, as lightning poles for the gaze of the empiricist. In Doyle's fiction, this role is taken by Holmes. As McCuskey underlines, the logic of Spiritualism is key to understanding Holmes' epistemology:

> Holmes cuts God and everyone else out of the loop that runs between mind and world, closing the distance between his revelations and his explanations, until there is no difference between what he believes and what he knows. At that point, the dominion of Holmes's faith becomes clear: he has perfect freedom in things mundane, which may as well be ultramundane, since his brain creates and shapes the universe at will. […] he carries within himself the reasons that make everything else exist. […] It is no secret why Holmes's backward reasoning works as if by magic. All the facts that Watson publishes are fictional, and their adventures have all been reverse engineered in the first place. […] Holmes enjoys unlimited concessions because his deductions are all preauthorized. […] The novel conceals its religious origin so well that even Light, knowing full well that the author was […] a Spiritualist, […] missed the clues to deeper meaning in the novel. […] The very name of spiritualism does not occur because the author gave it a new one: Sherlock Holmes[174]

Once again, «in the well-made world that the positivistic consciousness perceives, it is the Detective who replaces God as the abiding presence.»[175] The logic that sustains the closed circuit world of Sherlock Holmes according to McCuskey is therefore not Narcejac's cybernetics but the circular logic and confirmation bias of spiritualism. The correspondence of his theory with the world of fiction creates a loop. Holmes can say to have elaborated his theories from the observation of the world, but this world of swamp adders only exists for him to be in it. Every time that Watson is proved wrong, the authenticative force of the narration of the series is subdued to the prowess of the detective. Holmes unveils what at the same time is created it for him to unveil. The illocutionary power of fiction writing is at his service. As long as *Rule M* holds, whatever he says incontrovertibly comes true. It is Lewis' paradox: as long as Holmes is infallible, the swamp adder exists. Doyle in other words created a fictional world in

[174] MCCUSKEY, *Cit.* p. 82, 84, 86.
[175] WILLIAM V. SPANOS, *God and the Detective: The Christian Tradition and the Drama*, in *Christianity & Literature*, Vol. 20, No. 2, Sage, New York, 1971. p. 22.

which the circular logic that had started to influence his life after his first séances dating back to 1885[176] was perfectly realized.

McCuskey traces this thought back to religious debates over Darwinian theories and finds evidence of this in Doyle's later arguments about why spiritists should be believed[177]. In the later part of his life, in many of his letters and lecture series, Doyle appealed to his own authority as an honorable man for the public to believe his proselytes[178]. To have faith in spiritualism it had to be enough for the reader or listener to trust Conan Doyle, who had seen with his own eyes the prodigies of the séances. Similarly, we might say, the circular logic of Holmes's world depends on the authenticating power of Watson, honorable and trustworthy doctor and Victorian gentleman like his writer. In fact, it is in Watson's epistemic subplot, in his seeing himself persuaded empirically as Doyle was persuaded "empirically" by spiritualism, that our relationship with Holmes rests. McCuskey cites Engels: «The most certain path from natural science to mysticism […] is […] the shallowest empiricism that spurns all theory and distrusts all thought.»[179] If Holmes is the new name of spiritualism, Watson is the name of its witness.

Hodgson called Doyle's practice of breaking the perceived rules of accuracy and credibility the "crime" of detective fiction, tracing it back to the many examples of proto-detective fiction in which the detective is also the criminal[180]. More specifically,

---

[176] The date is in O'BRIAN, *Cit.* p. 124. Even though McCuskey finds it roots even earlier. See MCCUSKEY, *Cit.* pp. 53-57.
[177] MCCUSKEY, *Cit.* pp. 67, 71-73.
[178] In one of his most famous apologies of spiritualism Doyle often invited his readers to put aside phenomena in favor of the principle of authority. ARTHUR CONAN DOYLE, The *New Revelation*, Hodder & Stoughton, London, 1918. Found at https://www.arthur-conan-doyle.com/index.php/The_New_Revelation 28/06/2024. We readers, like it happens through Watson, are invited to believe on his honor. *I Pledge my Honour that Spiritualism is True* is the title of an article written by Arthur Conan Doyle first published in the Daily Express No. 8820 on 4 august 1928.
[179] FREDERICK ENGELS, "Natural Science and the Spirit World", In *Dialectics of Nature*, Clemens Dutt (Ed.), International New York:, 1940. pp. 297–310. Cited in MCCUSKEY, Cit. p. 83.
[180] He cites of course Oedipus, but also Vidocq Mémoirs, Wilkie Collins' *The Moonstone* and Israel Zangwill's *The Big Bow Mystery*. Along with all the critics, starting with Winks, that believed that «The ideal detective story is one in which the detective hero discovers that he (or she) is the criminal"» HODGSON, *Cit.* p. 313. He is also citing Winks, who had added Hjortsberg's *Fallen Angel*. WINKS, *Cit.* p. 5. See also ELANA GOMEL, "Mystery, Apocalypse and Utopia: The Case of the Ontological

he circumscribes this crime to the class of hoaxes[181], to which, in a fascinating way, the séances often belong in the eyes of the skeptic. By virtue of this analogy, which appeals to the beliefs of the author while Hodgson stops at the logic of the text, we find it more legitimate to speak of circular logic rather than of an authorial crime that the reader is charged with solving. The effect is that the world within the text is just and rational in a spiritualist way so that the problems outside of it might also feel like they are. Problems in the real world are luckily also solvable in many circumstances. Our reading points towards detective texts as creating that feeling of satisfaction that one finds when finding a reason for an actual problem. Perhaps this is why readers can enjoy detective fiction even when they are not playing against detectives to solve the crime before they do.

The analogy can be pushed further. Doyle's appeal to science served as a sustaining rhetoric with which the circular logic of his world is intertwined. This rhetoric belonged to spiritualism as well. Holmes invents in both senses, the common and the etymological as underlined by Eco. In the passage from Foucault that we quoted previously, the historian self-corrected his definition of the scientific individual like Newton or Mendel from "creator" to "discoverer" of truths. This connection is pertinent here. In Foucault review of Newtonian-Mendelian ideology, the scientist finds out what is already out there for him to find. Holmes invents, from Latin *invenire* "to come upon; devise, discover", because the truth is inscribed in the world for him to discover. Even if this logical loop could be found in several types of fiction[182], in the specific case of Doyle, McCuskey demonstrates that this is a key ideology embedded in the author's way of thinking. The rationality of Holmes' world, exemplified by the criteria of Kern (determinism, predictability, continuity, objectivity, visualizability), is heralded by the effect of the narration both through and in spite of all its scientific

Detective Story"*, in Science Fiction Studies*, Vol. 22, No. 3, SF-TH Inc, Greencastle, IN, (Nov., 1995), pp. 343-356.

[181] *Ivi.* p. 315.

[182] Think of the contradictory nature of the relationship between freedom and predestination in destiny-realated *storyworld*s. MARCO DORATI, *Finestre sul Futuro: Fato, profezia e mondi possibili nel plot dell'Edipo Re di Sofocle*, Fabrizio Serra, Pisa, 2015. pp. 40-45.

flaws; it remains as an abstract idea, a way of viewing the world that is sustained by the rhetoric of the narration rather than by accuracy to detail: Brooks' "creation of meaning". The key concept that remains when this logic is cleared, and that was shared by scientific thinking and spiritualism alike, was, as Malmgren noticed, that the world was readable, its signs stable, its development rational. This is the literary effect crated by the conclusive ending.

That the ending of a story has special importance in its interpretation is commonplace in literary criticism. Juri Lotman's[183] reflections on the subject are exemplary. In his work the interpretation of the text appears as a retroactive gesture. The stories we read, as we read them, appear open-ended. Lotman gives the example of fictional duels: before any duel there is no way of knowing who will win, how they will do it, whether anyone will die, etc. Each "event" in Lotman's account generates a number of possible worlds for the reader: in one, one duelist wins, in another the other, in a third one of the two dies. Lotman's point is that in a fictional story we cannot reliably speculate whether its outcome was a random chance or was predestined until the complete picture is finished in our minds. Genette and Gorman called this process on the side of the author "retrospective determination", stating that events that are chosen by the author to take place go on to retroactively determine the causes leading up to them in the creative process[184]. From a PWT perspective, the possible worlds dispensed with by the outcome of a duel correspond in detective fiction to Watson's (and the reader's) false opinions debunked by Holmes' correct ones with the help of fictional facts. The infinite possibilities of resolution hinted at by Eco's counterfactuals are excluded as we go towards a resolution that sees the detective winning in the end.

[183] LOTMAN, *Cit*. pp. 123-132.

[184]«These retrospective determinations constitute precisely what we call the arbitrariness of narrative, not really indeterminacy, in other words, but the determination of means by ends and, to put it more crudely, of causes by effects. It is this paradoxical logic of fiction that requires the definition of every element, every unit of the narrative by its functional character, […] and to account for what comes first (in the order of narrative temporality) by means of what comes second, and so forth hence it follows that what comes last is what controls all the others, and nothing controls it: an essential place for the arbitrary, at least in the immanence of narrative itself, since it is then possible to seek elsewhere all the determinations for it psychological, historical, aesthetic, etc. that one wants». GENETTE, GORMAN, Cit. p. 252.

This is the role of the subtle prince's explanation in Messac's terms. This structure is what we call the *pruning of possible worlds*.

At a philosophical level, however, something more happens. McIntyre suggests that the ending of a story inherently contains something like the end (or *telos*) of the human affairs depicted within the story's world, in a way that is suggestive of carrying a more encompassing meaning:

> Kafka […] shows us […] the world as we sometimes fear it to be, a world in which the possibility that we have ends and not just desires and desire-serving purposes, the possibility that there is a point and purpose to our lives, is never quite foreclosed, but in which we cannot but continue in a protracted state of suspicion that at most "There is a goal, but no way; what we call way is only wavering." So there is characteristically no ending to Kafka's stories, but simply a breaking off, sometimes a work left unfinished, sometimes a work artfully incomplete at the moment of its ending[185].

In detective fiction a variety of critics have had occasion to emphasize a philosophical character of story endings. Robin W. Winks[186], W. H. Auden[187], Dale Ahlquist[188] and Eric Biddy[189] for example find in the concluding endings of detective fiction a translated address of metaphysical mysteries typically explored by theology. This in their reading helps explain why detective stories are serial. Unable to solve the problem of evil on the theological scale, authors create characters capable of resolving punctual manifestations of it, infinite series of fictional crimes as individual monads of abstract evil. Spanos also adopts a theological standpoint, connecting the Christian tradition and positivism:

---

[185] ALASDAIR MACINTYRE, "Ends and Endings", in *American Catholic Philosophical Quarterly*, Vol. 88, No. 4, Minneapolis, MN, 2014. p. 818.

[186] WINKS, *Cit*. p. 5.

[187] WYSTAN H. AUDEN, *The Guilty Vicarage*, in *Detective Fiction: A Collection of Critical Essays*, Robin W. Winks (Ed.), Prentice Hall, Englewood Cliffs, 1980. pp. 15-24.

[188] «There are two kinds of mystery. There is the mystery that is a puzzle to be solved, the temporary mystery, and there is the mystery that is a marvel to be contemplated, the permanent mystery. Solving the puzzle, the temporary mystery, satisfies us, but it only satisfies us once. The eternal mystery is endless, and yet in contemplating it we are endlessly satisfied.» DALE AHLQUIST, "Preface: The Art Of Murder: G.K. Chesterton And The Detective Story". in *Christianity and the Detective Story*, Anya Morlan, Walter Raubicheck (Ed.). x-xix. Cambridge Scholar Publishing, Newcastle upon Tyne, 2013. . 2013

[189] ERIC BIDDY, "Theodicy and the Detective Story: Holmes, Hauerwas, and Auster", in *Christianity and the Detective Story*, Anya Morlan, Walter Raubicheck (Ed.). x-xix. Cambridge Scholar Publishing, Newcastle upon Tyne, 2013. pp. 37-46.

> […] the Western positivistic perspective looks on the unique experience as if it were part of an exciting and suspenseful well-made cosmic drama, more particularly, a detective play, the ending of which can be predicted by an acute "eye" private or otherwise, that sees relationships between facts--that is, clues--that point to a comforting solution of "the crime." [This] well-made play, like its metaphysical counterpart, the positivistic universe, has its source in the self-deceptive effort to flee in the face of an absurd multiverse […] by imposing a distancing ending or telos from the beginning on the dreadful contingencies of existence[190].

Taking the cue from Messac, we might consider the "logical" competence attributed to the detective and here once again linked to God's will, a return of ancient elements of the *Firasah* tradition. But there is more, the objective of the detective according to Spanos is to counteract possibility itself, to give an abduction that provides "the sense of an ending", a limit to the proliferation of chaos, a single right reading of the world like that of 17th century Christian tales of revealing a false miracle. Analogously, the stories' conclusions are more important than the individual instances of explanation because they *de facto* leave no further possibilities open while not being necessarily credible in and of themselves.

One may react in different ways to this. At that ending the reader may, for example, be left in doubt like the herpetologist, but the story itself is concluded leaving us to believe that the truth has indeed been found. The snake's existence, which was authenticated by the story (Holmes fights it and locks it back in the safe where it came from), is then reinforced by the conclusion of the story itself. To negate it one is forced to return to the middle of the text and question its premises and assumptions which, all along, have been developed discursively through various repetitions of Watson's subplots.

McCuskey writes that Holmes's method, once scrutinized, amounts only to an incoherent, even contradictory, store of alluring maxims and there is no point in subjecting the stories to close critical scrutiny, because they are an exercise in mythopoeic image-making in the first place[191]. Indeed, Genette and Gorman thought

[190] SPANOS, *Cit.* p. 17.
[191] Here McCuskey is citing Peter McDonald, I am quoting from both almost literally. See MCCUSKEY, *Cit.* p. 17.

of the very concept of vraisemblance precisely in terms of correspondence of events and behaviors within a story to widely assumed maxims[192].

This is key to our reading in PWT. Holmes's world, like every detective world (and every narrative world in general), is built on rules that can be extracted from its own course. Once these rules are extracted, they can be compared to the notions of the world that the author had and that the reader has in each era, bringing out—in their correspondence or difference—readings that are at times realistic, fantastic, etc. In our case, filtered through Doyle's spiritualist beliefs, the strange connection in terms of possibility between Holmes's *storyworld* and the K worlds generated by his abductions (the *Rule M*) can be explained through a positioning of his *storyworld* in relation to the real world. Hinging on the religious part of Ginzburg's paradigm, the final point Doyle makes in his letter to *Light* is to realize a legible world in which there is a *telos* within reach of the spiritualist that grants for the "natural" punishment of evil souls.

I argued so far that in Conan Doyle, the fact that the snake is impossible in our world derives from the secondary position accuracy held in his system of priorities. The more the reader's interpretation proceeds towards a perceived failure of literal reading, the more they lose sight that an indispensable fact of most of Holmes stories is that they end with what appears to be the detective's success. The distancing of the ending of which Spanos spoke about is from the possibilities of reality, but there is also a productive side, the desire for explainability. And in turn the desire for explainability has its limits, it can evolve conflict in a writer. Perhaps this is an opening for further studies in the psychology of literature applied to Conan Doyle that may interpret the conflict of Doyle with his character as portrayed for example in Bayard through the ambivalence that manifests in certain subjects towards reassuring fantasies.

The study of the influence across worlds in Doyle is on the trail of a specification of this same relationship. To find in other words what his creation of Holmes' world entails for him, what is its modalization in Eco's terms. Specifically, we argue in favor of a view that sees this relationship as a realization of a pre-conceived view of the

[192] GENETTE, GORMAN, Cit. p. 240.

world, as the representation of a perfect world-order and stability of signs that, not always coming true in the real world, is comforting when realized in a world that, though fictional, is rhetorically charged to resemble our own through scientific and rationalistic *poses*[193]. These psychological hypotheses have perhaps something to do with the fact that a phenomenon of reading such as *the Game* originated around Holmes and not elsewhere.

Lewis himself strived to create a model of appreciation of fictional truth values that sought to exclude readings like the one of Gans since the average reader does not share specific bits of scientific taxonomy[194]. By doing so he implies that the narration functions perfectly without them. In the world of positivist spiritualism, the author generates instead a compromise that motivates faith with reason. Within this view certain wordings resonate differently. At the end of his first case in *A Study in Scarlet*, Holmes is terrified by the idea that his experiment may have failed, and once the story has proved him right consoles himself precisely by reminding himself to have "faith" in his abilities[195].

In this part of the essay, we followed this argument as it highlighted underlying assumptions about the real world that can emerge in fictional worlds. These aspects have consequences on their form and themes, drawing from the conclusiveness of their plots and the intellectual behavior of their characters. It is these aspects that enable detectives, who often embody the principles of science and serve as the centers of their stories, to reconstruct their narratives through unexplainable meta-abductions, ultimately providing us with the conclusive plots associated with the genre in its early form. Consequently, the fact that a detective story's plot is conclusive, whether on a judiciary or epistemological level, should not be ignored or dismissed as

[193] There is a view in Bakhtin according to which life is not inherently tragic, comic, beautiful, or sublime for those who live it directly or those who merely observe it. It is only when one transcends these limitations of everyday experience, giving body to a different perspective through signification in the creation of characters, that life can be illuminated with a tragic light, take on a comic expression, become beautiful or sublime. MICHAIL BACHTIN, *L'autore e l'eroe. Teorie letterarie e scienze umane*, a cura di Carla Strada Janovič (Ed.), Einaudi, Torino, 1988. p. 64.
[194] This thought appears in his "Analysis 2". LEWIS, *Cit*. p. 45.
[195] See MCCUSKEY, p. 82.

conventional[196], but rather interpreted in comparison to other texts that lack these characteristics or base their appearance on different assumptions and *teleologies*. Following the example of Brooks, we can see the claim of being "scientific" made by a detective as an opportunity to explore the detective story as a fictional contribution to the discourses of science, pseudo-science and theology through a plot.

[196] This is a challenge to the idea of classical detective fiction as just «a literature of reassurance and conformism». This sentence by Dennis Porter is quoted by Charles J. Rzepka in his manual on detective fiction. Rzepka then comments: «But in fact, the tendency of the genre over the long run has been toward ever greater self-criticism, inclusiveness, and breadth of appeal». CHARLES J. RZEPKA, *Detective Fiction*, Polity, Cambridge 2005, p.3. Paraphrasing Thomas Pavel, we could say that «from this angle, [the] realism [of detective fiction] is not merely a set of stylistic and narrative conventions, but a fundamental attitude toward the relationship between the actual world and the truth of literary texts […] Nineteenth century [detective stories] may have aimed at constructing genuine possible alternatives to the actual world, as filtered to [their own] scientific episteme». Pavel, Cit. pp. 46, 50. Believed by their author to be possible through the example of Joseph Bell and held by the logic of spiritualism, the abilities of Holmes are presented as a science and his world as a genuine alternative to the real world of Doyle, differing from it only for the presence of invented characters.

Interlude – What if the detective is not infallible?

Literature tends to have its own way of being refractory to rigid systematizations. The trend of post-structuralist literary studies has had immense occasion to show how that, upon gathering data, virtually no literary corpus turns out to be coherent when encased in rigid scaffolding. Keeping this in mind, it is desirable to deal with situations in which our models do not correspond to the texts we seek to analyze.

It is common knowledge among the readers of detective fiction that not even Holmes himself was infallible. It is not difficult to find cases in which the authenticative power of the narration does not come to the rescue of Holmes' theories, not even in the canon. Some of them can be said to bear a specific change of meaning in the foreground. *The Adventure of The Yellow Face (1893)* is an example of a story in which Holmes fails to solve a case set in Norbury. His failure stems from not considering the bi-racial nature of the complexion of a little girl born of a white British woman and a black American man. Appalled by his own overlooking of the case, the detective at the end urges his sidekick: «"Watson," said he, "if it should ever strike you that I am getting a little over-confident in my powers, or giving less pains to a case than it deserves, kindly whisper 'Norbury' in my ear, and I shall be infinitely obliged to you.»[197] What to do of this outlining case? If we took our *Rule M* as a rigid structure or, even worse, as a predictor of variation akin to a scientific law we would be forced to admit defeat. On the contrary, as I stated previously, we wish to treat our formulation

[197] I shall quote from a different collection. ARTHUR CONAN DOYLE, *The Yellow Face*, in *The Annotated Sherlock Holmes*, William S. Baring-Gould (Ed.), Vol I, Clarkson N. Potter, Inc., New York (New York) 1972. p. 589. In the annotation of this edition of the collection we can see the curator William S. Baring-Gould endeavoring in observations that corroborate our thesis on the challenge posed by given readers to the detective story on the ground of reference to actual entities. In many notes to this story he argues for the time of the year in which the story is set to make it fit inside a chronology of Holmes stories (587), in another he comments that "unfortunately" the trains cited in the story did not exist (583, 586), others concern the situation of the interracial couple in relationship with American racial laws among others (579, 585, 588). The work undoubtedly pertains to the domain of tools intended for the writing of apocrypha in the *milieu* of Sherlockian fandom.

as a model. The best advantage of treating our formulation as such, is that a model accounts for our expectations while not pretending to be a rigid stencil through which to read all special cases. Each individual case, especially in literature, can be read *against* a given model to elicit its peculiarities in its difference from it. These differences in turn become data to compute in our analysis of the specific case. It is curious from this point of view that both *The Speckled Band* and *The Yellow Face* put Holmes in baffling situations concerning now ethnicity, now color. In *The Speckled Band*, the characters suspected a group of Roma people of being the crime's culprit. Their spotted bandanas matching the victim's dying cry, which contained the titular "speckled band" and referred instead to the snake. A suspicion initially shared by Holmes, who admits to it:

> "I had," said he, "come to an entirely erroneous conclusion which shows, my dear Watson, how dangerous it always is to reason from insufficient data. The presence of the gipsies, and the use of the word 'band,' which was used by the poor girl, no doubt, to explain the appearance which she had caught a hurried glimpse of by the light of her match, were sufficient to put me upon an entirely wrong scent. I can only claim the merit that I instantly reconsidered my position when, however, it became clear to me that whatever danger threatened an occupant of the room could not come either from the window or the door.[198]

In the end, it is revealed that the culprit was the victim's stepfather, a monster-man who, during a period in India, had already committed a racially and colonially connotated murder by killing his "native"[199] Indian butler in a fit of rage. Holmes is able to recant his ethnically connotated suspicion because it would have been impossible for a human to have entered the locked room. As we have seen his solution may feel less than reassuring, but the invention of the snake nonetheless saves the detective from a wrongful accusation. A standard interpretation of *The Yellow Face*,

---

[198] CONAN DOYLE, *The Adventure of The Speckled Band*, in *The New Annotated Sherlock Holmes*, *Cit.* pp. 257-258.

[199] *Ivi.* p. 232. To bolster our thesis, *The Speckled Band* is an example of those stories in which Holmes, albeit indirectly, kills the murderer. He does so by attacking the snake and turning it against its owner. At the end he openly acknowledges the act with little remorse, even concealing this act from the police. This reinforces our argument that Doyle's concept of spiritual justice (which involves race, color and colonial relationships) manifests through Holmes as an objective telos of its narratives, positioning the detective as the herald of a value system that operates independently of any morality other than the just fate he embodies.

instead, would read the story as one foregrounding race. Conan Doyle making his hero guilty of having failed to consider skin color and the condition of interracial couples in late 19th century Britain and America in his resolution of the case is possibly connected to common practices of cancelation of such issues on a larger scale. The strength of the piece lies precisely in it being an outline in a streak of solved cases, perhaps explainable through Tynianov's concept of literary evolution as borrowing elements from the extraliterary when a particular form becomes automated and therefore starts to die out[200]. The racial question the story poses gains strength and preeminence as a moral question. Notably, like it happened for the case of the swamp adder, Doyle's inventions over an object of the actual world contribute to make the story conclusive the way he means it to conclude. The child in the story, in fact, is authenticated as having darker skin than both of her parents which is genetically improbable[201]. Like it happened for the snake, the desired conclusion superseded the research that would have granted an otherwise unimportant form of accuracy. The rhetorical objective in this reading would be to make Holmes fail on account of a quintessential emblem of race. This would become the story's kernel around which the plot is built.

---

[200] JURIJ N. TYNYANOV, *De l'Evolution Littéraire*, in *Théorie de la littérature*, *Cit.* pp. 120-137.

[201] «[L]ittle Lucy is darker far than ever her father was.». CONAN DOYLE, *The Yellow Face*, in *The New Annotated Sherlock Holmes*, *Cit.* p. 470. A note from Leslie S. Klinger: «A "dear little girlie" she may well be, but Edward Quayle charges that Lucy's "coal-black" complexion makes it impossible for her to be Effie Munro's child. "Any anthropologist could have reminded him that the child of a mixed racial marriage has pigmentation approximately halfway between that of the parents." Eileen Snyder, after examining the seminal work of Charles B. Davenport on miscegenation in the British West Indies (1913), similarly states that it would have been impossible for anyone other than two at-least-tan-skinned blacks to produce a "coal-black" offspring. Patrick E. Drazen attempts to refute Snyder's conclusions, pointing out that Davenport's studies ignore dominant-recessive gene theory and that Snyder's blanket statement fails to take into account that genetics is a science of probabilities, not certainties. While it is not likely that a "coal-black" descendant would result, it is not impossible. Further, Drazen suggests, Effie Munro may have been a mulatto herself.» CONAN DOYLE, *The Yellow Face*, *Cit.* p. 471, Note 22. Like systematically realized Meta-Abductions, the complexion of Lucy is not categorically impossible or contradictory but rather exemplary by way of being hyperbolic. What was unaccountable for the first was the claim to repeatability, here the hyperbolic character of the skin of the child, even if theoretically possible, is justified in the same way by its relationship with the plot. It is a given about which Sherlockians speculate freely in order to find justifications for its happening at a real world level, which is the converse of what Bayard sought to do but on the same plain. Both the readings seek to bypass the fictional nature of the texts.

The issue of race in this case is interlaced with the issue of rationalism thus allowing for a new conclusion to emerge. An elaboration around a different kernel gains power by positioning itself against the expectation that corresponds to our model. Why would Doyle have his portrayal of dark skin sensationalized when its accurate counterpart would have worked the same, albeit less powerfully? On this subject, a study by Jinny Huh is paramount in showing how the blackness of the girl becomes the kernel of Doyle's tale if read through the lens of the concept of passing, that is the ability of a person to be seen as a member of an identity group or social category, such as a racial identity or an ethnicity. In Huh's reading,

> […] unmasked, Lucy's hyperbolic blackness is safely revealed, returning her to her "rightful" identity. […] The crime of passing is self-solving and nature wins out in the end, even without a successful detective figure. […] In Doyle's story, what is "safe" about Lucy's act of racial passing as well as Holmes's failure is that Lucy's race is ultimately detectable and visible. The hybrid body here is a nonthreat, resulting in a "safe ending."[202]

Such story, like *The Speckled Band*, can find its conclusion when its fictional "natural" taxonomy is restored. The fact that neither the snake nor the skin of the girl correspond to common AW specimens does not compute in the conclusiveness of the story, its visibility does. The concepts of *telos*, order and legibility, as they are maintained within the fictional world, are the pivots around which the detective can even, safely, fail. If he fails because truth comes out on its own, Huh notes, none of the principles of order are invalidated, the logic of the world is secured and the effect of dissolution of the tensions of the plot is, once again, gained. So it happens that Watson's introduction to the *Yellow Face* tellingly locates Holmes' failing stories, which coincide with those in which no other could find an answer after him, outside the domain of the narratable,

[202] JINNY HUH, "Whispers of Norbury: Sir Arthur Conan Doyle and The Modernist Crisis Of Racial (Un)Detection", in *Modern Fiction Studies*: *Race, change and the Fictions of Identity*, Vol. 49, No. 3, The Johns Hopkins University Press, Baltimore, Fall 2003, p. 570. The essay contains a review of the relationship of Conan Doyle with blackness and race. Especially important in it are Huh's investigation of the shock Doyle experienced upon meeting black American abolitionist le Henry Highland Garnet, American consul at Monrovia, and of the often-overlooked early reports of his voyages in western Africa, in which the critic elicits the features of the author's colonial gaze, as well as his racial anxieties.

invoking a connection between the ideas of nature, the conclusiveness of the plot, and truth-in-fiction[203]. It is, fascinatingly, "natural" to Watson not to tell them:

> [I]t is only natural that I should dwell rather upon his successes than upon his failures. And this not so much for the sake of his reputation […] but because where he failed it happened too often that no one else succeeded, and that the tale was left forever without a conclusion. Now and again, however, it chanced that even when he erred the truth was still discovered[204].

Watson seems to admit openly that his reason to narrate is to have a successful conclusion for his detective rather than anything else. At the same time suggesting that those un-narrated stories, we can imagine, are the ones that would put the readability of the world in crisis. That same readability that connects spiritism and positivism, *Firasah* and the evidentiary paradigm. Unfortunately, we cannot always rely on Watson for confirmation of this hypothesis… Unless we wish to send a letter to 221b Baker Street and patiently wait like many readers before us.

In the next chapter, we will apply the same method to American detective fiction after WWII. This broad jump will allow us to recuperate Narcejac's ideas of cybernetic *telos* in a more circumstantiated manner, and to show how plot conclusions intertwine with world-formation in different contexts and how different ideas of how nature and the individual connect in different worlds of fiction.

[203] HUH, *Cit.* p. 571.
[204] CONAN DOYLE, *The Yellow Face*, *Cit.* p. 449.

Chapter 2
Against the *Telos*: Thomas Pynchon

I'm ready to go anywhere, I'm ready for to fade
Into my own parade, cast your dancin' spell my way
I promise to go under it

Bob Dylan, *Mr. Tambourine Man* (1965)

What the system calls organization—linear organization—is a systematic cage, arbitrarily limiting the possible. It's never worked before. It always produced the present.

San Francisco Seed (1967)

2.I. *Telos*, or To Each Detective its (Meta)physics

The history of detective fiction and its examination within the science-literature relationship often characterizes the period from the early 1900s to the 1950s and 60s as a time marked by challenges in detective epistemology. Writers, with varying degrees of experimental inclinations, gradually began to withhold conclusive endings that had long been a hallmark of the genre. Implicitly considering detective fiction as a genre uniquely suited for depicting the pursuit of truth, this shift in how writers portrayed their characters' quests is frequently linked to a growing detachment from intuitive scientific approaches, a decline in traditional empiricism, or the notion that the major scientific breakthroughs of the early 20th century had unsettled the foundations of science, diminishing its ability to fully comprehend the world. These trends are often characterized as intellectual consequences of advancements in the theoretical sciences during the early 20th century. The scientific theories deemed most disruptive include Einstein's Theory of Relativity (at the century's outset), quantum mechanics, particularly from Planck and Bohr to Heisenberg's Uncertainty Principle and Schrödinger (from the 1930s onward), alongside Gödel's Incompleteness Theorems in logic (1931) and Lorenz's Chaos Theory (1963). The broad timeframe of these advancements aligns with a similarly extensive period of interest for theorists of

detective fiction. In exploring connections between disciplines, these theorists often draw parallels among writers who are chronologically, thematically, and stylistically disparate. Trying to find order in the broad scope of their discourse, critics of this crisis have nonetheless held an explicit "historical" view of mutations in the detective genre, roughly distinguishing "old" and "new" detectives, scanning history in search for lenses through which to explain the literary forms they studied, progresses in science being one of them.

Scholars often apply this perspective in their study of the more experimental forms of literature such as the modernist and postmodern. Within the broad *Enciclopedia delle arti contemporanee*, Andrea Cortellessa (2015), highlights the significant divide that emerged into the mind of writers after Einstein, picturing a clear separation between Newtonian physics and the new theories of the 20th century. Cortellessa calls this web of influences (including anachronisms in which authors seemed to anticipate future scientific discoveries) the "invisible empire", evoking a dichotomy with the "visible" Newtonian science of which Kern spoke too. Along the first half of the century, limitations and inconsistencies in human understanding seemed to manifest in the unseen realms of the extremely small and extremely large, as well as in the logic and observational instruments of science. This led to a situation where the century's discoveries were at times portrayed by writers not as triumphant advancements but as acknowledgments of the limits of science. In the realm of quantum physics, for instance, simple empirical knowledge and intuitive Newtonian laws began to appear inconclusive, suggesting that, when taken to its extremes, any logical or rational process could only progress through unverifiable leaps[205]. From these reflections, applied to Carlo Emilio Gadda's detective fiction, Cortellessa interprets the open ending of *Quer Pasticciaccio brutto de via Merulana* (1946, 1957) as a realistic one. A realism, he writes, of a kind that privileges the "invisible empire" of the new scientific influences over the mere mimicking of the newspaper facts from

[205] ANDREA CORTELLESSA, *L'impero invisibile*, in *I portatori del tempo. Enciclopedia delle arti contemporanee*: *Il tempo inclinato*, Achille Bonito Oliva (Ed.), Vol. III, Electa, Milano, 2015. p. 322.

which the author, an engineer, was taking his story[206]. The truncated ending, played on the insecurity of the detective among at least two solutions, grants for a metaphorical "superposition of states": multiple answers could be given to the *whodunit* question, but none is.

Darconza (2013) also predicates the differences between the early period of detective fiction and its postmodern developments on analogies with scientific disciplines. Dealing with Dürrenmatt's "Requiem for the Detective Novel" (*The Pledge*, 1958), Darconza identifies a rift between the detective and his world, and connects it with a new form of Cartesian doubt stemming from contemporary scientific research, resurrecting Jefferson Hope's bogeyman:

> In a universe dominated by chance, how can we rely on anything other than our own construction of reality? And what degree of reliability can we grant to our senses if contemporary scientific research has only shown that our sight and hearing are nothing more than receivers of electromagnetic waves and, as such, do not give rise to unique constructions of reality?[207]

The question of empiricism that informed "classic" detective fiction takes center stage. If the senses are nothing but electrical impulses sent to the brain then, like in *The Matrix*, the idea of a truthful relationship between the detective and the world seems to fall apart. From a historical perspective, Maurizio Ascari, in the foreword of Darconza's essay, agrees with Marjorie Nicholson that the Golden Age detective tradition set itself against the epistemic relativism of modernist literature in the mind of the cultivated readers, opposing a "selective" and "teleological" structure to the "inclusivity" of the modernist masterpieces. Against the "fashionable pessimism" of contemporary highbrow literature, Nicholson saw Golden Age detective fiction as a place where a unique truth still existed, along with an embraceable morality and a stable

[206] *Ivi.* p. 330.

[207] «[I]n un universo dominato dal caso […] come possiamo affidarci a qualche cosa che non sia unicamente la nostra costruzione della realtà? E quale grado di affidabilità possiamo concedere ai nostri sensi se la ricerca scientifica contemporanea non ha fatto che dimostrare che la nostra vista e il nostro udito altro non sono che ricettori di onde elettromagnetiche e, come tali, non danno origine a costruzioni univoche della realtà?» GIOVANNI DARCONZA, *Il detective, il lettore, lo scrittore: L'evoluzione del giallo metafisico in Poe, Borges, Auster*, Aras, Fano, 2013. p. 61. My Translation.

and observable world[208]. Works like Dürrenmatt's requiem offered an idea of the police case that is far from these certainties. Within it, police cases are said to be often solved by luck, a conception that lacks the "providential" guarantees of earlier stories. Dürrenmatt has his investigator Matthäi expose the idea of inherent *telos* that informed detective fictions. The controlled world they generated is considered by the detective «possible» but «a lie»[209]. To say it with Marie-Laure Ryan, within postmodernism:

> To the "old man's reality" [réalité à papa] of Newtonian physics, the Age of Enlightenment, and positivism, postmodernism substitutes the vision of a reality based on paradox, constructed by the conventional rules of a game that we define ourselves, and whose knowledge can only be fragmentary and subjective[210].

In a world where the epistemological relationship between humans and the world is ultimately broken, postmodernists govern their plots with self-consciously arbitrary rules, and the *telos* of the detective enters into crisis. From their sub-liminal use, which corresponded to a realistic intent (Doyle writing the plot of Holmes so that it is credible, so that it seems to emerge from the facts and not vice versa), postmodern authors move to a conscious use, the intentions of which we will discuss shortly.

These are the factors involved in the breaking of *Rule M*, base of the *telos* of the detective, which was played on the Procrustean bed of adapting each time the rules of the world and the epistemic sphere of the detectives to correspond to give a conclusive ending, with all its sociological, axiological and metaphysical implications. This way, in 1984, Stefano Tani and Stefano Sani had characterized a new detective figure as «covering an opposite role»[211] than that of the Poesque "resolvent" detective. This

---

[208] MAURIZIO ASCARI, *Introduzione: L'infinito è un gioco di specchi*, in *Il detective, il lettore, lo scrittore: L'evoluzione del giallo metafisico in Poe, Borges, Auster*, Aras, Fano, 2013. pp.21-22.
[209] FRIEDRICH DÜRRENMATT, *The pledge*, Knopf, New York, 1959, p. 15. DARCONZA, *Cit. Ibid.*
[210] «"À la réalité à papa" de la physique newtonienne, de l'âge des Lumières et du positivisme, le postmodernisme substitue la vision d'une réalité fondée sur le paradoxe, construite par les règles conventionnelles d'un jeu que nous définissons nous-mêmes, et dont la connaissance ne peut être que fragmentaire et subjective.» MARIE-LAURE RYAN, "Cosmologie du récit. Des mondes possibles aux univers parallèles", in *La Théorie littéraire des mondes possibles*, Françoise Lavocat (Ed.), CNRS Éditions, Paris, pp. 61-62. My Translation.
[211] STEFANO TANI, STEFANO SANI, "The Dismemberment of the Detective". In *Diogenes*, Vol. 30, No. 120, Sage, New York, 1982, p. 23. See also STEFANO TANI, *The Doomed Detective: The Contribution of the Detective Novel to Postmodern American and Italian Fiction*, Southern Illinois University Press, Carbondale, 1984.

tendency, which in Tani applies to both the hard-boiled and the "postmodern" detective, becomes the symbol of the early 20th century brand of «acceptance of mystery—as [the detective] is either unable to find a solution or finds an unacceptable one.»[212] In the inconclusive endings of the new forms, Tani finds the condensation of a generalized questioning of human reason:

> [T]he recent literary detective indeed managed to stop discovering in the present about the past (the mystery, the murder) and thus became more of a detective, actually a detective in tune with today's perplexities about the scope and possibilities of human reason.[213]

The new detectives' representation evolves into a «a dramatization of a human condition «refusing [once again] any system or *telos*»[214]. The suspended, unsolved mystery becomes central, and not only as a device aimed to challenge the reader's horizon of expectations, but as the prop for a dramatic expansion of the sociological scope of the genre[215]. Even if genres and subgenres like the hard-boiled and the postmodernist sometimes share features like the open ending, the people who write experimental detective fiction are separated from those who write for "the simple art of murder". In its postmodernist formulations the detective becomes a «wider symbol»[216], with a philosophical purport the character was supposed not to have in the past. To describe his object of study, Tani uses the term «anti-detective story», which he derives from Spanos[217], and develops it into a definition of anti-detective novel as «a deliberate negation» of previous forms of this type of literature[218]. Deprived of its stable, "divine" truths, early detective fiction becomes the touchstone against which a

---

[212] TANI, *The Dismemberment of the Detective*, *Cit. Ibidem.*
[213] *Ibidem.*
[214] *Ivi.* p. 24.
[215] «The detective novel, a reassuring "low" genre which is supposed to please the expectations of the reader, becomes the ideal medium of postmodernism in its inverted form, the anti-detective novel, which frustrates the expectations of the reader, transforms a mass-media genre into a sophisticated expression of avant-garde sensibility, and substitutes for the detective as central and ordering character the decentering and chaotic admission of mystery, of non-solution.» *Ibidem.*
[216] *Ibidem.*
[217] WILLIAM V. SPANOS, "The Detective and the Boundary: Some Notes on the Postmodern Literary Imagination", in *boundary 2*, Vol. 1, No. 1, Duke University Press, Durham, NC, (Autumn, 1972), pp. 147-168.
[218] TANI, *The Dismemberment*, *Cit.* p 24.

different form of literature is created. Spanos already brough forth this historical macro-division, identifying the advent of existentialism and of the theater of the absurd with the end of the *pièce bien faite* of the Christian-positivist narrative present in that kind of detective fiction[219]. Spanos had also put science in the mix, seeing that bourgeois literature had «the obsessive expectation for endings or, more precisely, for solutions that the modern experience of the world will not justify (despite the effort of science, technology, and […] the industrial-military complex)»[220]. To this he opposed:

> […] [t]he militant refusal of the dramatists of the absurd to fulfill expectations or, putting it in another way, to create plays with beginning, middle, and end, [which] has its ultimate source in or at least can best be explained by the existential philosophical criticism of the traditional Western view of man in the world, especially as it has been formulated by positivistic science and peddled by the vested interests of the modern technological urban culture.[221]

Fundamentally, with Tani, the use of the devices of the *mystère expliqué* starts to be seen as an opportunity to dramatize a search for truth that critics interpret as broader than that implied by the likes of Conan Doyle. Definitions of sub-genres to group authors that present this characteristic flourish. Merivale and Sweeney (1999), use a term by Holquist (1971)[222] and call it *metaphysical detective story*. They do so to emphasize how, rather than "negating" the detective-form, the end of the closed plot explodes its possibilities, always with a view to exceeding the positivist worldview and its "realité à papa" while maintaining the genre's appeal to portray an epistemic quest.

---

[219] SPANOS, *God and the Detective*, *Cit.* p. 17.

[220] *Ibidem.* A similar association is notably brought forth by contemporary Italian philosopher Umberto Galimberti. In Galimberti's view, repeated often throughout his production, Christian religion always considers the past as negative and the future as positive. Original sin is the past (negative); redemption is the future (salvation). This optimistic view of the future has been taken up by science, which considers the past ignorance, the present research, and the future progress. Marx, for whom the present is revolution and the future is justice, also inherits this tradition, and Freud too, since he considers the past as trauma, the present as analysis, and the future as healing. See for example, specifically regarding science and technology, UMBERTO GALIMBERTI, *L'epoca moderna e il primato della scienza e della tecnica come deriva teologica*, in *Psiche e techne. L'uomo nell'età della tecnica*, Feltrinelli, Milano 1999, pp. 293-303.

[221] Spanos, *God and the Detective*, *Cit. Ibidem*.

[222] Holquist expresses the same opinion on teleology and on the sociology of the genre we find in Tani. «[T]he new metaphysical detective story finally obliterates the traces of the old which underlie it. It is non-teleological, is not concerned to have a neat ending in which answered, and which can therefore be forgotten. No, the new story is purged of such linear teleology, it is not […] mass produced, printed in the sense other books are. It is rather a fresh sheet of paper, on which the reader […] must hand letter his own answers». Holquist also had similar insights to Eco, stating that detective fiction such as Poe and Doyle's « holds to the Scholastic principle of *adequatio rei et intellectus*, the adequation of mind to things, the belief that the mind, given enough time, can understand everything. There are no mysteries, there is only incorrect reasoning.» MICHAEL HOLQUIST "Whodunit and Other Questions: Metaphysical Detective Stories in Post-War Fiction Author(s)", in *New Literary History: Modernism and Postmodernism: Inquiries, Reflections, and Speculations*, Vol. 3, No. 1, Johns Hopkins University Press, Baltimore, MD, (Autumn, 1971), p. 141, 153.

In the words of the critics, «[t]hese stories [they write] do subvert traditional detective-story conventions, but not necessarily as […] "a deliberate negation" […]. Rather, these stories apply the detective process to that genre's own assumptions about detection»[223]. A *metaphysical detective story* then becomes:

> […] a text that parodies or subverts traditional detective-story conventions-such as narrative closure and the detective's role as surrogate reader-with the intention, or at least the effect, of asking questions about mysteries of being and knowing which transcend the mere machinations of the mystery plot.[224]

A PWT perspective takes on these issues from a slightly different point of view. Firstly, it demonstrates that there is indeed a metaphysics, or at least—to say it with Bischi and Darconza—a peculiar set of axioms[225] to Holmes' stories that one could easily call "metaphysical". Firstly, Principles like *Rule M* govern the world surrounding detectives and the interactions they have within it, extending beyond the natural laws present in the text. These principles and the language that led us to extract them can be viewed as responding to the writer's relationship with their world, including their opinion over the principle of causality and spiritual justice. Therefore, referring to detective stories with open endings as "metaphysical" in the sense of an expansions of the narrative scope of detective fiction, can be considered a reduction error towards early forms that share this characteristic. While early detective fiction may not have aimed to challenge readers' perceptions of reality, when viewed through the lens of historical discourses on science, it reveals underlying assumptions and beliefs that nonetheless prompted scholars to question them. From a PWT perspective, distinct physical-metaphysical frameworks give rise to different fictional worlds, constructed through their portrayal in texts.

---

[223] PATRICIA MERIVALE, SUSAN E. SWEENEY, *The Game's Afoot: On the Trail of the Metaphysical Detective Story*, in *Detecting Texts: The Metaphysical Detective Story from Poe to Postmodernism*, Patricia Merivale, Susan E. Sweeney (Ed.), University of Pennsylvania Press, Philadelphia, 1999. p 3.

[224] GIAN ITALO BISCHI, GIOVANNI DARCONZA, *Il labirinto e la farfalla: Il postmoderno in letteratura e matematica*, Morcelliana Brescia, 2018. p. 2.

[225] *Ivi*. p. 10.

Secondly, scholars employ periodizations that associate forms of detective fiction such as the hard-boiled and more experimental forms, basing their analogies on macro-regularities of the plot (like the open ending) or the position of the characters with respect to their sense of existential and epistemological security in the world. From the perspective of science-literature relationship, one can extract from each author different influences that correspond to different positions of fictional worlds in relation to it, sometimes with consequences that contradict these broad categorizations. PWT allows for a partial distancing from literary-historical interpretations that prioritize literary intertextuality, such as those proposed by Tani and Merivale-Sweeney. This not to suggest that each literary work exists in isolation from its literary tradition, but rather to put the focus on how the fictional world created within each work can also testify independently from its contemporaries and predecessors to its relationship to science, history and the perspectives on the world that from these derive. As Dechêne correctly observes:

> "unreadable" mysteries […] under the deceptively monolithic appearance of subverting traditional detective-story conventions, offer a multiplicity of motifs—the overwhelming presence of chance, the unfulfilled quest for knowledge, the urban stroller lost in a labyrinthine text—that generate a vast array of epistemological and ontological uncertainties explored by the genre[226].

Detective stories may be the form with which many dramatized the quest for knowledge as a theme, but it is not with a unitary project in mind that different writers wrote open-ended detective fictions along the 20th Century. As much as there were many rule-books on how to write "proper" detective fiction, there has been no manifesto for subverting it.

Dechêne, along with Merivale-Sweeney and Hodgson, have the merit of counterbalancing their periodization and genre-formulations by proposing them within alternate histories that seek for their origin in the past (the first two trace their Metaphysical Detective Fiction and Metacognitive Mystery Tales back to Poe, Hawthorne, Melville and James) or witnessing self-reflexivity in classic detective

[226] DECHÊNE, *Cit.* p. 3.

fiction itself (think of Hodgson's idea of the hoax, or of the Freudian interpretation that wants Doyle as his own saboteur).

The standard vision of postmodern culture we have seen can be traced back to Lyotard's idea that sciences as quantum physics and Gödelian logic set themselves in the way of the positivist push towards total knowledge and perfect efficiency[227]. In *The Postmodern Condition* (1979) Lyotard identified two sciences: a modernist one and a postmodern one. The former dedicated to pragmatism, performance, and the mathematization of reality up to the most unpredictable phenomena like the social sphere, the latter focused on profound methodological questions, the detachment between common intuition and the profound truths of reality, and meta-reflection on its own tools and limits, emphasizing ultimate indeterminacy. As a master narrative (or part of one), science was subject to the skepticism that defined the postmodern condition. Lyotard linked the study of society as a system to thermodynamics where the predictability of the system's evolution is based on knowing all variables like in a modernist rendition of Laplace's Demon, unattainable within the framework of postmodern science. The philosopher cited Borges' story of the emperor's attempt to create a perfect map of his empire leading to the country's ruin. The new physics was probabilistic rather than deterministic, with limits in precise measurement and predictions.

Now, as many have argued[228], this view of the progress of science could be seen as a misrepresentation. Despite its self-reflections on its own limitations, science never stopped in view of neither probability nor apparently contradictory objects, and neither it lost its claim to make humans capable of understanding the world around them in any pragmatic way. As noted by Katherine Hayles[229], the presence of fluid and

[227] See LYOTARD, Cit. pp. 53-60.
[228] A keen example of such confutation can be found in DAVID SPURRETT, "Lyotard and the Postmodern Misunderstanding of Physics", in *Theoria*: *Science and Civilization*, No. 93, Berghahn Books, Brooklyn, NY, 1999. pp. 29-52.
[229] «The claim is sometimes heard, for example, that the science of chaos challanges traditional ideas of how science is done. But the science of chaos is not opposed to normal science. It *is* normal science.» N. KATHERINE HAYLES, *Complex Dynamics in Literature and Science*, in *Chaos and Order: Complex Dynamics in Literature and Science*, University of Chicago Press, Chicago, IL, 1991. p 4.

imprecise concepts like “chaos” or “indeterminacy” neither was experienced as a crisis within science nor did it ever stand automatically for an expansion of the “metaphysical” scope of a narrative. Lyotard himself had noted that «classical determinism continue[d] to work within the framework of the unreachable—but conceivable—limit of the total knowledge of a system»[230].

The idea of a perfect mind capable of fully knowing a situation, reconstructing and predicting all the preceding and subsequent events over time, was a construct of thought even at the time of Laplace, a boundary myth that survived only in the minds of the most religiously determinist individuals like Conan Doyle. In actuality, the use of statistical tools and probability calculations had integrated perfectly into the natural sciences, allowing for the survival of its limit myths and for a relationship with reality that was still perfectly fertile, satisfying both theoretical and pragmatic needs. Lyotard was writing in the eighties. In the fifties and sixties, as always, science was one of the most powerful narrations in terms of both legitimacy and fascination, contrasting the widespread construal of the missing endings of detective stories as the fruit of a postmodern epistemological skepticism.

A series of concepts and disciplines that appear in the pages of Lyotard can highlight a weak point in the critics’ argument especially for what concerns Pynchon. These concepts are negative feedback, thermodynamics, entropy, digital communication, and the idea of a disconnection between science and its object of study. In the late forties and early fifties, in the United States, a scientific discipline was born that connected all these ideas in the sense to which Lyotard opposed, the name of this discipline was cybernetics. Lyotard had started his argument precisely by citing the new discipline[231].

The influence of this science is sometimes overlooked in Pynchon, whose criticism occasionally characterizes the writer's work as skeptical of logical-rational

[230] LYOTARD, *Cit*. p. 56.
[231] *Ivi*. p. 3.

observation methods[232]. This skepticism is construed as arising from the impact of advancements in the "sciences of indeterminacy". At other times, Pynchon's critics also reduce the significance of science in his work to the principles of thermodynamics and information theory, which are addressed together in cybernetics. By focusing on the author's declared influences and his bibliography more generally, and using PWT, we will try to clarify his stance on these issues, which are deeply connected to its relationship with science and are part of a broader political-existential context involving ideas on work, the objectives of world creation, and the concept of possibility itself.

2.II. Science at Work

Within the broad scope of the history of detective fiction it is possible to offer examples of how the science of the late 1940s and early 1950s was still perfectly capable of exerting a positivist influence on detective literature. The critics mentioned above overlook a literary genre that emerged during those years in the United States. This genre evolved from the same hard-boiled tradition which was also influencing the deconstructions of highbrow literature. It recaptured the essence of life's fragility and the world's disorder, but instead of relying on the cleverness of the solitary hero, it employed "scientific-bureaucratic" methods drawn from real-life practices and implemented by groups of professionals of law enforcement. It is the police procedural. A brief analysis of this type of literature is useful as a touchstone of comparison with the work of Pynchon, that shares parts of its cultural background but positions itself towards it in a radically different way.

Stephen Knight, in his study of the ideologies underlying detective fiction, identifies in the first volume of Ed MacBain's *87th Precinct* series—titled *Cop Hater* (1953) —a few characteristics that constitute a departure from the forms that had preceded it and from those we have so-far described. According to Knight, the true motor of McBain's novels is a form of conservative moralism coupled with a post-war

[232] This happens for example in MCHALE, *Cit*. p. 22, 26. DANIELA DANIELE, *Città Senza Mappa*, Edizioni dell'Orso, Alessandria 1994. p. 15, note 7.

appeal for bureaucratic order that motivates their exhibitions of violence, procedure and science. McBain's stories are in fact rich in pseudo-technical devices like the reproduction of documents and expert reports. These elements interrupt the flow of narration and impart a scientific atmosphere to the investigative process. However, unlike it happened in certain detective stories of the "puzzle" tradition, these technical elements prove "hollow"[233]. The documents do not aid the reader in solving the crime depicted in the novel "before the detective", they merely confirm information that the text had already provided by other means. They are thus simulacra of a new scientific-bureaucratic approach to reality. They are also elements of scientific divulgation.

There is a scene in *Cop Hater* in which a technician explains elements of hematology and bloodstain pattern analysis to a detective on the scene, producing a chart on the matter which is reproduced as such in the book[234]. Why would a professional carry such a didactical tool on the scene of the crime? It is not important. The reader feels let in on the procedure and is fascinated by the power of technique.

In these fictions, the heroic and unique protagonists of the Golden Age and hard-boiled detective fiction give way to regularly employed police officers, with a routine, limited intellectual abilities, and a solid standardized procedure which is what really enables them to do their job. Even crime is depersonalized, mechanically stemming from a system whose socially ingrained injustices are not investigated. Echoing this perspective, the city itself, which was already as much a character in the Holmes stories as in the hard-boiled ones, undergoes a turn in the stylistic connotation of some of its descriptions. It seems to depopulate of human life and move as a collection of autonomous objects. Knight quotes a passage from *Cop Hater*:

> The lot had once owned an apartment house and the house had been a good one with high rent. It had not been unusual, in the old days, to see an occasional mink coat drifting from the marbled doorway of the apartment house. But the crawling tendril of the slum had reached out of the brick, clutching it with tenacious fingers, pulling it into the ever-widening circle it called its own.[235]

[233] KNIGHT, *Cit.* p. 175.
[234] ED MCBAIN, *Cop Hater*, Pocket Book, New York, 1999. pp. 168-169.
[235] Quoted in KNIGHT, *Cit*. pp. 178-179.

In this way of thinking Knight finds a new idea of society, characterized by «automatic processes, anxiety about city living, itself a product of commodity-based culture, […] felt in and through objects»[236].

Knight connects this way of thinking to the work of sociologist Daniel Bell, known to most as the "anti-Marxist"[237] theorist who coined the term "postindustrial society". In 1961, the sociologist had published *The End Of Ideology: On the Exhaustion of Political Ideas in the Fifties* in which he discussed how «science, knowledge and technological research, rather than industrial production and the extraction of the surplus value [are] the "ultimately determining instance"» of postindustrial society[238]. Bell's visions on large issues such as wage labor and crime bear some common marks, outlining Lyotard's vision of hyperbolic efficiency and organization. One is the promotion of centralized means of control. In his essays, in places where "rationalization" and standardization of public and political processes intervene, Bell argues, crime is forced to move away because «the problem of crime does not rest upon the truisms about human nature, but on the way the methods of securing gains are *organized*».[239] The impact of his views is extremely important if one wants to deal with the American culture of the 1950s and 1960s.

In the chapters of his essay *Work and its Discontents*, Bell discusses the issues of the evolution from Fordism-Taylorism to the idea of automation. Fascinatingly, he uses references popular today in detective fiction studies. Years before Foucault, the sociologist cites Bentham's Panopticon as a building that is half prison and half factory, model, in his view, of countermeasures to human's laziness[240]. He quotes Aldous

---

[236] *Ivi.* p. 179.
[237] FREDERIC JAMESON, *Foreword*, in JEAN-FRANÇOIS LYOTARD, *The Postmodern Condition: A Report on Knowledge*, University of Minnesota Press, Minneapolis, 1984. p. xiv.
[238] *Ivi*., p. xiii.
[239] DANIEL BELL, *The End of Ideology*: *On the Exhaustion of Political Ideas in the Fifties*, revised edition, Collier, New York, NY, 1962. p. 44. Emphasis in the original.
[240] «This identification of factory and prison was, perhaps, quite natural for Bentham. Prison and factory were united in his philosophical mind by the utilitarian conceptions of tidiness and efficiency. The root of utilitarianism—this new mode of conduct which Bentham elaborated—is a passion for order, and the elaboration of a calculus of incentives which, if administered in exact measures, would stimulate the individual to the correct degree of rectitude and work.» *Ivi.* p. 228 .

Huxley: «"Today every efficient office, every up-to-date factory is a panoptical prison in which the workers suffer . . . from the consciousness of being inside a machine."»[241] The age of the measurement of time above all else (which Bell contrasts with Bergsonian *durée*) is also the age of labor surveillance.

Religious metaphors abound. Engineering, measurement, hierarchies and surveillance make Fordism-Taylorism a «Watching Hand of God»[242] capable of overseeing and manipulating at the same time. «One of the prophets of modem work was Frederick W. Taylor, and his stopwatch was his bible».[243] Bell drew an analogy between Taylor and Freud who in 1929 had written *Civilization and its Discontents*. He quotes him in a footnote:

> "Order," said Freud, "is a kind of repetition compulsion by which it is ordained once for all when, where and how a thing shall be done so that on every similar occasion doubt and hesitation shall be avoided. The benefits of order are incontestable: it enables us to use space and time to the best advantage, while waiving expenditures of mental energy. One would be justified in expecting that it would have ingrained itself from the start and without opposition into all human activities; and one may well wonder that this has not happened, and that, on the contrary, human beings manifest an inborn tendency to negligence, irregularity and untrust-worthiness in their work, and have to be laboriously trained to imitate the example of their celestial models.[244]

God's watchful hands, the stopwatch Bible, "celestial models" of man's work. A picture emerges of human labor as reticent, "negligent", passive, as if inherently resistant, rebellious against a divine order. «If 'conspicuous consumption' was the badge of a rising middle class, 'conspicuous loafing' is the hostile gesture of a tired working class.»[245] To this, an unstoppable, reliable, constantly productive and tireless divine work is opposed. Analysis and control are at the service of this new scientific-divine model of work:

> What Taylor did was to split each job into its component operations and take the time of each. This, in essence, is the whole of scientific management: the systematic analysis and

[241] *Ivi.* p. 229. Bell doesn't cite the source which is Huxley's essay on the *Carceri d'Invenzione* etchings by Piranesi. ALDOUS HUXLEY, *Prisons: With the "Carceri" Etchings by G. B. Piranesi,* Trianon Press, Paris, 1949. p. 15.
[242] BELL, Cit. p. 230.
[243] *Ivi.* p. 231.
[244] *Ivi.* p. 229.
[245] *Ivi*. p. 239.

> breakdown of work into the smallest mechanical component and the rearrangement of these elements into the most efficient combination.[246]

Thus emerges the popular image of the famed "one best way". «Not only could the pattern of machine work be broken down into elements, but human motion, too, could be 'functionalized,' and the natural movements of arms and legs could be ordered into a 'one best way' of performance.»[247]

The basic philosophy we want to extract from these passages and which partly reflects in McBain's novels, is that there is only one development, the most efficient and "divine" possible way, which can be imposed on the worker and that «[t]he penalty for violating these rules is *waste*.»[248] This is the outline of Bell's concept of efficiency.

Freedom and reality itself are here connected in the worker's relation to labor. In the last section of Bell's essay, tellingly entitled *Ananche and Tanathos*[249], Bell introduces the idea that on the field of labor a game involving the *telos* and meaning of human life is being played, putting forward the question of what might happen once labor falls into the hands of machines, real inheritors of human labor because capable of achieving the divine work that escapes the irrational worker. The sentence echoes Samuel Butler's fears about automation and machine evolution[250]. «What will happen, then, when not only the worker but work itself is displaced by the machine?[251]»

The terminology used by the sociologist seems to match the one used by Spanos to discuss the late 1800s. Expanding on Knight's observations, we could speculate that

---

[246] *Ivi*. p. 232.
[247] *Ivi*. p. 233.
[248] *Ivi*. p. 234. My emphasis.
[249] Incidentally, the "Ananche" or Greek destiny was mentioned by Gadda in relation to determinism. Determinism is depicted as capable of giving a reading of Ananche but not its interpretation. CARLO EMILIO GADDA, *Racconto italiano di ignoto del novecento*, in *Opere*, Dante Isella (Ed.), Vol V., *Scritti Vari e Postumi*, Garzanti, 1988-93. p. 460.
[250] Samuel Butler is widely recognized as one of the earliest to express fears towards the development of machines in the now familiar form of equating them to a species destined to substitute humanity. This had consequences in his fiction and even influenced famous SF writers such as Frak Herbert, who named an antecedent of his Dune saga that involved the distruction of machines "Butlerian Jihad". See SAMUEL BUTLER, *Darwin Among the Machines*, in *The notebooks of Samuel Butler*, Henry Festing Jones (Ed.), E.P. Dutton, New York, NY, 1917. pp. 42-46. SAMUEL BUTLER, *Erewhon*, Penguin, London, 1976. FRANK HERBERT, *Dune*, Berkley Publishing Corporation, New York, 1977.
[251] BELL, *Cit.* p. 272.

McBain's portrayal of the police partly corresponds to this way of viewing work. The transformation of detective work into a machinic, efficient profession, whose interest lies in its scientific allure. Indeed, those were the years of a revolution in American police forces characterized by the standardization of procedures, carried out under the banner of Police Professionalism[252], which was bound to influence the genre that popularized it in its appeal to give readers an insight into the realities of police work. The human side these fictional officers' experiences is comprised of their daily lives, filled with violence and conventional private relationships: deaths and replacements in the workplace and marital life outside. As Knight's analysis reveals, this perspective, if coupled with the disinterest for the sociology of crime, is fundamentally conservative, highlighting a link between this political stance and the portrayal of sciences. In this context, Lyotard's skepticism towards grand narratives offers a significant reference point, particularly in his critique of the drive for control and efficiency.

Lyotard argued that the aspiration to perfectly calculate social systems was ultimately unachievable. While his critique, which was influential in the analysis of detective fiction, highlighted a crucial point, it also contained an opening towards a significant flaw from a scientific standpoint. It could be involved in depicting science itself as leading to its own deconstruction. This outcome was by no means a foregone conclusion. To gain a deeper understanding of this viewpoint, one must delve into the discipline that in Lyotard and Bell's texts[253] marked the post-war period: Norbert Wiener's discipline of cybernetics.

---

[252] «By the 1950's […] Police professionalism […] was swept up with the growing American emphasis on bureaucracy in business and industry. From this orientation, a professional police department was one that operated with a high degree of efficiency and effectiveness. Efficiency and effectiveness were measured by how well the department operated to objectively enforce the law and maintain the peace. Old styled foot patrol officers were replaced with faster more effective mobile patrols. Training requirements and standards of training began to arise. Police departments soon adopted other bureaucratic organizational principles of centralized organization, chain of command and communications, educational requirements, standards for training, spheres of competence, and so forth.» BRUCE L. BERG, *Policing in Modern Society*, Butterworth Heinemann, Boston, MA, 1999. p. 34.

[253] BELL, *Cit.* p. 267. In this edition, the same page appears, tellingly, as the epigraph of the volume. *Ivi*. p. 2.

2.III. Cybernetics, Power and the (In)evitable Future

In Wiener's terms, cybernetics is the unified study of «communication and control in the animal and the machine»[254]. It posits that there is a substantial similarity between the "regulatory mechanisms" of all complex systems, from machines to groups to living beings, and that underlying these mechanisms are processes of communication. It aims on the one hand to realize machines capable of replacing man in his function of controller of other machines, and on the other hand, to study certain physiological functions, concepts of organization, techniques of control and features of intelligence. While in Bell it was seen as responsible for a general fear of automation, in Lyotard it appeared as the ultimate iteration of the positivist impulse towards efficiency. Some confronted this view.

Critic of postmodernism David Porush, reading Wiener, suggested that the stance attributed by Lyotard to "postmodern science" was not an innovation challenging the principles of cybernetics and its positivist efficiency; it was its starting point. To the critic, Norbert Wiener harbored a fear of incompleteness that aligned him with the scientific outlook of the critics of detective fiction, especially Spanos' views on the dispel of the "multiverse" of possibilities by positivist ideology. A fear that evolved into a quest for answers:

> [T]he primary impetus to the cybernetic view came as a response to the irrefutable power of quantum physics, which originated twenty years earlier. Quantum physics showed the human observer's uncertainty into the center of the scientific stage, interposing human indeterminacy between the scientist's theory and reality. Cybernetics was framed as a response to what for many, including Einstein and Wiener, was this intolerable situation. It sprung from a neo-classical urge to banish probabilism or uncertainty from science, to co-opt the human role in favor of logic[255].

Porush describes a passage from Wiener's *The Human Use of Human Beings* (1950, 1954), book of divulgation of his theories, where the scientist «soars with wings of

[254] NORBERT WIENER, *Cybernetics: Control and Communication in the Animal and the Machine*, MIT Press, Cambridge, MA, [1948] 1961.
[255] DAVID PORUSH, "Reading in the Servo-Mechanical Loop", in *Discourse: On Technology (Cybernetics, Ecology, and the Postmodern Imagination)*, Vol. 9, Wayne State University Press, Detroit, MI, (Spring-Summer 1987), p. 54.

lead» and «turns theological»[256]. The passage reads as follows: «[t]his random element, this organic incompleteness, is one which without too violent a figure of speech we may consider evil; the negative evil which St. Augustine characterizes as incompleteness»[257]. However, instead of simply plunging back into Laplacian determinism, the new science of systems and order was based on the idea «that physics now no longer claim[ed] to deal with what will always happen, but rather with what will happen with an overwhelming probability».[258]

In Porush's reading, cybernetics contained something more than «the metaphor of information [that] gives us a means for seeing the underlying unity among theories across the disciplines.»[259] «Where *information*», he writes, «is a neutral and abstract term for a phenomenon, like *energy* or *matter* or *space* or *time*, *cybernetics* connotes a larger human institution, with […] a narrative stance all its own»[260]. The critic, writing in 1987, opposing a still common vulgate on postmodern culture, did not hesitate to state: «We live not in an Information Age but a Cybernetic One»[261].

But what is the narrative stance of cybernetics? For Porush cybernetics emerged in pursuit of reinstating a degree of certainty amidst the uncertainties of quantum physics. As happened in Lyotard, determinism had found its way to survive the advent

---

[256] *Ibid.*

[257] *Ibidem.* Wiener's comments on the same page are telling. «What has happened to physics since is that the rigid Newtonian basis has been discarded or modified, and […] contingency now stands in its complete nakedness as the full basis of physics. It is true that the books are not yet quite closed on this issue and that Einstein and, in some of his phases, De Broglie, still contend that a rigid deterministic world is more acceptable than a contingent one; but these great scientists are fighting a rear-guard action against the overwhelming force of a younger generation. One interesting change that has taken place is that in a probabilistic world we no longer deal with quantities and statements which concern a specific, real universe as a whole but ask instead questions which may find their answers in a large number of similar universes. Thus chance has been admitted, not merely as a mathematical tool for physics, but as part of its warp and weft. This recognition of an element of incomplete determinism, almost an irrationality in the world, is in a certain way parallel to Freud's admission of a deep irrational component in human conduct and thought.» NORBERT WIENER, *The Human Use of Human Beings: Cybernetics and Society*, Doubleday, Garden City, NY, [1950] 1954. pp. 10-11.

[258] *Ivi*. p. 10.

[259] PORUSH, *Cit*. p. 53.

[260] *Ibid*. Emphasis in the original.

[261] *Ibid*.

of the new science as a limit concept. Porush contended that writers had always conceived of machines as a stand-in for determinism[262]. In his view, Cybernetics had provided a more expansive outlook on the "machina mundi"[263] we glimpsed in Ginzburg, and postmodernists reacted to it. Writers started seeking solace from the technologization of the world within the "technology" of fiction, striving to immunize themselves against dehumanization by self reflexively treating their own oeuvre as machines, and thus ideally distinguishing themselves from it. The resultant product of this dialectical process is what Porush called cybernetic fiction[264], a fiction that deals with "cybernetic" objects such as androids and communication systems, while also dealing with itself as self-consciously fictional, as a meaning machine or communication technology in and of itself, subsuming views like Merivale-Sweeney's on the self-reflexivity of postmodernist literature to the influence of the new science.

For what concerns narrative *telos*, instead, there are two different ideas connected to the treatment of future states of things in Wiener: one that concerns the probabilistic direction of the whole universe and one concerning single closed systems. Both are connected to entropy. Wiener cited Willard Gibbs:

> As entropy increases, the universe, and all closed systems […], tend naturally to deteriorate and lose their distinctiveness, to move from the least to the most probable state, from a state of organization and differentiation in which distinctions and forms exist, to a state of chaos and sameness. In Gibbs' universe order is least probable, chaos most probable.[265]

The universe, guided by probability, is directed towards maximum entropy, to "chaos and sameness". Machines and living beings, on the other hand, reduce entropy by bringing order into the world. This is why cybernetics also had stakes in the concept of *telos* from a philosophical standpoint. To Wiener, «[m]achines are islands of order in a chaotic world [and] [t]o speak of a deterministic system aiming at an ultimate purpose

[262] «[T]here is an infinite variety of machines used figuratively by fiction, but only one thing that they signify: determinism.» DAVID PORUSH, *The Soft Machine: Cybernetic Fiction*, Methuen, New York, NY, 1985. p.16.
[263] *Ibid*.
[264] *Ivi*. p. x.
[265] WIENER, *Human Use*, *Cit*. p. 12.

is not contradictory»[266]. This desire to reintegrate the concept of *telos* into the very science of his time was original. As Malapi-Nelson noted, this «notion of a final cause had been cast out from mechanistic explanations due to the alleged fact that it locates "the cause after the effect", […] The cybernetic proposal of "teleological machinery" was, thus, controversial, to say the least».[267] Machines became «"islands of hope", […] pockets of intention and will, in the midst of the deadly indifference of entropy—the ever-present dark reminder that reality spirals down into oblivion»[268].

The nature of *telos* within scientific discourse was thus debated, but it nonetheless exerted a push on the collective imagination, filtrating into literature. Literary critic Tony Tanner connects this entropic view of the world to the sense of alienation that many American writers of the mid-century felt in the depersonalized urban environment, something similar to what Knight outlined in McBain's detective fiction[269]. It was the idea that progress brings about a loss in "distinctiveness", a uniformity that brings about less and less events until reality itself menaces to dissipate, which assumed the characteristics of an inescapable materialist eschatology. This is accompanied by Porush's idea of cybernetic literature, which, by being conceived as a machine, allows for its own conscious manipulation, protects its human author from the inhuman idea that the work emerges from him mechanically, and qualifies itself as a structure opposed to chaos. The non-connotated mathematics underlying Wiener's writings influenced literary interpretations through their divulgation, evoking vivid images of impending doom. Instead of being driven by God or Conan Doyle's concept of "soul" in the pursuit of universal justice and the ultimate individuation of sinners, Wiener's direction is either intrinsic to the machine or guided by mere probability and contingency leading towards the dissolution of all organization. The universe was

[266] PORUSH, *Reading*, *Cit*. p. 122.
[267] *Ibid.*
[268] *Ivi*. p. 137.
[269] «The even more widespread fear of the tendency of all things towards eventual homogeneity is another manifestation of the ubiquitous dread of 'entropy'.» TONY TANNER, *City of Words: American Fiction 950-1970*, Harper & Row, New York, NY, 1971. p. 142.

depicted as heading towards decay, while machines, with their inherent but predictable purpose, opposed this trend.

All systems, whether biological, mechanical, or even abstract entities like societies and groups, possessed their own teleology and could be analyzed using similar equations. Wiener illustrated this concept with the example of a neurological patient attempting to drink from a glass of water. When faced with a positive feedback issue in his goal of reaching the glass, the patient exhibited movements resembling those of an anti-aircraft turret experiencing the same problem: excessive, uncontrolled, escalating oscillations. It is against this analogy that philosophers like Hans Jonas argued, advocating for a distinction between machinic purpose and human will[270], between ends and endings like McIntyre would do years after talking about Kafka.

Cybernetics very consciously intercepted metaphysical preoccupations and remained infused with theological language while depriving it of any push towards a radical distinction between machines and living beings. As Wiener wrote:

> […] such words as life, purpose, and soul are grossly inadequate to precise scientific thinking. […] It is […] therefore, best to avoid all question-begging epithets such as "life," "soul," "vitalism," and the like, […] there is no reason why [machines] may not resemble human beings in representing pockets of decreasing entropy in a framework in which the large entropy tends to increase.[271]

In his *God & Golem, Inc.: A Comment on Certain Points Where Cybernetics Impinges on Religion* (1964), the book here quoted, Wiener expresses ideas on the destiny of humanity in relationship to the machine. If humans have appropriated part of God's

[270] Jonas argued that circular causation and feedback loops were insufficient to explain biological teleology as they overlook the concepts of need, concern, and interest. Jonas used the example of a human pilot guiding a torpedo to illustrate that purpose belongs to the individual, not the instrument. The general, then the soldier are the ones who need the torpedo to hit the target, not the machine. Jonas argued that cybernetics overlooks the inherent purposiveness of living organisms, asserting that mechanistic explanations fall short in capturing life's essence, particularly the organism's "needful freedom." He contrasted the limitations of a mechanistic worldview with the experiential understanding of living beings, underscoring the uniqueness of life as an ontological surprise. HANS JONAS, "A Critique of Cybernetics", in *Social Research*, Vol. 20, No. 2, The New School, (SUMMER 1953), pp. 172-192.

[271] WIENER, *Human Use*, *Cit*. p. 31,32. See also CLAIRE M. TYLEE, "Spot this Mumbo Jumbo": Thomas Pynchon's Emblems for American Culture in "Mortality and Mercy in Vienna" in *Pynchon Notes*, No. 17, 1985. pp. 52-73. where it is associated to Bertrand Russell's «"unyielding despair" concerning the soul's proper habitation in a purposeless life.» p. 52.

prerogatives in "creating" machines that can do such things as playing chess, they cannot expect that the outcome of their Miltonian game keeps remaining the same it was in literature and religion:

> This is the problem of the game between the Creator and a creature. This is the theme of the Book of Job, and of Paradise Lost as well. In both these religious works the Devil is conceived as playing a game with God, for the soul of Job, or the souls of mankind in general. Now, according to orthodox Jewish and Christian views, the Devil is one of God's creatures. […] Can any creator, even a limited one, play a significant game with his own creature? […] in playing against [a machine] which absorbs part of its playing personality from its opponent, this […] will not be absolutely rigid. The opponent may find that stratagems which have worked in the past, will fail to work in the future. The machine may develop an uncanny canniness.[272]

Wiener cites some other works of literature as examples of creator characters dealing with creatures or powers they cannot control and that menace to destroy them: *Fisherman and the Jinni* from *Arabian Nights*, and Goethe's poem *The Sorcerer's Apprentice*. In the view of the scientist, these plots are either solved by an exploit of cunning or by a *Deus Ex Machina*[273]. The powerful creatures of these "fables" are meant, for Wiener, to synthesize «the accumulated commonsense of humanity» against the «sorcery» that is appropriating God-like creative and destructive powers[274]. Only the intervention of a more powerful being or of a more "cunning" one, can save the inadvertent openers of Pandora's box.

---

[272] NORBERT WIENER, *God & Golem, Inc.: A Comment on Certain Points Where Cybernetics Impinges on Religion*, MIT Press, Cambridge, MA, 1964. pp. 16, 21.

[273] On the issue of cybernetic plots Patricia Warrick divides what she identifies as the most common cybernetic plots into two "modes of plot development": the "conflict" mode and the "puzzle or problem-solving" mode. The first, focusing on action, pits the human against the machine and the second concentrates on an epistemic plot involving the solution of a mystery generated by the machine itself. She uses *Frankenstein* by Mary Wollestonecraft-Shelley and Edgar Allan Poe's *Maelzel's Chess Player* as examples of both modes then reprised by the writers she studies, which are mostly Science Fiction writers. See PATRICIA WARRICK, *The Cybernetic Imagination in Science Fiction*, MIT Press, Cambridge, MA, 1980.

[274] «Perhaps the powers of the age of the machine are not truly supernatural, but at least they seem beyond the ordinary course of nature to the man in the street. Perhaps we no longer interpret our duty as obliging us to devote these great powers to the greater glory of God, but it still seems improper to us to devote them to vain or selfish purposes. There is a sin, which consists of using the magic of modern automatization to further personal profit or let loose the apocalyptic terrors of nuclear warfare. If this sin is to have a name, let that name be Simony or Sorcery.» NORBERT WIENER, *God and Golem, Inc.: A Comment on Certain Points where Cybernetics Impinges on Religion*, MIT Press, Cambridge Ma, 1964. *Cit*. p. 52.

Other images of scientifically foreseeable catastrophe abound. Overpopulation[275] and nuclear annihilation[276] are two examples. Wiener, like Asimov and many other responsible scientists, believed that these issues constituted a call for the involvement of humanity in the processes of scientific progress. Research, development of technology and the promotion of scientific literacy in the political and social spheres were the issues where human ingenuity was to be expended to avert present and future crises. Progress itself is the cure to its own ills.

Coming to political philosophy, at the turn of this century, the far-left anonymous French-Italian collective Tiqqun, entitled one of their most famous texts *The Cybernetic Hypothesis* (2001). This text, in its radicalism, is particularly poignant in characterizing the political purport of cybernetics. In it, the «machine-based ontology and behavior-based epistemology»[277] of cybernetics is analyzed in its relationship with power. For the radical Tiqqun, who share many of Daniel Bell's observations but side politically at his antipodes, cybernetics had matured into a full-fledged ideology, a true master narration:

> The new conquerors, whom we shall call cyberneticians here, don't form an organized party […] but a diffuse constellation of agents, motivated, possessed, blinded by the same fable. They are the killers of time, the crusaders of the Same, the lovers of fatality. They're the believers in order, the lovers of reason, […]. The Grand Narratives may well be dead as the postmodern vulgate reminds over and over again, but domination is still constituted by master fictions.[278]

This reverses the view of postmodernism of the critics of detective fiction that relied on Lyotard. For the Tiqqun like for Porush, the cybernetic way of thinking about control arose in a time of crisis, reflecting a desire for order and certainty in the natural and social sciences. Despite its scientific rejection of determinism, it nonetheless brought about multiple fatalistic ideas of impending doom, disintegration, homologation, and dissolution of the difference between humans and machines. The Cybernetic

[275] «which is by far the most serious danger confronting mankind at the moment». *Ivi.* p. 66.
[276] *Ivi.* p. 52.
[277] MALAPI-NELSON, *Cit*. p. 174.
[278] TIQQUN, *The Cybernetic Hypothesis*, Robert Hurley (Ed.), semiotext(e) intervention series, No. 28, [2001] 2020. p. 22.

Hypothesis, in Tiqqun's terms, shares similarities with totalitarian ideologies in its desire to cover and control all the spheres. It is a form of ideology, an anti-humanism that prioritizes maintaining the status quo while purporting to transcend human limitations and ideologies. For the Tiqqun, as for Porush and partly also Lyotard:

> What emerged historically and politically during the interwar period, and what the cybernetic hypothesis responded to, was the metaphysical problem of establishing order starting from disorder. The whole scientific edifice, in what it owed to the deterministic assumptions embodied in Newton's mechanistic physics, crumbled in the first half of the century. The sciences of this era must be imagined as territories torn between the neo-positivist restoration and the probability revolution, and then groping toward a historic compromise whereby laws could be redefined on the basis of chaos, and certainty on the basis of probability.[279]

To Tiqqun, the Cybernetic Hypothesis embodies Bell's idea of "politics at the end of politics"[280]. For the Italo-French collective, these forms of control are all constituted by narratives, myths that have taken and motivated power beyond Lyotard's diagnosis of the agony of the master narrative of positivist efficiency. If moved on the field of labor, these critiques resonate with Bell's observations about the "one best way".

Taking these arguments into consideration, the perspective emerges that cybernetics could have positioned itself in the minds of its writer observers in the terms of a "narrative" that includes an opposition to the indeterminate in favor of the extraction of statistical laws and a future that is characterized by unstoppable progress needed as a form of resistance to a catastrophic and claustrophobic future of entropy, overpopulation and nuclear holocaust. On the one hand, one best way in the positive sense, the functioning of the well-built, efficient machine: designed, predictable and orderly. On the other end, one inescapable way in the negative sense, the ultimate eschatological disintegration of heat death. Being the discipline of control, Cybernetics

---

[279] *Ivi.* p. 37-38.

[280] Elsewhere Tiqqun wrote that in 1953, amidst the rise of the cybernetic hypothesis in the natural sciences, American university social sciences academic Karl Deutsch published *The Nerves of Government*. Taking the political implications of cybernetics seriously, he suggested moving away from the traditional idea that power was sovereign, which had long been the core of politics instead proposing a shift towards governing through rational coordination of information and decision flows. This cybernetic modernization of power and outdated forms of authority could be seen as a visible manifestation of what Adam Smith referred to as the "invisible hand", which had previously been a mystical cornerstone of liberal experimentation. This echoes the ideas of Bell about the "watchful hand of God" and the evolutions in policing in America. See Ivi. pp. 29-31.

was seen by some as the discipline of order against the dissipation of reality and by others as a form of totalitarian ideology of coercion, like a dictatorship in times of trouble.

This point of view privileges an interpretation of certain forms of postmodernism as adversarial towards the politics of science's master narration rather than skeptical towards its epistemological legitimacy. Even without contemplating the possibility of total knowledge and total control, cybernetics ended up affirming itself as a narrative of inescapable determination of the future. Not all authors that dealt with its progresses dismissed them as impossible to attain, some set themselves against the political consequences of its efficacy.

This political positioning was also the case for much of the literary counterculture in the readings of Leslie Fiedler[281] and Leo Marx[282]. While the European Tiqqun at the turn of the 21st Century advocated for revolutionary politics, American liberal counterculture of the 1960s and 1970s opposed the science of efficiency and the inevitability of progress by advocating for an expansion of the individual imagination into other worlds. Seeking empowerment through vitalism, drug experimentation, communal living and orientalism, the hippies offered a perspective of neo-humanistic (and often individualistic) liberation of time, a sort of postmodern *otium* that opened to new forms of secular vision and syncretic spirituality. Internal divisions were present. While some, like Gary Snyder and Kirkpatrick Sale, advocated forms of neo luddism played on the perception of machines as inherently exploitative and/or severing ancestral bonds between humans and nature, others, like some members of the San Francisco Oracle inner circle went as far as to contemplate the idea that with full

[281] LESLIE FIEDLER, *Cross the Border – Close the Gap: Post-Modernism*, in *The Penguin History of Literature*, vol. 9., *American Literature since 1900*, Marcus Cunliffe (Ed.), Penguin, New York, 1993. pp. 329-352.

[282] Here I am referencing especially LEO MARX, *The Neo-Romantic Critique of Science*, in *The Pilot and the Passenger: Essays on Literature, Technology and Culture in the United States*, Oxford University Press, Oxford, 1988. pp. 160-178. And LEO MARX, *American Literary Culture and the Fatalistic View of Technology*, in *The Pilot and the Passenger: Essays on Literature, Technology and Culture in the United States*, Oxford University Press, Oxford, 1988. pp. 179-207.

automation humanity would achieve a liberation of time from work[283], foreshadowing anti-work theories of the radical left that are now resurfacing in the era of AI[284].

Eschatological ideas of finalism, machine-like reduction of the human element and entropic uniformity, had been a recurring theme in critiques of modern society throughout the 20th century and before. From Thomas Carlyle to British science fiction writers, through Samuel Butler, Henry Adams, Max Weber, Hannah Arendt and Gunther Anders, culminating with Heidegger, who towards the end of his life claimed that philosophy would be entirely replaced by cybernetics[285]. Focusing on the 1950s and 1960s, Leo Marx identified notions of inevitability in what he calls the "neo-romantic" critics of technological advancement. Critics like Theodore Roszak recuperated instances that were already present in Adams and Carlyle, also opposing the bureau-technocratic view by picturing science as the scapegoat of dehumanization and environmental destruction. In the era of cybernetics, rationalistic romantics who were not prejudiced against technology, such as Shelley or Goethe, were overlooked in favor of a Blake-ian sense of loss in the vision of "Dark Satanic Mills".

With influences from Marcuse's *One-Dimensional Man*, Lewis Mumford's *The Myth of the Machine* and Jacques Ellul's *The Technological Society*, terms like "system" and "the machine" started to be used as critical synonyms of the bureau-technocratic world apparatus, reinforcing the perception of a rigidly advancing, increasingly totalitarian technological society. In his analysis of Wiener's influence on literature, Tanner juxtaposed Henry Adams's portrayal of an "ultimate ocean of entropy" with William James's optimistic view of life's capacity to shape itself in

---

[283] In the famed *San Francisco Oracle* Vol. 1 No. 7. p. 6. There is a conversation between the Gotha of the Heights-Ashbury hippie movement (Snyder, Ginsberg, Leary and Watts) in which such ideas appear.

[284] See for example NICK SRNICEK, ALEX WILLIAMS, *Inventing the Future: Postcapitalism and a World Without Work*. Verso Books, London, Brooklyn, NY, 2015.

[285] « *Heidegger*: [...] The role philosophy has played up to now has been taken over by the sciences today […] Philosophy dissolves into the individual sciences: psychology, logic, and political science. *Der Spiegel*: And what takes the place of philosophy now?
Heidegger: Cybernetics.» MARTIN HEIDEGGER, ""Only a God Can Save Us": The Spiegel interview", in Thomas Sheehan (Ed.), *Heidegger: The Man and the Thinker* (). Chicago, IL, [1966] 1981. pp. 45–67. Cited in Malapi-Nelson, *Cit*. p. 116.

independent, innovative and finally vitalistic ways. Underlining this contrast, historian Jenny Andersson studied that during the Cold War era, the depiction of the future itself evolved into an ideological battleground, contending with divergent perspectives on whether future temporalities should be perceived as singular or multiple[286]. Science fiction writer Arthur C. Clarke, for example, framed the issue of the future as connected to a "lack of imagination"[287], underscoring the significance of alternative worlds in science fiction, which, if not predictable by scientific means, could be accessed through imaginative exploration. This fundamental concept of the imaginative function of fiction, which frees thought from the constraints of reason, is evident in the works of Pynchon and Asimov. Its outcomes, however, differ significantly from the psychedelic and individualistic escapism of the most conservative Hippies in the context of the reality-fiction relationship.

Whereas Wiener was not irresponsible towards the impact of his theories, seeing human thought as an invaluable bulwark against the destructive possibilities he foresaw for humanity[288], Bell himself downplayed the role of cybernetics in tragic projections of the future, alleging that contemporary closed visions of fully automated unemployment destiny were merely overly pessimistic views, and that automation would touch only a fraction of workers[289].

---

[286] JENNY ANDERSSON, *The Future of the World: Futurology, Futurists, and the Struggle for the Post-Cold War Imagination*, Oxford University Press, Oxford, 2018. p. 159.
[287] *Ivi*. p. 215.
[288] Wiener's warnings remain extremely relevant in the age of black box machines both in tone and in the literary metaphors employed: «What, moreover, when we have put the decision in the hands of an inexorable magic or an inexorable machine of which we must ask the right questions in advance, without fully understanding the operations of the process by which they will be answered? Can we then be confident in the action of the Monkey's Paw from which we have requested the grant of the £200? No, the future offers very little hope for those who expect that our new mechanical slaves will offer us a world in which we may rest from thinking. Help us they may, but at the cost of supreme demands upon our honesty and our intelligence. The world of the future will be an evermore demanding struggle against the limitations of our intelligence, not a comfortable hammock in which we can lie down to be waited upon by our robot slaves» WIENER, *God and Golem*, *Cit*. pp. 68-69.
[289] «Norbert Wiener, whose book on "cybernetics" was responsible in part for the vogue of "communication theory," has pictured a dismal world of unattended factories turning out mountains of goods which a jobless population will be unable to buy. Such projections are silly. Even if automatic controls were suddenly introduced, regardless of cost considerations, into all the factories

In this panorama of positions, the idea that the post-war period was characterized by conflicting conceptions of scientific progress, with some envisioning a teleological narrative and others embracing plurality, will be the basis of our argument on the influence of science on Thomas Pynchon.

2.IV. Thomas Pynchon: Possibility and Cybernetics

A paragraph in Pynchon's introduction to *Slow Learner* (1984), the author's collection of texts which dated before the release of *V*. (1963), concerns his famous short story *Entropy* (originally 1960):

> I happened to read Norbert Wiener's *The Human Use of Human Beings* (a rewrite for the interested layman of his more technical *Cybernetics*) at about the same time as *The Education of Henry Adams*, and the "theme" of the story is mostly derivative of what these two men had to say. A pose I found congenial in those days — fairly common, I hope, among pre-adults - was that of somber glee at any idea of mass destruction or decline. The modem political thriller genre, in fact, has been known to cash in on such visions of death made large-scale or glamorous. Given my undergraduate mood, Adams's sense of power out of control, coupled with Wiener's spectacle of universal heat-death and mathematical stillness, seemed just the ticket.[290]

Looking back at his production, Pynchon associates Wiener to Adams. One would wonder whether the association between the two texts might not constitute in itself an invitation to somehow read the first in the key of the latter. From the outset, inescapable eschatology (albeit looked at with a smile) seems to dominate Pynchon's view. It is appropriate to speculate on the specifics of his association. As Tanner, Porush and Vanderbeke already noticed, in *Entropy* this influence could not be clearer. In the story, entropy is not expressed in a stand-alone metaphorical state but, at the author's behest, it appears at the crossroads between concepts such as homeostasis and information theory, deploying the full "narrative stance" of cybernetics. Vanderbeke, in his analysis of Pynchon's early works, had discerned their intricate and ambivalent connection to the theme of entropy. On one hand, it served as the central axis around which the author

---

that could use them, only about eight per cent of the labor force would be directly affected.» BELL, *Cit*. p. 267.

[290] THOMAS PYNCHON, *Introduction*, in *Slow Learner*, Vintage, London, [1984] 2022. p. 13.

crafted his depictions of apocalyptic decline, exemplified by a poignant dialogue in *Entropy* where Callisto discusses communication theory in the terms formalized by Tanner. He expresses apprehension that human communication, as an exchange of information, may eventually lead to a cultural heat death, where uniformity of thought prevails, and conventional cognition ceases to exist[291]. On the other hand, over time, entropy in Pynchon evolves to symbolize a realm of unpredictability, including the disorder of white noise from which coherent messages emerge, embodying a sense of unexhausted creativity amidst the uncertain[292].

In the passage above, Pynchon cites the political thriller as a genre fascinated by the threat of mass destruction. It is easy to imagine that he had in mind the spy-stories and political drama pieces of the period following WWII and the atomic events. But if one wants to get into detective fiction, it is possible to find multiple footholds in Pynchon's yet incomplete bibliography that hold testimony to the author's interest in the genre.

Pynchon's works are mentioned in Merivale-Sweeney's collection of essays as examples of the postmodern way of disrupting the expectations of the detective fiction reader. None of the critics in their collection treats the matter in much depth, but the work cites Tani among the ones to establish *The Crying of Lot 49* (1966) as a form of detective fiction[293]. The critic ascribed Pynchon in the list of authors such as Gadda, Borges, Hjortsberg and Robbe-Grillet, as writers who shared a "postmodern sensibility". Drawing from common definitions of postmodernism, Tani defines their writing as challenging the mythical and psycho-analytical depth found in modernist writings and emphasizing the absence of symbolic encompassing meaning and central focus in their works. Unlike it happens in many of the works by the other authors in

[291] THOMAS PYNCHON, *Entropy*, in *Slow Learner*, Vintage, London, [1984] 2022. pp. 88-89.
[292] See DIRK VANDERBEKE, "*N* Tropes for Entropy in Pynchon's Early Works", in *Pynchon Notes*, 2001, pp. 35-59.
[293] MERIVALE, SWEENEY, *Cit*. pp. 5, 17-19, 18 (fig.), 81, 91-92, 94, 138. Works: *The Crying of Lot 49*, 12, 17-19, 75,91-92, 94, 109, 128; Tani had done so in the essay *The Dismemberment of the Detective*[293](1982) and had returned to it, generalizing his scope, in *The Doomed Detective* (1984).

his list, Tani (like Merivale and Sweeney[294]) acknowledges that *The Crying of Lot 49*, lacks a true detective. Oedipa Maas is a Californian housewife who unwillingly stumbles upon a perceived conspiracy. She represents a character who contrasts with the traditional masculine figure of the Californian Detective, which, according to Tanner, serves as the primary influence and subgenre that Pynchon disrupts[295]. In a recent essay this issue is taken up by Jennifer Backman and Kostas Kaltsas, according to whom these atypical detectives are described as "over easy" in contrast to "hard-boiled" Los Angeles residents like Philip Marlowe[296].

Tani places Pynchon at the antipodes of McBain in the reading of Stephen Knight. He connects the character of Oedipa, as an anti-detective, to a common distrust of society as a bureaucratic system where the police is viewed as ineffective or corrupt. In his reading, the suspect of evil conspiracies responds to a diffused sense of societal and epistemological unease, pointing towards an opposite perspective concerning police institutions. In this context:

> Like many Pynchon novels, *Lot 49* presents itself as a mystery that, rather than resolving, grows more and more complex upon investigation. […] "Shall I project a world," […] is the primary question. The novel's heroine Oedipa Maas finds herself immersed in questions of authority.[297]

According to McHale, the famous sentence points towards a break of the relation between the protagonist and her own world. Oedipa fears her capacity for solipsism, believing the external world may be a fabrication of her mind. This is why she relates,

---

[294] *Ivi*. p. 19.

[295] TONY TANNER, *Thomas Pynchon*, Methuen, London, New York, NY, 1982. p. 56. See also PAOLO SIMONETTI, ""Bye Bye Black Dahlia": Pynchon, Coover e il "vizio intrinseco" della detective fiction", in *Fictions: Studi sulla narratività* Vol. X, Maurizio Ascari, Francesca Saggini (ed.)*, Crime e Detective Fiction nel Novecento: Voci a Confronto*, Pisa: Fabrizio Serra, 2011, pp. 45-53.

[296] JENNIFER BACKMAN, "From Hard Boiled to Over Easy: Reimagining the Noir Detective in *Inherent Vice* and *Bleeding Edge*", in *Thomas Pynchon, Sex, and Gender*, Ali Chetwynd, Joanna Freer, and Georgios Maragos (Ed.), the University of Georgia Press, Athens, 2018. pp. 19-35. KOSTAS KALTSAS, "Of "Maidens" and Towers: Oedipa Maas, Maxine Tarnow, and the Possibility of Resistance" in *Thomas Pynchon, Sex, and Gender*, Ali Chetwynd, Joanna Freer, and Georgios Maragos (Ed.), the University of Georgia Press, Athens, 2018. pp. 36-51. This connection to had-boiled detectives was also present in MCHALE, *Cit*. p.22. To which he adds the influence of Conrad.

[297] PHILLIP GRAYSON, *Radical Hope in the Novels of Thomas Pynchon: The Moon and the Meteor*, Lexington Books, London, 2022. p.120.

in the first chapter, to Remedios Varo's surrealist triptych of women embroidering a tapestry of the world[298]. These questions of "projected worlds" and "authority" invite new meanings in PWT. As Oedipa navigates through the belongings of her former lover who inexplicably named her its sole executrix, she encounters a series of cartoonish characters who appear to be part of a conspiracy to convince her of the existence of a secret society built around an alternative postal network known as the Tristero system. This network, symbolized by a stylized muted post horn and the acronym W.A.S.T.E. ("We Await Silent Tristero's Empire"), supposedly connects outcasts across America for unknown reasons. The novel famously concludes with Oedipa attending an auction where she believes a Tristero emissary may be present to purchase the titular lot 49 which might have something to do with the organization. Before the crying of the lot begins, the novel ends, frustrating the reader's expectation of answers.

In Tani, the question of whether *Crying of Lot 49* is ascribable or not to the category of detective fiction is not problematized[299]. The evidence of the text as a representation of a search for truth suffices for the identification of the story with the genre, testifying perhaps to the *longue durée* of the concept of mystery we saw in Messac. Oedipa's name itself, after all, is remindful of a long-standing tradition, datable at least back to Messac and made famous by Ernst Bloch, to identify in Oedipus a «primordial detective theme»[300]. Added to this are, on the one hand, Oedipa's investigative way of proceeding, characterized by iterated dialogue with those pseudo-symbolic figures that are Pynchon's characters, and on the other, the obsessive search for meaning behind signs like the muted post-horn, which becomes the heir to the clues

---

[298] MCHALE, *Cit*. p.23.

[299] In him, like in Joel Black, the fact that she «is thrust into an investigative role» suffices to associate, at least in part, the novel with detective fiction. JOEL BLACK, *(De)feats of Detection: The Spurious Key Text from Poe to Eco,* in Merivale Sweeney, Cit. pp 91-92.

[300] ERNST BLOCH, "A Philosophical View of the Detective" in *Discourse*: MASS CULTURE ISSUE, Vol. 2, Wayne State University Press, Detroit, (Summer, 1980), p. 45. On this theme, connected to the "feminization" of the searcher for truth see EMMA MILLER, "The Naming of Oedipa Maas: Feminizing the Divine Pursuit of Knowledge in Thomas Pynchon's *The Crying of Lot 49*", in *Orbit, Writing Around Pynchon*, Vol. 1, No. 1, 2012. Found at < https://www.pynchon.net/owap/article/view/30> 08/07/2024.

of the classic detective story. In this sense, Spanos and Tani's definition of anti-detective fiction fit in highlighting the undermining of those "stable signs" that characterized Doyle's reading in Malmgren.

However, these features alone leave open questions. Are there further reasons to believe that Pynchon intended *The Crying of Lot 49* as some sort of detective fiction? Can the novel's open ending be equated with Gadda's "invisible empire realism" or do they serve different purposes in terms of the fiction-reality relationship? Some arguments can be made for an interest of Pynchon in detective fiction in general and in Conan Doyle or Sherlock Holmes in particular. Most of his works can be described as revolving around a mystery. Joel Black cites «[t]he strangest instances of detection/interpretation […], such as the molecular configurations "explicated" by the "coal-tar Kabbalists" […] in […] *Gravity's Rainbow* (1973), or the "atmospheric radio disturbances," […], studied by engineering student Kurt Mondaugen in […] *V.* (1963)»[301]. One could also consider the whole search for the titular V., the tragicomical quest of trying to find a reason to Slothrop's erections in *Gravity's Rainbow*, and Prairie's quest to find her mother in *Vineland* (1990) as mysteries that the characters seek to solve. McHale and Duyfhuizen notably shared this view[302].

Only his last two novels, which we will not address here directly, specifically feature two different forms of exauthorized detectives: the drug using P.I. Doc Sportello in *Inherent Vice* (2009) and ex-fraud examiner Maxine Tarnow in *Bleeding Edge* (2013), respectively investigating the disappearance of a real-estate mogul and the irregular earnings of a dotcom entrepreneur.

In *Inherent Vice*, the protagonist rationalizes his drug use by claiming to be drawing inspiration directly from the character of Holmes[303], whom, like the players of *The Game*, he considers to be a real historical figure. Some other references to Conan

---

[301] JOEL BLACK, *Cit*. p 92.

[302] See BERNARD DUYFHUIZEN, "God Knows, Few of Us Are Strangers to Moral Ambiguity": Thomas Pynchon's Inherent Vice (review)", in *Postmodern Culture*, Vol. 19, No. 2, 2009. Found at <https://www.pomoculture.org/2013/09/05/god-knows-few-of-us-are-strangers-to-moral-ambiguity-thomas-pynchons-inherent-vice-review/> 08/07/2024. MCHALE, *Cit*. p. 22-23.

[303] THOMAS PYNCHON, *Inherent Vice*, New York, Penguin, [2009] 2014. pp. 96-97.

Doyle's work appear in the author's oeuvre. At the beginning of *Gravity's Rainbow*, for example, Sherlock Holmes is mentioned as an apposition to a description of the London fog, as if to qualify it with an allure of «nineteenth century positivistic exorcism of eighteenth-century Gothicism»[304], while also characterizing it as if shrouding a mystery to be investigated[305].

A yet unsupported argument could also be made that the title of the work we set to examine could have been inspired from a work by Conan Doyle, *Lot No. 249*, a Gothic horror short story first published in *Harper's Magazine* in 1892[306]. The narrative revolves around a kind of investigation concerning the content and ownership of a mysterious auction lot. A university's academic community is shaken by a series of crimes which seem to be linked to the enigmatic titular lot. The lot contains a mummy that is revived through an ancient ritual, leading to a series of aggressions. Ultimately, the culprit is revealed to be its owner who has been awaking the monster using a magical book, driven by an uncontrollable desire for power and knowledge. At the end, the colleagues of the lot's owner discover its content and force him to destroy the cursed items to put an end to the chaos. As I will argue, the theme of resistance against an

---

[304] THOMAS PYNCHON, *Gravity's Rainbow*, Vintage, London, [1973] 1995, p. 14. TANI, *Dismemberment*, *Cit*. pp 22-23.

[305] The popular theatrical version featuring Basil Rathbone is cited towards the end. PYNCHON, *Gravity's Rainbow*, Cit. p. 536.

[306] I found the association, in a disjunctive sense, at TV TROPES, *Literature: The Crying of Lot 49* found at <https://tvtropes.org/pmwiki/pmwiki.php/Literature/TheCryingOfLot49> 08/07/2024. A number of other possible explanations can be found at PYNCHON WIKI, *The Crying of Lot 49*, Chapter I <https://cl49.pynchonwiki.com/wiki/index.php?title=Chapter_1> 08/07/2024. And at PYNCHON WIKI, 7x7 <https://cl49.pynchonwiki.com/wiki/index.php?title=7_x_7> 08/07/2024. References are made James Joyce and to obscure details of Pynchon's ancestors, some of which are interesting but obviously speculative and difficult to confirm or deny. These websites, although mostly not scholarly in nature, are part of a long lasting Pynchonian tradition that dates at least back to the 1990s. OTTO SELL, *Die Sauberen Schweine* < https://www.ottosell.de/pynchon/ > 17/07/2024. + The Pynchon Files defunct Website curated by Richard Lane. Richard Lane, The Pynchon Files, < https://web.archive.org/web/20010202022400/http://www.pynchonfiles.com/ > 17/07/2024. The Hyperarts Pynchon pages curated by Tim Ware. TIM WARE, Hyperats, < https://web.archive.org/web/19961106050633/http://www.hyperarts.com/ > 17/07/2024. And the *Spermatikos Logos* Website curated by Allen Rush. ALLEN RUSH, *Spermatikos Logos*, < https://shipwrecklibrary.com/the-modern-word/pynchon/spermatikos-logos/ >17/07/2024. Almost all of these webmasters are featured in the documentary *A Journey in the Life of P*, by the Dubini brothers. DONATELLO DUBINI, FOSCO DUBINI, *A Journey in the Life of P*, Kultur Studio, 2008.

excessive drive towards power-knowledge can be perceived in the plots of Pynchon as well.

Within *The Crying of Lot 49* itself, many points, especially in chapter 5, seem to associate Oedipa with a hard-boiled detective figure. We see her talking about "clues" as compensations for the absence of the "direct, epileptic Word" (capitalized, we might say: the word of God) "that might abolish the night" of mystery, carry out tailing operations (telling herself she is glad to wear "flats", which we can assume make her somewhat like a flatfoot), and even refer to herself as a "private eye", whose customary beating up in the plot turns into a symbolically semiotic one, to the point of turning her "optimism" into, of all things, "fatalism", "immobilizing her":

> […] there was somehow always the post horn. […] A couple-three times would really have been enough. […] She busrode and walked on into the lightening morning, giving herself up to a fatalism rare for her. […] That optimistic baby had come on so like the private eye in any long-ago radio drama, believing all you needed was grit, resourcefulness, exemption from hidebound cops' rules, to solve any great mystery. But the private eye sooner or later has to get beat up on. This night's profusion of post horns, this malignant, deliberate replication, was their way of beating up. They knew her pressure points, and the ganglia of her optimism, and one by one, pinch by precision pinch, they were immobilizing her.[307]

Within the same chapter the semi-ironic hard-boiled atmosphere escalates. She even gets shot at and subsequently kidnapped by her own analyst (the ex-nazi doctor Hilarius, a Mengele-like figure who is now paranoically afraid that the police are vengeful Jewish people in disguise) and subsequently freed by the police, only to then escape from them in the pursuit of her quest.

In these passages there seem to appear the themes of the religious-like rapport of the detective character with its material world represented by clues (the one subsumed under *Rule M*), and the connection of their inconclusive nature with the beating that may stop the detective story on its tracks, substituting possibility with fatalism.

[307] PYNCHON, *Crying*, *Cit*. pp. 89, 94, 99.

While there are no direct references to specific detective fictions, at least one work of "crime" fiction is mentioned: Perry Mason[308]. Towards him, Oedipa's lawyer Roseman, harbors conflicted feelings:

> Roseman had also spent a sleepless night, brooding over the Perry Mason television program […], […] toward which Roseman cherished a fierce ambivalence, wanting at once to be a successful trial lawyer like Perry Mason and, since this was impossible, to destroy Perry Mason by undermining him. Oedipa walked in more or less by surprise to catch her trusted family lawyer stuffing with guilty haste a wad of different-sized and colored papers into a desk drawer. She knew it was the rough draft of *The Profession v. Perry Mason, A Not-so-hypothetical Indictment*, and had been in progress for as long as the TV show had been on the air.[309]

This passage stages the questioning of a fictional model by the envy of a character. The lawyer created by Pynchon is writing a tirade against Perry Mason made from the perspective of actual legal professionalism. Here, as in *Inherent Vice*, a "detective" character seems to transcend the barrier of fiction and is confronted as if real-within-fiction. Perry Mason, originally featured in novels by Erle Stanley Gardner, was enjoying peak popularity during the writing of *The Crying of Lot 49* due to the successful TV series airing on CBS from 1957 to 1966, date of the novel's publication. The series typically followed a classic detective fiction format, with Perry Mason unveiling the perpetrator of the weekly crime in a climactic courtroom showdown[310]. The character was easily associated with this simultaneously surprising and conclusive plot development, all concentrated in the last few minutes of its unfolding. In conjunction with these revelations made by the narrator through Oedipa's perspective, Roseman's character feebly attempts to seduce her in a silly act of harassment, and then

---

[308] Another one, though arguably less promising, could be the stories of Fu-Manchu, the fearsome "yellow peril" of Sax Rohmer's works, in which the hero Denis Nayland Smith (grandson of Sherlock Holmes in Philip Jose Farmer's version), continually finds himself having to investigate the misdeeds of the racistly stereotypical villain and save humanity from his evil plans. In the novel, the character's face is imitated in a grimace used by the Maas family psychiatrist Dr. Hilarius as a farcical therapy tool. On Oedipa, the effect of the procedure triggers distracts her from an hallucination concerning Uncle Sam into another featuring the grotesque Fu-Manchu grimace itself. THOMAS PYNCHON, *The Crying of Lot 49*, New York, Vintage, [1965] 2000. p. 8. See also PHILIP JOSE FARMER, *Tarzan Alive: A Definitive Biography of Lord Greystoke*, New York, Popular Library, 1972.

[309] PYNCHON, *Crying*, *Cit*. pp. 8-9.

[310] PYNCHON WIKI, *The Crying of Lot 49*, Chapter I, *Cit.* Found at <https://cl49.pynchonwiki.com/wiki/index.php?title=Chapter_1> 17/07/2024.

asks her to run away with him. When asked about where he intends to escape to, the lawyer immediately renounces his purpose, testifying to his ultimate lack of objective already manifested in the endless reworking of his "indictment". As for the reason for the woman's coming to his office, he asks her a daunting question, setting her on her mission:

> "Why would [Pierce Inverarity] do a thing like that," Roseman puzzled, after reading the letter.
> "You mean die?"
> "No," said Roseman, "name you to help execute it."
> "He was unpredictable." They went to lunch. Roseman tried to play footsie with her under the table. She was wearing boots, and couldn't feel much of anything. So, insulated, she decided not to make any fuss.
> "Run away with me," said Roseman […].
> "Where?" she asked. That shut him up.
> Back in the office, he outlined what she was in for […]
> "Hey," said Oedipa, "can't I get somebody to do it for me?"
> "Me," said Roseman, "some of it, sure. But aren't you even interested?"
> "In what?"
> "In what you might find out."
> As things developed, she was to have all manner of revelations. Hardly about Pierce Inverarity, or herself; but about what remained yet had somehow, before this, stayed away.[311]

If we read the questioning of Perry Mason as an ambivalent desire/repulsion for a surprise finale, the fact that it is accompanied by an aborted attempt at seduction just as Oedipa's journey is beginning becomes interesting. Right at the charged narratological moment of sending the heroine toward her quest, Pynchon sets up a character full of envy, libido and male entitlement but without a clear "*telos*" in mind. To underscore this moment, the narrator makes another gesture of great diegetic importance. It recurs to a prolepsis concerning the future and scope of Oedipa's quest, which, as everyone is bound to learn, will take her nowhere. "She was to have all manner of revelations". A kind of narratorial trap is announced in this passage. The Perry-Mason-like expectation of a surprise ending is accompanied by a scene of frustration[312], and soon afterwards the narrator tells us about the future. The truncated

[311] THOMAS PYNCHON, *Crying, Cit.* pp. 8-9.
[312] This, of course, is a male perspective. There is little reason to believe that Pynchon intended to condemn his male characters on their gender dynamics. The men that harass Oedipa during the course of the novel, which are many and to different extents, rather than underscoring her constantly

ending is foreshadowed by the bafflement of Roseman, whose act of sexual harassment (which is common to almost all male characters confronting Oedipa) is interrupted by a simple question on its direction.

As Molly Hite summarized: «*The Crying of Lot 49* is the most traditional of Pynchon's novels, chronicling the quest of a single central character and reporting on her consecutive discoveries through the mediation of a single omniscient narrator»[313]. The contrast between the omniscience of the narrator and the absence of conclusion suggests a deliberate choice. It can predict the future, but what lies in said future is defined in negative terms. Oedipa is going to have "all manner of revelations", but *not* about the "unpredictable" Pierce, instead about "what remained", what "stayed away". The dimension of spiritualistic seduction of the reader that imbued Watson's internal narration is abandoned in favor of an external narrator that showcases one of the most powerful means of authentication: prolepsis. However, this narrator assumes a peculiar stance. Despite being external and omniscient, its focalization consistently remains internal. This

> […] serves as a reminder that there is no privileged outside perspective commanding a view of "the whole shape at once." The world exists as an indefinite number of partial, contingent, and overlapping versions; and by shifting points of view […] this narrator manages to be authoritative without being omniscient in the conventional sense—which is to say transcendent. […] no quasi-authorial sanction guarantees that one idea of order is the ultimate one.[314]

Pynchon's narrator, as much as it appears fully in control of its authoritative capacity, deliberately uses it to tease the reader. After giving us the impression that it can provide important information, it then withholds the answers to the questions posed in the narrative, such as the one about the existence of the Tristero. The narrator's shortcomings are thus better characterized as retention of information rather than an

uncomfortable and dangerous positioning as an object of desire, are presented as little more than annoying cartoon-like characters that face no consequence for their actions and towards which Oedipa mostly knows how to deal with.

[313] MOLLY HITE, *Ideas of Order in the Novels of Thomas Pynchon*, Columbus, OH, Ohio State University Press, 1983, p. 42. On the narratology of Pynchon, also including observation of Fiction Theory, see LUC HERMAN, *Narratology*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019.

[314] *Ivi*. pp. 43-44.

incapacity to provide it, which could be typified by a common unreliable narrator. It is difficult to address this question in in Doležel's alethic-epistemological terms, a difficulty that must be regarded as such, as we have seen with Sherlock's failures. Instead of clearly distinguishing between what is true and what is not, the narrator, by adopting the characters' perspectives, leaves out significant information crucial to the quest. In doing so, the narrator fails to evoke the intrigue of a Watson, whose credibility readers assessed independently. Rather, the narrator creates a sense of ambiguity that persists as such in broad daylight.

This effect is played on what Doležel would call *saturation*, which we could define as the "manipulation" of the incompleteness of the text[315]. A text's *saturation* is the "degree" of detail, richness or completeness with which a fictional world is depicted. The more information the narrator provides, the higher the *saturation* of the text. In a case like that of Pynchon, however, we find one of those creations of deliberate ambiguities of which Ronen wrote. Pynchon's narrator oscillates between two extremes: on the one hand, it provides a great amount of specific data, both invented and researched by the author in the real world (think of the innumerable historical episodes and pop-culture citations); on the other hand, it deliberately generates gaps of information about certain details of reality, among which the ultimate answer to the mystery of the existence of the Tristero.

In one of the most famous passages, towards the end of the novel, the narrator addresses Oedipa's paranoia in peculiar "logical" terms. Exhausted by what has been a constant barrage of unconfirmed hints and open questions about the Tristero, Oedipa experiences a spontaneous metaphysical crisis. Either there is a "transcendent meaning" to her adventures or only paranoia, no third option:

> Who knew? Perhaps she'd be hounded someday as far as joining Tristero itself, if it existed, in its twilight, its aloofness, its waiting. The waiting above all; if not for another set of possibilities […], then at least, at the very least, waiting for a symmetry of choices to break down, to go skew. She had heard all about excluded middles; they were bad shit, to be avoided; […] it was now like walking among matrices of a great digital computer, the zeroes and ones

[315] See DOLEŽEL, *Heterocosmica*, *Cit*. pp. 169-184.

> twinned above, hanging like balanced mobiles right and left, ahead, thick, maybe endless. Behind the hieroglyphic streets there would either be a transcendent meaning, or only the earth. […] Either Oedipa in the orbiting ecstasy of a true paranoia, or a real Tristero.[316]

The narrator seems to speak from within Oedipa's own psyche: "She had heard all about excluded middles; they were bad shit, to be avoided". In this passage, Pynchon associates the logic of the excluded middle with that of possibilities. The main characteristic of the Tristero is that of waiting for an indefinitely postponed opportune moment to bring their mysterious plan to fruition – waiting for a "set of possibilities" or at least for a "symmetry of choices to break down, to go skew". The mysteries that the protagonist has encountered are read as dichotomies: either there is a deeper sense that veers towards the metaphysical, or there is just the obvious empiric world, "a transcendent meaning, or only the earth".

Hite suggests that instead of debating which option is right or preferable, the narrator implicitly questions how choices became so restricted[317]. The principle of excluded middles, the critic argues, does not logically justify reducing interpretations of experiences to just two opposing positions. Hite concludes that in Pynchon this type of thinking is referring to conventional expectations towards cohesive narratives. Traditional storytelling terms like "plot" and "development" imply a purposeful progression towards an end, and terms like "resolution" and "conclusion" suggest something akin to the dynamics of an argument. A standard narrative, she argues, is about bringing elements together, leading to a sense of closure.

As we have seen in Doyle with Genette, this is especially true in detective fiction where opinions over what happened in the plot (the characters' epistemic K-worlds) are central, especially at the ending. Someone has to "win" the argument of the plot

[316] PYNCHON, *Crying*, *Cit.* p. 140.

[317] Hite is particularly poignant. «But this formulation of the dilemma obscures the fact that the binary alternatives are not true contradictories; they do not exhaust the possibilities. […] the great irony of the novel is that her quest has an importance apart from any final baptism of transcendent significance. […] The novel is thematically and aesthetically whole apart from any supposedly climactic resolution. The real significance of these dichotomies is pointed up by the narrator's comment on Oedipa's ''excluded middles.'' The narrator does not address the question of which alternative is preferable or which is correct; instead he asks how the options got so limited» HITE, Cit. p. 17.

like someone has to win the arguments with Watson: either Holmes is right at the end, or he is not[318]. Through Pynchon, these processes reveal their arbitrariness. Oedipa's insistence on dualism does not belong in the narrative she herself is a part of. In Sherlock Holmes's stories, the possible worlds projected by the characters concerning the circumstances of the story are gradually excluded until a single, true explanation is given, Watson's failed attempts at solving crimes being the chief examples of this procedure. The connection between the detective-medium and the world allows for a progressive pruning of these possible worlds until only one remains as true. One can find many explanations for how the crime went on, but if it is decided that it happened by means of an impossible snake the faithful narrator will report it as such.

The semiotic metaphor of hieroglyphs, representing signs to be decoded and requiring a Malmgren-like stance on meaning, is juxtaposed to Oedipa's excluded middles, alongside the digital metaphor of binary code. In the binary system, with brutal simplification, the key aspect is the capacity to arbitrate a choice between two options, this is why Gregory Bateson famously defined a bit of information as the "difference that makes a difference"[319] .

Pynchon's plot thus affirms its own openness to possibility, the unfulfilled wait for a world rather than another, another story, a symmetry of choices to go skew. The narrator seems to suggest an opening that Oedipa does not see, that there is something that can be outside of the dichotomy of binary logic: suspension, Tomaševskij's detour, the wait itself. Pynchon seems to posit Oedipa's dilemma as a matter of freedom of choice in selecting a message, the meaning of the episodes she is living. The open question about the Tristero scares her, and she in turn tries to restrict her own semiotic possibilities to zeroes and ones in a desperate attempt to protect herself from wild possibility through a logical order of the strictest kind. We could imagine Oedipa

[318] *Ivi*. pp. 15-18.
[319] GREGORY BATESON, "Form, Substance and Difference", in *ETC: A Review of General Semantics*, Vol. 72, No. 1, January 2015, pp. 90-104. On this theme in Pynchon and its connection with the relationship between mathematics, reality and possibility see NINA ENGELHARDT, *Mathematics*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019.

animated by a cybernetic or a Spanosian fear of indeterminacy, and her world, represented by the narrator, playing against her.

The model reader of the *Mystère Expliqué* may remain disappointed. Why bother giving us what Daniela Daniele calls a Melvillian "whale of a book"[320], meaning a mysterious and obtrusive mass of information to be interpreted—albeit not a particularly large one—if not to reach a solution? Is there a *telos* to this type of text? Here is where Narcejac comes back. From a cybernetic perspective, a "classic" detective fiction could be read as a teleological system, a "purposeful" object, as Hite showed with her metaphor of the narrative argument to be won. For Norbert Wiener, a chess playing machine or a target seeking torpedo have a clear objective hard-wired into their programming and they self-correct towards its achievement, which is what qualifies them as "purposeful" or teleological[321]. Every time the machine goes off track, its error is noted by its sensors, which feed information back into its input to "steer" it back to place. Metaphorically, if we read a "classic" detective story as "aiming" towards the detective being right through *Rule M*, we could read all the attempts made by the other characters to solve the case as the narrative's positing of possible worlds that deviate from the chosen course. As Tomaševskij and Eco had noted, these are then promptly discarded to buttress the surprise of the detective's explanation, the only one that agrees with TAW. We called this progressive exclusion of possible trajectories a *pruning of possible worlds*. From this perspective, Pynchon's narration does the opposite. Instead of pruning possible worlds, declaring possibilities as false and rejecting them as contradicting the truth, it leaves them to grow unchecked like wild weeds. This suggests that the position of the narrative in cybernetic terms (if it is a machine to begin with, as Porush supposed[322]) would be in principle something like a

[320] DANIELE, *Città*, *Cit*. p. 26. Here Daniele refers to *Gravity's Rainbow*, adding the dimensions of the book to the metaphor of the whale. In my using her expression I concentrate on the text's mysteriousness.
[321] ARTURO ROSENBLUETH, NORBERT WIENER, JULIAN BIGELOW. "Behavior, Purpose and Teleology", in *Philosophy of Science*, vol. 10, no. 1, 1943. p. 19.
[322] See DAVID PORUSH, *The Soft Machine: Cybernetic Fiction*, New York, Methuen, 1984.

non-teleological machine, like a roulette, designed precisely *not* to give a predictable result[323].

Another episode in which these elements appear can tighten the association further: the encounter of Oedipa with the Nefastis Machine. The episode happens across two chapters, the fourth and the fifth: in the fourth through the voice of Stanley Koteks, engineer at Yoyodyne (a business Inverarity had been involved in); in the fifth through a direct encounter with the machine in the apartment of its eponymous creator. During the first episode, Koteks produces a document like a technician out of a McBain novel:

> "You know the Nefastis Machine?" […].he produced a Xeroxed wad of papers, showing a box with a sketch of a bearded Victorian on its outside, and coming out of the top two pistons attached to a crankshaft and flywheel. "Who's that with the beard?" asked Oedipa. James Clerk Maxwell, explained Koteks, a famous Scotch scientist who had once postulated a tiny intelligence, known as Maxwell's Demon. The Demon could sit in a box among air molecules that were moving at all different random speeds, and sort out the fast molecules from the slow ones. Fast molecules have more energy than slow ones. Concentrate enough of them in one place and you have a region of high temperature. You can then use the difference in temperature between this hot region of the box and any cooler region, to drive a heat engine. Since the Demon only sat and sorted, you wouldn't have put any real work into the system. So you would be violating the Second Law of Thermodynamics, getting something for nothing, causing perpetual motion. […] He went on to tell how the Nefastis Machine contained an honest-to-God Maxwell's Demon. All you had to do was stare at the photo of Clerk Maxwell, and concentrate on which cylinder, right or left, you wanted the Demon to raise the temperature in. The air would expand and push a piston. The familiar Society for the Propagation of Christian Knowledge photo, showing Maxwell in right profile, seemed to work best.[324]

Oedipa looks around: there are IBM typewriters working in her surroundings[325], and her feeling is that she is walking «uncoherced into the presence of madness»[326]. Seemingly irrational elements indeed abound. One wonders what the effigy of a Victorian man on a machine is for, or why a picture issued from a Christian society would make it work better. Koteks, deepening these suspicions, goes on to say that

---

[323] The examples of the chess-playing machine, of the torpedo and of the roulette are made by Wiener respectively in WIENER, *Human Use*, *Cit.* pp. 175-182. And, ROSENBLUETH, WIENER, BIGELOW. *Cit*. p. 19.
[324] PYNCHON, *Crying, Cit*. p 64.
[325] *Ivi*. p. 65.
[326] *Ibid*.

«“Not everybody can work it, of course,” […]. “Only people with the gift. ‘Sensitives,’ John calls them.”»[327] and proceeds to invite her to try to contact Nefastis directly. The gift, a special power a person has innately, points us towards Doležel’s alethic endowments and, therefore, to *Rule M*. The reference to Maxwell’s Demon is linked both to the field of cybernetics and to Victorian positivism-spiritualism. Additionally, as noted by Andersson and Bell[328], IBM was one of the companies most deeply involved with cybernetics. Pynchon had already mentioned it in *Entropy*,

> Miriam has been reading science fiction again. That and *Scientific American*. It seems she is, as we say, bugged at this idea of computers acting like people. I made the mistake of saying you can just as well turn that around, and talk about human behavior like a program fed into an IBM machine.[329]

In Pynchon’ mind, IBM seems to behave as a signal of cybernetic practices. The character of Miriam gets angry at her partner Saul when he equates humans and machines, busy as she is in the contemplation, we assume, of the difference between the two, searched for in science fiction and the *Scientific American*. Pynchon portrays the Nefastis machine using analogous cybernetic terms, with its creator articulating an explanation reminiscent of the narrative position that the discipline employs in Porush's description.

> He began […] to talk about something called entropy. […] there were two distinct kinds of this entropy. One having to do with heat-engines, the other to do with communication. The equation for one, back in the ’30’s, had looked very like the equation for the other. It was a coincidence. The two fields were entirely unconnected, except at one point: Maxwell’s Demon. As the Demon sat and sorted his molecules into hot and cold, the system was said to lose entropy. But somehow the loss was offset by the information the Demon gained about what molecules were where.
>
> “Communication is the key,” cried Nefastis. “The Demon passes his data on to the sensitive, and the sensitive must reply in kind. There are untold billions of molecules in that box. The Demon collects data on each and every one. At some deep psychic level he must get through. The sensitive must receive that staggering set of energies, and feed back something like the same quantity of information. To keep it all cycling. On the secular level all we can see is one piston, hopefully moving. One little movement, against all that massive complex of information, destroyed over and over with each power stroke.”
>
> “Help,” said Oedipa, “you’re not reaching me.”

[327] *Ibid.*
[328] ANDERSSON, Cit. pp. BELL, Cit. pp.
[329] PYNCHON, *Entropy*, p. 90.

> "Entropy is a figure of speech, then," sighed Nefastis, "a metaphor. It connects the world of thermodynamics to the world of information flow. The Machine uses both. The Demon makes the metaphor not only verbally graceful, but also objectively true."
> "But what," she felt like some kind of a heretic, "if the Demon exists only because the two equations look alike? Because of the metaphor?" Nefastis smiled; impenetrable, calm, a believer. "He existed for Clerk Maxwell long before the days of the metaphor."
> But had Clerk Maxwell been such a fanatic about his Demon's reality?[330]

Once again, science exerts a complex influence within a work of fiction. On one hand, in Pynchon's work, various concepts blend. The novel incorporates elements such as computer science's binary code and Maxwell's Demon. On the other hand, the *Gedankexperiment* seems to have materialized, akin to the impossible snake in Holmes's story. This suggests a breach that may distinguish Oedipa's world from our own, presenting, in Darko Suvin's terms, a potential *novum*—a science-fictional element or object that diverges from the reader's world[331]. The metaphorical status of entropy is in doubt, Maxwell's Demon is a real machine which, apparently, needs a medium to function.

Grayson sees in the function of the Nefastis Machine a call back to the ancient theory of extramission, whereby vision was justified by emission of "eye beams" from the eyes onto reality[332]. It is our contention, instead, that the presence of the photograph, the call to the user to be a "sensitive" and the mention of Victorian England instead suggest a form of spiritualism cast in a cybernetic context[333]. Nefastis, whose name

---

[330] PYNCHON, *Crying*, *Cit*. p. 79.
[331] DARKO SUVIN, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, New Haven NJ, Yale University Press, 1979. p. 64. The category is taken from Bloch.
[332] GRAYSON, *Cit*. p. 14, 25, 29, 100, 102-103, 106, 112-113, 121, 123, 127-128, 130, 132.
[333] The connections between spiritualism and photography are well known. Doyle carried a series of spirit photographs to his lectures, presented as typical "visual" evidence of the ability of mediums, often called "the gift" in the words that Pynchon also uses. However, it was not common for spiritualism to use photographs as a means to channel such abilities. Another paranormal discipline that could take its place is psychometry, theorized in *Manual of Psychometry: The Dawn of a New Civilization* by Joseph Rodes Buchanan in 1983. This field sought to distinguish itself from spiritualism by allowing practitioners (in a manner similar to that of Firasah) to glean information about previous owners from objects, including photographs. Psychometry often required contact, typically on the forehead, with the object through which one intended to channel their abilities. It also showed connections with graphology, the ability to infer traits of a person from their writing and was similarly promoted as a tool for forensic purposes. The most likely hypothesis is that Pynchon blended these disciplines with religion to evoke a generic aura that straddles the line between pseudoscience and metaphysics. JOSEPH RODES BUCHANAN, *Manual of Psychometry: The Dawn of a New*

could call back to Horace's famous *Carpe Diem* ode evoking divination and the forbidden knowledge of destiny[334], is here using the language that first distinguished precisely the cybernetic discipline. He speaks in fact of "cycling" of energy and information in terms of "feed back", while highlighting the interdisciplinarity which was characteristic of the science. All the while, he is mixing these references with what seem to be his own metaphysics. He is a "believer" in a "deep psychic level", somebody who contrasts Oedipa's common-sense view that a simple analogy cannot account for the identity of thermodynamics and "the world of information flow", with calm faith instead of arguments. His discourse confounds rather than clarify. Nefastis embodies a mystical interpretation of cybernetics; he is a quasi-religious advocate of its analogies (think of Tiqqun), a paradoxical figure akin to Holmes.

Following the detective fiction model we have discussed, *Rule M* would have us expect that the detective will establish at some point a connection with the world that is more authentic than that of other characters, one that holds when confronted with fictional facts. The narrative posits the machine to be the test experiment for a medianic link between the gifted sensitive and the inner workings of the world – something like Cortellessa's invisible empire manifested in the now allegedly "objectively true" Demon. A comparable moment is found in *A Study in Scarlet*, where Holmes tests Jefferson Hope's pills on a dog to demonstrate their toxicity. As Holmes awaits the dog's reaction, he, like Oedipa, experiences a moment of suspense and the unsettling possibility of being mistaken. Upon confirming his deduction, Holmes reproaches himself for not having had enough "faith" in his own method[335]. The Victorian-esque

---

Civilization, Frank H. Hodges, Boston, 1983. pp. ii, 37-3880-82, 188-191. CLEMENT CHEROUX, ANDREAS FISCHER, PIERRE APRAXINE, DENIS CANGUILHEM, SOPHIE SCHMIT (Ed.), *The Perfect Medium: Photography and the Occult*, Yale University Press, New Haven, 2005.

[334] «Tu ne quaesieris, scire nefas, quem mihi, quem tibi / finem di dederint, Leuconoe, nec Babylonios / temptaris numeros.» HORACE, *Odes I: Carpe Diem, Text, Translation and Commentary*, David West (Ed.), Oxford, Oxford University Press, 1995. p. 50.

[335] « Holmes had taken out his watch, and as minute followed minute without result, an expression of the utmost chagrin and disappointment appeared upon his features. He gnawed his lip, drummed his fingers upon the table, and showed every other symptom of acute impatience. So great was his emotion, that I felt sincerely sorry for him [...] "It can't be a coincidence," he cried, at last springing from his chair and pacing wildly up and down the room; "it is impossible that it should be a mere

pseudo-scientific backdrop of the experiment encourages our analogy. For a moment, the experiment seems to succeed, suggesting that in Pynchon's fictional world some spiritual cybernetic magic played on the metaphor of entropy exists, and that Oedipa is indeed a sensitive. However, at the same time, it also seems to fail:

> […] concentrate on a cylinder. Don't worry. If you're a sensitive you'll know which one. Leave your mind open, receptive to the Demon's message. I'll be back." […] Oedipa sat through two Yogi Bears, one Magilla Gorilla and a Peter Potamus, staring at Clerk Maxwell's enigmatic profile, waiting for the Demon to communicate. Are you there, little fellow, Oedipa asked the Demon, or is Nefastis putting me on. Unless a piston moved, she'd never know. Clerk Maxwell's hands were cropped out of the photograph. […] He gazed away, into some vista of Victorian England whose light had been lost forever. Oedipa's anxiety grew. It seemed, behind the beard, he'd begun, ever so faintly, to smile. Something in his eyes, certainly, had changed . . . And there. At the top edge of what she could see: hadn't the right-hand piston moved, a fraction? […] She had seen only a retinal twitch, a misfired nerve cell. Did the true sensitive see more? In her colon now she was afraid, growing more so, that nothing would happen. Why worry, she worried; Nefastis is a nut, forget it, a sincere nut. The true sensitive is the one that can share in the man's hallucinations, that's all. How wonderful they might be to share. For fifteen minutes more she tried; repeating, if you are there, whatever you are, show yourself to me, I need you, show yourself. But nothing happened. "I'm sorry," she called in, surprisingly about to cry with frustration, her voice breaking. "It's no use." [336]

Did the piston move? "She'd never know". Did the picture smile? Oedipa could have imagined it. Is Nefastis just insane? Does the machine really contain an honest-to-God Demon? The alleged smile of the picture is mockingly enigmatic like a cartoon rendition of Monna Lisa's smile, forever looking into a now "lost" Victorian England[337]. The narrator keeps a tight grip on Oedipa's mind, the reader only knows

---

coincidence. [...] What can it mean? Surely my whole chain of reasoning cannot have been false. It is impossible! And yet this wretched dog is none the worse. Ah, I have it! I have it!" [...] The unfortunate creature's tongue seemed hardly to have been moistened in it before it gave a convulsive shiver in every limb, and lay as rigid and lifeless as if it had been struck by lightning. Sherlock Holmes drew a long breath, and wiped the perspiration from his forehead. "I should have more faith,"» CONAN DOYLE, *Study*, *Cit*. p. 63.

[336] PYNCHON, *Crying*, *Cit.* p. 81.

[337] Interestingly, the same methaphor is used by Narcejac while describing Austin Freeman's composition of the Thorndyke novels. In this passage he deals with the existential mystery of the "unique", of the punctual contingent state of affairs as possessing an ungraspable particular quality, which to him is the exclusive domain of literature. In his view, Science aims to reduce this domain to the point of dissolution into general laws. In reality, all rocks made of the same material are the potentially the same from a molecular standpoint and so humans all belong to categories. If Freeman were still alive, he writes, he would applaud these ideas, ignoring the fact that "humans are not things". To Narcejac, characters in a novel are inexplicable beings, caught by blind forces (which science can identify and define) but always capable, in principle if not in fact, of assuming and

what she knows, which is ultimately nothing. The alethic sphere is not detailed, it is subsumed to the epistemic through the close internal focalization. Her epistemic sphere is lacunose and therefore so is the reader's. The reader, like Oedipa, will never know if the Nefastis machine works and thus we will never be entirely sure of the existence of this *novum* in Oedipa's world. The text does not authenticate anything fully.

It appears as if the saturation and the positionings of gaps in Pynchon's work are in a complex relationship with the plot's progression. In passages like these the information is rich and detailed. It elaborates and expands the narrative but, at the same time, it does not resolve its proposed dilemmas. When directly confronted with the mysteries it presents, the text evades and introduces uncertainties, even in these apparently dense, mockingly symbolic moments, where the character's relationship with the world's inner workings seems to be on the verge of transcending the empirical level. The moment of anagnorisis is constantly deferred. The plot thus progresses through a continuous cycle of unresolved narrative questions. Oedipa encounters one character after another, each providing inconclusive information, never reaching a resolution. In the Nefastis Machine episode, a meta-narrative self-embedding seems to unfold. Readers, like Oedipa, will not receive answers, neither about the episode nor the entire novel.

The inclusion of cartoons adds comedy to a scene that, from a Sherlock Holmes perspective, would border on the tragic. It appears unsettling for Oedipa, who repeatedly summons the Demon to no avail. She experiences a fear akin to that of Holmes, yet this time there is no link between her inner self (represented by her retina and nerve cells) and the profound mechanics of the world around her (represented by

---

dominating them. This conflict concerns fate and freedom, and constitutes the individuality of the person, their "cipher" in Narcejac's terms. That is the role of a character in a great novel, it is from the character that the world is defined. In this sense, he writes, a character is made of words, because the word expresses, precisely, the essential difference, the singularity, which is never a "thing", but a reality in becoming. The method of Freeman, like that of Poe, like that of Da Vinci, instead, kills all becoming; it only succeeds in creating objects. The Raven is an object, like the Monna Lisa, although the famous smile represents to the critic the "promise of a change within immobility". Such reflection on freedom and uniqueness, on the irreducible nature of the human is also present in Porush which makes it the kernel for the access of cybernetics in texts. NARCEJAC, *Cit*. pp. 84-86.

the demon). The "detective" poses questions but the narrative itself, embodied by the piston and the narrator's voice, remains ambiguous. Perhaps what Oedipa truly regrets, inexplicably on the brink of tears with her voice trembling, is *not to have Holmes' alethic endowment*, not being the detective Spanos' bourgeois sought. However, as mentioned, the narrator does not offer a clear perspective on the situation. Oedipa may indeed have witnessed some movement, suggesting perhaps powers to be revealed at a later stage. *Rule M* is suspended. Pynchon's narrative world is characterized by this active retention of possibilities. Viewing this through Ronen's lens, we observe a resemblance to Gadda's Heisenbergian conclusion: in literature, between opposites, *tertium datur*. In this instance, unlike in Gadda's conclusion, the reference to a scientific framework is explicit, not towards a science of indeterminacy but towards a science of positive explanation and mathematization that evolves into a form of magic.

Let us consolidate our observations thus far. If we consider Pynchon's association between Wiener and Adams as a fusion of science's capacity to elucidate and transform the world alongside its ability to depict scenarios where possibilities are exhausted and the world's inevitable end is foreseen, we can interpret these passages as interconnected. In *Lot 49*, the portrayal of cybernetics presents itself as capable of generating a technology that, in Leo Marx's words, embodies one of the most compelling aspects of the practical appeal of a science within the society where it originated[338]: the ability of showing beyond dispute that a theory is true and practical. However, this machine proves to be possibly fraudulent and is certainly inconsequential to Oedipa's story.

Wiener, through the dissemination of his theories, presented Pynchon with an ambivalent stance halfway between a probabilistic final disintegration of reality in

[338] Already in mid nineteenth century if «Science was abstract and invisible; machines were sensuous and incontestably "real"; it was like the difference between a prophet's merely verbal claim of supernatural power and his performance of a miracle in the presence of witnesses.» What cybernetics offered in contrast to the earlier theoretical progresses of the twentieth century was a new, concrete, visible possibility of encoding the world and controlling it. In its multidisciplinarity it presented itself as extremely practical, widely encompassing and thoroughly devoted to material efficiency. It produced machines that could be touched and made to work, to kill, even to think. MARX, *Fatalistic*, *Cit*. p. 186.

Entropy and an advocacy for scientific foresight in machine design[339]. When applied to the sense of an ending inherent in cybernetics, Pynchon's world could be viewed as a different kind of experiment. What if, contrary to Wiener's principles, Pynchon's fiction lacks a teleological purpose? This aligns with the classic postmodern interpretation[340], the implications of which are elucidated through the study of cybernetics. In his article *Behavior, Purpose and Teleology*, Wiener sought to rehabilitate the concept of teleology by linking it to the idea of purpose while excluding final causes and determinism[341]. Malapi-Nelson reported how it was controversial within academia, because it was nonetheless perceived as problematically rehabilitating those very same concepts within the scientific method which had got rid of them[342]. As we have seen with Leo Marx, even the young neo-romantic writers of that era, drawing on a century-old mystical fear, felt overwhelmed by what they saw as

---

[339] Wiener anticipated now common issues of self-driving cars. «[W]e realize our wishes, insofar as we do actually realize them, by a feedback process, in which we compare the degree of attainment of intermediate goals with our anticipation of them. In this process, the feedback goes through us, and we can turn back before it is too late. If the feedback is built into a machine that cannot be inspected until the final goal is attained, the possibilities for catastrophe are greatly increased. I should very much hate to ride on the first trial of an automobile regulated by photoelectric feedback devices, unless there were somewhere a handle by which I could take over control if I found myself driving smack into a tree. The gadget-minded people often have the illusion that a highly automatized world will make smaller claims on human ingenuity than does the present one and will take over from us our need for difficult thinking, as a Roman slave who was also a Greek philosopher might have done for his master. This is palpably false.»WIENER, *God and Golem*, *Cit.* pp. 62-63.

[340] See LINDA HUTCHEON, *A Poetics of Postmodernism: History, Theory, Fiction, New York*, Routledge, [1988] 1990. p. 57.

[341] ROSENBLUETH, WIENER, BIGELOW. *Cit*. pp. 23,24.

[342] The association made by Malapi-Nelson between cybernetics and behaviorism, coupled with the potential reversal of the cause-effect relationship and Lyotard's totalizing ambition towards determinism are evident in passages from Gravity's Rainbow where behaviorist scientists are studying Slothrop's erections that occur before the V2 rocket falls. « "You're putting response before stimulus." "Not at all. Think of it. He's out there, and he can feel them coming, days in advance. But it's a reflex. A reflex to something that's in the air right now. Something we're too coarsely put together to sense but Slothrop can." "But that makes it extrasensory." "Why not say 'a sensory cue we just aren't paying attention to.' […] Suppose, Pointsman argues, that Jamf's stimulus x was some loud noise, […] any doodle close enough to make him jump ought to be giving him an erection: the sound of the motor razzing louder and louder, then the cutoff and silence, suspense building up then the explosion. Boing, a hardon. But oh, no. Slothrop instead only gets erections when this sequence happens in *reverse*. Explosion first, then the sound of approach: the V-2. But the stimulus, somehow, must be the rocket, […] When we find it, we'll have shown again the stone determinacy of everything, of every soul. There will be precious little room for any hope at all. You can see how important a discovery like that would be.» PYNCHON, *Gravity*, *Cit*., pp. 49, 86.

the inevitable and totalitarian control of technological progress over their lives, which was narrating tales of inescapable doom. Rather than representing an "invisible" reality through science, Pynchon appears to be constructing a world where certain explanatory rules governing our reality do not easily apply.

2.V. Is it O.K. to be inoperative?

If we take the pruning of possible worlds as the procedure of the Spanosian "detective story machine", all instances where one solution or the other is not progressively excluded can be read as the sabotage of this machine. In affirming this we come closer to Thomas Narcejac's vision of the detective novel as a *machine a lire* in which the writer, like Wiener in the eyes of cybernetics philosopher Nick Land[343], «a besoin d'un plan; il observe des régles; il sait chaque instant ou il va» and whose tradition is based on the confusion between «déterminisme et nécessité», end and endings, making it so that «les actes humains obéissent a des lois au méme titre que les phénoménes physiques»[344] and are therefore predictable[345]. In this perspective, stemming from Poe's "backward" compositional method, Narcejac aligns with the teleological views of

[343] «Wiener is the great theoretician of stability cybernetics, integrating the sciences of communication and control in their modern or managerial-technocratic form.» NICK LAND, *Circuitries*, in *Fanged Noumena: Collected Writings 1987-2007*, New York, Sequence Press, 2012. p. 299. Here Land is seconding the connection between cybernetics and the observations made by Leo Marx on countercultural Neo-Romantic technocriticism's attack on bureucratization.

[344] NARCEJAC, *Cit.* pp. 18, 24. See also MAURIZIO ASCARI, *La leggibilità del male: Genealogia del romanzo poliziesco e del romanzo anarchico inglese*, Pàtron Editore, Bologna, 1998. p. 45.

[345] In light of this, we can read another passage from the novel as a foreshadowing of its ending. In the famous episode of the atomized can that takes off like a "missile" avant la lettre in Pynchon's bibliography, the same cybernetic-religious language that dominates the cybernetic discourse appears in relation to the flying can. «The can knew where it was going, she sensed, or something fast enough, God or a digital machine, might have computed in advance the complex web of its travel; but she wasn't fast enough, and knew only that it might hit them at any moment, at whatever clip it was doing, a hundred miles an hour. [...] The can collided with a mirror and bounced away, leaving a silvery, reticulated bloom of glass to hang a second before it all fell jingling into the sink; zoomed over to the enclosed shower, where it crashed into and totally destroyed a panel of frosted glass; thence around the three tile walls, up to the ceiling, past the light, over the two prostrate bodies, amid its own whoosh and the buzzing, distorted uproar from the TV set. She could imagine no end to it; yet presently the can did give up in midflight and fall to the floor, about a foot from Oedipa's nose. She lay watching it.» PYNCHON, *Crying*, *Cit.* pp. 23-24. If we consider Narcejac's reflections on the energy of reader feedback on the plot, this moment of Oedipa contemplating the zigzagging trajectory of the can encapsulates the aims of our thesis.

detective plots that we explored in the first chapter, particularly those of Brooks and Doležel.

In 1984 Pynchon wrote an article entitled *Is it O.K. to be Luddite?*. In this article, published the same year as the introduction to *Slow Learner*, the writer departs from novelist C.P. Snow's famous Lecture *The Two Cultures and the Scientific Revolution*, where Snow coined the famous expression that dominated (and in part engendered) the now century-long debate between literary and scientific knowledge. In his lecture, Pynchon notes, Snow frames humanists as "natural Luddites", casting them «as the counterrevolutionaries of the "Industrial Revolution'" which their modern counterparts have "never tried, wanted, or been able to understand"»[346]. To this view, Pynchon opposes the argument (among others) that the luddites did not attack the latest machines that were produced at their time but older ones, and thus that their gesture was political rather than fearful of progress. The figure of King Ludd, Pynchon explains, instead became something of an urban legend, a fiction set in reality with the purpose of evoking something more than a human, «Big and Bad»[347] like Frankenstein's monster, like Walpole's Alfonso, like King Kong:

> What gave King Ludd his special Bad charisma, took him from local hero to nationwide public enemy, was that he went up against these amplified, multiplied, more than human opponents and prevailed. When times are hard, and we feel at the mercy of forces many times more powerful, don't we, in seeking some equalizer, turn, if only in imagination, in wish, to the Badass - the djinn, the golem, the hulk, the superhero - who will resist what otherwise would overwhelm us? Of course, the real or secular frame-bashing was still being done by everyday folks, trade unionists ahead of their time, using the night, and their own solidarity and discipline, to achieve their multiplications of effect.[348]

The Golem and the Djinn also appeared in Wiener, explicitly being called upon as examples of repositories of common sense against the dangers of carelessness in technological matters. In the mind of Pynchon, the hyperbolic dimensions and destructivity of these characters have a «[l]uddite value: that is, for its attempt, through

[346] THOMAS PYNCHON, *Is it O.K. to be a Luddite?*, in *New York Times Book Review*, 28 October 1984. < https://www.nytimes.com/1984/10/28/books/is-it-ok-to-be-a-luddite.html > 19/07/2024.
[347] *Ivi.*
[348] *Ivi.*

literary means which are nocturnal and deal in disguise, *to deny the machine.*»[349] His hypothesis is that they generated as a form of psychological compensation for the death of the «Age of Miracles» by the hand of the enlightenment. His analysis is directed towards *possibilities* "if only in imagination", both in the form of beings (magical creatures) and of events (miracles). He even cites Blake's Satanic Mills, one of the banners of the countercultural tradition elicited by Leo Marx[350]:

> […] folks in the 18th century believed that once upon a time all kinds of things had been possible which were no longer so. Giants, dragons, spells. The laws of nature had not been so strictly formulated back then. What had once been true working magic had, by the Age of Reason, degenerated into mere machinery. Blake's dark Satanic mills represented an old magic that, like Satan, had fallen from grace. As religion was being more and more secularized into Deism and nonbelief, the abiding human hunger for evidence of God and afterlife, for salvation - bodily resurrection, if possible - remained.[351]

This "possibility" is explicitly set against "the laws of nature", like Nefastis' Demon in the words of Koteks. The Methodist movement, the American Great Awakening, Freemasonry, the luddites and the Gothic novel are for Pynchon expressions of «the same profound unwillingness to give up elements of faith, however "irrational," to an emerging technopolitical order that might or might not know what it was doing»[352]. The Nefastis' machine could also be said to be part of this imagery as a figure of irony in the sense given by Porush or by Linda Hutcheon, in which an ironic literary object inevitably puts forth both its literal meaning and its opposite[353]. Pynchon uses terms reminiscent of PWT, questioning the portrayal, in fiction, of the violation of scientific laws and challenging the notion that such transgressions indicate a lack of "seriousness" on the part of writers. Like Spanos wanted the metaphysical aspect of narratives and their connection to reality appears to pivot on the notion of possibility. Rationalization is seen as an inherent murderer of the "multiverse", of the idea of possibility itself, only that this time, a complex mourning follows its assassination. As

---

[349] *Ivi.*
[350] Marx, *Neo-romantic*, Cit. p. 171. Here Marx notices how Roszak calls the stile of science "the single vision" citing Blake, playing on our portrayal of post-was science as promoting, in the eyes of its neo-romantic critics an idea of narrowing of possibilities.
[351] THOMAS PYNCHON, *Luddite, Cit. Ivi.*
[352] *Ivi.*
[353] PORUSH, *Soft-Machine*, *Cit*. p. x. HUTCHEON, *Poetics*, *Cit*. pp. 58, 125.

Pavel argued[354], miracles were once considered actual possibilities. In Pynchon, fictions that contain them seem to become those in which this possibility, vivifying but potentially dark, lives on, resisting "serious reader's" claims of it being the idle pastime of the unserious. Detective fiction is also part of this picture:

> […] if we do insist upon fictional violations of the laws of nature - of space, time, thermodynamics, and the big one, mortality itself - then we risk being judged by the literary mainstream as Insufficiently Serious. […] The Gothic attitude in general, because it used images of death and ghostly survival toward no more responsible end than special effects and cheap thrills, was judged not Serious enough and confined to its own part of town. It is not the only neighborhood in the great City of Literature so, let us say, closely defined. In westerns, the good people always win. In romance novels, love conquers all. In whodunits, murder, being a pretext for a logical puzzle, is hardly ever an irrational act. In science fiction, where entire worlds may be generated from simple sets of axioms, the constraints of our own everyday world are routinely transcended. In each of these cases we know better. We say, "But the world isn't like that." These genres, by insisting on what is contrary to fact, fail to be Serious enough, and so they get redlined under the label "escapist fare."[355]

Detective fiction, along with other "escapist" genres, aims to maintain the unlikely concept of a logical crime through its pre-narrative axioms (in terms close to those of Narcejac) in contrast to a "real" world of disorder and unpredictability. Pynchon shared this issue with other contemporary crime writers such as Patricia Highsmith and Truman Capote who in the fifties and early sixties were treating the theme of unexplainable murder confronted with the rationalization of the "real" world.

Pynchon distances himself from the notion that serious literature must align with a world that mirrors reality. If attempting to defy thermodynamics (and natural laws in general) is deemed taboo in the realm of "adult" fiction, Pynchon offers an alternative to both conventional "serious" literature and formulaic genres. He suggests that science fiction experienced a surge in popularity after Hiroshima, providing solace for those skeptical of technological advancements. During the Atomic Age and Cold War era, science fiction writers explored humanistic concerns and philosophical inquiries,

[354] The analogy of examples is striking «The actual world as well as the relation of accessibility are different for the authors of medieval miracle plays compared to the author of a modern mystery novel. A world in which the statue of the Virgin Mary speaks to a layman belongs to the range of possibility for a medieval writer and his public, just as a world in which an FBI narcotics squad dismantles a network of drug dealers and arrests everybody is a possible world for the writer of a contemporary mystery novel and its readers.» Thomas Pavel, *Fictional Worlds*, *Cit*. p. 47.

[355] THOMAS PYNCHON, *Luddite, Cit. Ivi.*

distancing themselves from «hardware»[356] destruction in favor of «exotic cultural evolutions and social scenarios, paradoxes and games with space/ time, wild philosophical questions—most of it sharing […] a definition of "human" as particularly distinguished from "machine"»[357], yearning for "lost" human reason like earlier Luddites yearned for miracles. The description would even fit a writer like Asimov if it were not for his penchant for the irreducible supreme good of scientific progress.

In Pynchon, the division between serious and unserious literature becomes one of the objects of his sabotage. No judgment of "seriousness" based on the rules of the fictional world can be made to the text, which invites them and frustrates them at the same time. We do not know if there is magic. Maybe Oedipa is a paranoid and Nefastis a charlatan. Maybe «[t]he Tristero System […] is real, or [maybe it is] a staged hoax»[358], like many other detective fiction plots in the mind of Hodgson. On the plain of scientific accuracy, the mutually contradictory possible worlds projected by *Lot 49* are never pruned: they are left to flourish wildly, and this in turn makes them close to the myth of King Ludd. If the miraculous version of Maxwell's Demon is possible, then possibility itself is unexhausted. This contrasts with the verifiably unreal elements in Thomas Pynchon's worlds, such as the Vivaldi *Kazoo Concerto* mentioned at the beginning of the work[359]. Elements like these, including the imaginative names of the characters, seriously unlikely but never outright impossible, serve to blur the boundaries between reality and fiction, to make the reader doubt. Their impact on the plot is consistently inconsistent.

Later in the article, Pynchon notes that then in the 1980s, as society entered what Porush called the Cybernetic Age, he observed a shift in the Luddite attitude towards machinery as word processors became more user-friendly. He identified a new potential for miracles within technology itself. According to him, this shift led to a convergence between Luddites and technocrats, as the first began to acknowledge the

---

[356] *Ivi.*
[357] *Ivi.*
[358] TANNER, *City*, *Cit*. p. 176. Oedipa uses the same term. PYNCHON, *Crying*, *Cit*. p. 129.
[359] PYNCHON, *Crying, Cit.* p. 2.

positive impact technology could have in addressing challenges (curing diseases, preventing nuclear disasters, managing environmental issues, combatting panoptic surveillance in cyberspace) and the latter were forced to forfeit their control over emerging technologies in the posthuman world. This passage within the wider context of the counterculture is exemplarily described by Fred Turner[360]. The nexus between cybernetic disciplines and biology seemed destined to become the new way for the unpredictable to enter the world:

> If our world survives, the next great challenge to watch out for will come – you heard it here first – when the curves of research and development in artificial intelligence, molecular biology and robotics all converge. Oboy. It will be amazing and unpredictable, and even the biggest of brass, let us devoutly hope, are going to be caught flat-footed.[361]

After this conclusion, which hints at the political positioning of the author, King Ludd is evoked once again by a neo-romantic quote from Byron. As a call to arms against power, the evocation of King Ludd, which Pynchon has so far treated as the quintessential fiction embodying politically charged possibility, becomes a stir directed at the revolutionary American spirit of his contemporaries:

> As the Liberty lads o'er the sea
> Bought their freedom, and cheaply, with blood,
> So we, boys, we
> Will die fighting, or live free,
> And down with all kings but King Ludd![362]

In the light of this opinions expressed by the author, the hypothesis of a willful symbolic act of sabotage on the part of the narrator of *Lot 49* is reinforced in view of the creation a fiction with a neo-luddite-influenced political drive, but a few more arguments can be made.

Among the materials preserved at the Harry Ransom Humanities Research Center at The University of Texas at Austin, only recently made available to the public, there is the draft of *Minstrel Island*, a musical with neo-Luddite themes dating back to 1958 that Pynchon and his longtime friend Kirkpatrick Sale (notorious neo-Luddite) were

---

[360] FRED TURNER, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*, University of Chicago Press, Chicago, 2006.
[361] PYNCHON, *Luddite, Cit. Ivi.*
[362] *Ivi.*

writing together, and letters to him and to his wife Faith dating from 1963-1964, between the publication of *V.* and that of *The Crying of Lot 49*. The letters reveal that Pynchon, during a stay in Mexico, interacted with Borges's works. He re-read *Ficciones* in Spanish, read *El Aleph* and announced that he was looking for Isidro Parodi's mystery stories written by Borges with Bioy Casares[363].

The draft plays into the theme of neo-luddite sabotage, appearing to be a satirical take on a large tech company, shamelessly identified as IBM in the unpublished draft. The company's arrival on a secluded island is portrayed as a colonization effort, IBM is both a business and a governmental institution, a Daniel Bell-ian panopticon aiming to modernize and control a quaint beach town. Its members are seen as persuaders, attempting to introduce their technology and ethics of efficiency to a resistant native population. The nameless characters in the play, including Hero, Broad (Ivey), and others, are all portrayed as victims of technology in some form. The carefree lifestyle of the minstrels, a group of local people dedicated to music and leisure, is contrasted with IBM's strive towards efficiency, leading to tension within the community that menaces to burst into violence in the form of sabotage bombings. The play explores the themes of love, commodification, and resistance to a dominating techno-political force[364].

Steven E. Jones framed the association between Pynchon's fiction and Luddism in confident terms:

---

[363] THOMAS PYNCHON, Unpublished letter to Faith and Kirkpatrick Sale, June 2, 1963.

[364] THOMAS PYNCHON, *Minstrel Island*, unpublished draft, Spring 1958. In the letters to the couple, the theme of technology returns little. In one of the letters (dated May 28, 1962), Pynchon, then in Seattle, complains about the gentrifying consequences of the Seattle World Fair, announcing that he is actively boycotting it and that he agrees with the April 23 article by noted journalist Alistair Cooke, in which the author laments its relatively small scale and characterizes it as little more than a celebration of the consumer products of participating countries in order to erase, in the collective mind, its identity as a gathering place for "Klondike failures and Labor Radicals." THOMAS PYNCHON, Unpublished letter to Faith and Kirkpatrick Sale, May 28, 1962. The only other reference to the society of technology and the changes in the world of work are the observations that Pynchon makes on June 29, 1963 when he characterizes Mexican society (by then he had moved south) as obsessed with calculations, productivity. A "watchwatching" society, written in one word and remindful of Daniel Bell's stopwatch Bible. THOMAS PYNCHON, Unpublished letter to Faith and Kirkpatrick Sale, June 29, 1963.

> In *The Crying of Lot 49* […], the quintessential postmodern neo-Luddite novel, technology is beginning to be computerized. The whole point of *The Crying of Lot 49* is that paranoid apophenia — obsessive pattern recognition — may well be the most appropriate response to modern technological society. […] The Pynchonesque plot is all about coming to perceive meaningful connections between phenomena […], patterns of networked relationships beneath the surface of everyday reality, a machine behind the appearance of organic nature. This attitude, this myth of sublime technology, *is* modern (or postmodern) neo-Luddism.[365]

In fact, Jones suggests that the underground communications network of the Tristero conspiracy and its W.A.S.T.E. system may be a metaphor of neo-Luddite resistance. Jones cites the scene where a Yoyodyne executive faces technological redundancy when he is automated out of a job by an IBM machine. Saved from suicide by joining the W.A.S.T.E. counter conspiracy, by metaphorically "becoming waste", this scenario ironically literalizes the idea of being made redundant by technological progress while also projecting a deferred rebellion to this predicament. In *The Crying of Lot 49*, the "machine" of the system and the secret society opposing it share a similar structure - pervasive and invisible. Their patterns of meaning manifest themselves in sublime revelations, such as when the urban sprawl of Los Angeles transforms into a transistor circuit in the eyes of the protagonist. Oedipa's realization about "zeroes and ones" is significant. According to Jones it anticipates cyberpunk dystopias that followed. He cites stories that make use of crime fiction tropes: *Blade Runner*, *Neuromancer*, and *The Matrix*[366]. Once again:

> Pattern-recognition in this case is common sense as well as paranoia, because the skein of technology has in fact become coextensive with the world of experience, like some updated hypertext version of the medieval Book of the World. Given this situation, neo-Luddism, in the form of an ironic, emotionally paranoid resistance against technological totality, seems an eminently reasonable response.[367]

In the age of early computers, the new Ginzburgian "Book of the World" for detective Oedipa is written in binary language. Porush's «larger and more effective vision of the *machina mundi*»[368].

---

[365] STEVEN E. JONES, *Against Technology, From the Luddites to Neo-Luddism*, New York, Routledge, 2006. p. 204. Emphasis in the original.
[366] *Ivi*. pp. 204-206.
[367] *Ivi*. p. 207
[368] PORUSH, *Soft Machine*, *Cit*. p. x.

This vision has a coercive character against which her whole story and its narrator oppose a resolute third way, the double way of excess and withdrawal of information by manipulation of the saturation of the text. With Zavarzadeh we could define this situation as eluding «simple meaningful/meaningless reality testing»[369], and connected it to «[a] condition of 'certainty' […] replaced by a condition of 'probability' - randomness and uncertainty»[370]. Lacking a definitive ending, the argument of the plot is suspended, no possible world prevails; and since the questions of Oedipa are epistemic and alethic in nature (is it possible for the Tristero to exist? how can I know about the Tristero?), the very fabric of the narrative world around her seems to be suspended. To evade reality testing in Pynchon is not a failure, it is a choice. Pynchon, like complex dynamics scientists, sees complexity as the realm of possible patterns, not as chaos[371]. As Vanderbeke states, in Pynchon's oeuvre «[r]igid order and maximum entropy are complementary, […] while life takes place on the interface between the extremes in a continuous process oscillating between the creation and destruction of order.»[372] The possibility of finding answers along with the emotional involvement it creates are always present and they remain, like Narcejac wanted, the motor of the detective-like plot. Apophenia is the key to Pynchon as it was to Conan Doyle. The line that divides them is the line that divided paranoia from sanity in Freud: the "truth" of the connections within the world of reference[373]. Oedipa thought so when

[369] MAS'UD ZAVARZADEH, "The Apocalyptic Fact and the Eclipse of Fiction in Recent American Prose Narratives", in *Journal of American Studies*, Vol. 9, No. 1, April 1975, p. 69.
[370] *Ivi.* p. 70.
[371] HAYLES, *Complex Dynamics*, *Cit*. pp 2-7.
[372] VANDERBEKE, *Cit*. p. 38.
[373] «La categoria dell'accidentale, di ciò cui non occorre motivazione, alla quale l'individuo normale ascrive una parte delle proprie prestazioni psichiche e dei propri atti mancati, viene quindi negata dal paranoico per quanto concerne le manifestazioni psichiche altrui. Tutto ciò che egli osserva negli altri è significativo, tutto è interpretabile. […] Il paranoico quindi in un certo senso ha ragione; egli vede qualcosa che sfugge alla persona normale, ha vista più acuta della mente normale, ma lo spostamento sugli altri dello stato di cose così riconosciuto toglie valore alla sua conoscenza» SIGMUND FREUD, *Psicopatologia della vita quotidiana*, in Freud, S., *Opere*, Vol IV, *1900-1905 Tre saggi sulla teoria sessuale e altri scritti*, Boringhieri, Torino, 1970. p. 276. Confront this with this passage from Pynchon in which the saintly individual holds something similar to our *Rule M* power that connects he or she with the deep inner workings of the world: « The saint whose water can light lamps, the clairvoyant whose lapse in recall is the breath of God, the true paranoid for whom all is organized in spheres joyful or threatening about the central pulse of himself, the dreamer whose puns probe ancient

she said to herself that "[…] the true sensitive is the one that can share in the man's hallucinations, that's all".

Linda Hutcheon notably elicited a similar stance in postmodernism in general. The increasing homogenization of mass culture (the character's fear in *Entropy*, the one pointed out by Tanner), as any other totalizing socio-cultural process, are forces that postmodernism aims to challenge, not to deny. The same is true for scientific master-narrations. The point is not being skeptic towards cybernetics as much as it is to challenge the arbitrary narrative purport it happened to bring along with its epistemics[374]. According to Linda Hutcheon, Pynchon's postmodernism questions multiple interconnected forms of privileged explanatory power while simultaneously representing them, putting them at work in an exaggerated, parodic way that asserts them while sabotaging them. This approach is necessary to understand the elusive concept of «pulsing stelliferous Meaning»[375] evoked by Pynchon in *Crying of Lot 49*. In this fictional world meaning formation is possible but uncontrollable, discontinuous, unreliable, sublime. Like Pierce Inverarity himself: "unpredictable", it emerges with beauty from unexpected circumstances[376]. Depriving his fiction of its *telos*, Pynchon does not dissipate it, it multiplies its possibilities through the K-worlds of Oedipa and beyond. Pynchon is not setting scene to the undecidable as a property of the world as much as to all that remains ignored once a part of the world has been read and codified.

---

fetid shafts and tunnels of truth all act in the same special relevance to the word, or whatever it is the word is there, buffering, to protect us from. The act of metaphor then was a thrust at truth and a lie, depending where you were: inside, safe, or outside, lost. Oedipa did not know where she was.» PYNCHON, *Crying*, Cit. p. 98.

[374] Here we are essentially arguing against positions that want Pynchon to conform to postmodernism as the believing in the fundamental ungroundedness of the world. TERRY EAGLETON, *The Illusions of Postmodernism*, Oxford, Blackwell, 1996. p. vii. We oppose a view that sees Pynchon creating worlds is deliberately creating ungrounded worlds in order to put the reader in a position of questioning historic ideological forces that pushed for a strong narrative in which determinism was revived after its dissolution into the new science. For the political-historical intent of Pynchon see LINDA HUTCHEON, *The Politics of Postmodernism*, New York, Routledge, 1990. And JOANNA FREER, *Politics and Counterculture*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019.

[375] Pynchon, *Crying*, *Cit*. p. 60. citato da HUTCHEON, *Poetics*, *Cit*. p. 157.

[376] I am elaborating on insights contained in HUTCHEON, *Poetics*, *Cit*. pp. 6,47,58, 120, 125, 130,131,133,157, 192. And LINDA HUTCHEON, *Politics, Cit*. pp 63, 65.

"Not about Pierce, instead about "what remained", what "stayed away"". It is in white noise – from which communication theory extracted codifiable and manipulable messages – that Pynchon finds his elements. There seems to be a connection between *telos* and proliferation of non-binary possibilities. In this light one can re-examine Tristero and W.A.S.T.E.

2.VI. Waste and Hope

In a story contained within the collection *Slow Learner* entitled *Low Lands,* a Long-Island attorney and ex-Navy communications officer named Dennis, kicked out by his wife, spends a night with some friends in a garbage dump. In the middle of the night, while his friends are sleeping, Dennis hears a woman's voice calling him. Intrigued, he ventures into the dump to find her. When he finally meets her, he is captivated by her beauty despite her incredibly short stature. She invites him to her underground home built of tunnels under the dump itself. There she expresses her desire to marry him. Despite being already married, he hesitates but ultimately accepts, reflecting on his longing for children, and recognizing that she reminds him of the family life he never had with his wife Cindy and her «relentless rationality»[377]. In this dream-like scene, the ex-communications officer Dennis finds a magical new possibility within a pile of waste. He finds communication in white noise, the possible world in which he has children, a world he excluded, is reintegrated by this magic encounter.

One can perceive waste as a locus of unexpressed possibility. Prezzavento calls the theme of waste in Pynchon «a sort of parallel world alternative to the normal everyday life»[378]. Žižek, on his part, insisting on the reality of trash, deems places like the famous airplane cemetery in the Mojave Desert «the obverse of the incessant capitalist drive to produce»[379], and frequently pushes for its aesthetic revaluation.

---

[377] PYNCHON, *Low Lands,* in *Slow Learner*, *Cit*. pp. 55-77.
[378] PAOLO PREZZAVENTO, *Thomas Pynchon: A Stranger in a W.A.S.T.E. Land*, in Giancarlo Alfano, Mattia Carratello (ed.) *La Dissoluzione Onesta: Scritti su Thomas Pynchon*, Napoli, Cronopio, 2003, p. 190.
[379] SLAVOJ ŽIŽEK, *The fragile absolute, or, Why is the Christian legacy worth fighting for?*, London, Verso, 2008. p. 38.

Daniele, examining Pynchon's fiction through an architectural perspective that highlights the uncontrolled growth of urban sprawls and no-towns in the 60's, describes his fiction as a U-topia[380], as focusing on the elsewhere, on a city that "doesn't exist". David Kipen even labeled the *storyworld* of Pynchon, in which characters often return from novel to novel and in which things such as Yoyodyne and a Vivaldi Kazoo Concerto exist, a *Pynchonverse*, similar to ours but irreducibly different[381].

We can read *The Crying of Lot 49* considering these positions that focus on waste as "elsewheres" and "U-topias" in which the principles of positivist efficiency do not work. If we hang on Daniel Bell's suggestions about Taylorist productivity, informed in the sociologist by the advances of cybernetics and enriched by his metaphysical musings, a story such as Pynchon's flags the opposite: it radically reclaims waste, the cardinal sin of the society of production. Without the visible *telos* of the *mystère expliqué*, Pynchon's narrative lingers in its very being "wasteful" and is effective as such, as «capitalist drive at rest»[382]. If we read, as we have done with Hite and Narcejac, the structural dynamic of the *mystère expliqué* as containing in itself some sort of cybernetic purpose, *The Cryng of Lot 49* becomes a deliberate sabotage of this very machination. Ultimately, we can read the *telos* of detective fiction as a metaphor for Wiener's teleology. If the goal of the cybernetic machine is to achieve its *telos*, then Pynchon's textual machine (Porush) is a non-teleological machine[383]. Its postmodern "playfulness" could be construed as time reclaimed from productivity, and at the same time made intense in the contact with ambiguous events and individuals.

With the flourishing of possible worlds as a narrative structure, one could perceive *Lot 49* as exemplary of a more general stance on art. During a renowned lecture in Paris in March 1987, Gilles Deleuze characterized the act of creation as involving an "act of resistance", a resistance inherent to artistic work itself, set against the dominant

[380] DANIELE, *Cit*. p. 19.
[381] DAVID KIPEN, "David Kipen's Great American Novel: The Works of Thomas Pynchon," Los Angeles Times, June 30, 2016.
[382] ŽIŽEK, p. 38.
[383] ROSENBLUETH, WIENER, BIGELOW. *Cit*. p. 19.

paradigm of information, which more than explaining art serves as a mechanism for exerting power in what he referred to as "control societies"[384]:

> […] une information, [declared Deleuze] c'est un ensemble de mots d'ordre. Quand on vous informe, on vous dit ce que vous êtes sensés devoir croire. […] Quel est le rapport de l'œuvre d'art avec la communication? Aucun. […] il y a une affinité fondamentale entre l'œuvre d'art et l'acte de résistance.[385]

Developing this perspective, Giorgio Agamben, in his essay *What is an act of creation?* Writes that

> […] the properly human praxis is that which, by rendering inoperative the specific works and functions of the living being, makes them, so to speak, *run on idle* [girare a vuoto] and in this way opens them to possibilities. […] [R]endering all human works inoperative is poetry itself. What is poetry if not an operation in language that deactivates and renders inoperative its communicative and informative functions in order to open them to a new possible use?[386].

Taking inspiration from Deleuze and Agamben we can see Pynchon's plots as affirmations of possibilities set against the ideology behind cybernetics. If cybernetics is, as Heidegger also thought, the complete and total functionalization of thought, and consequently, submission of philosophical possibility to teleology, then narrative, if deprived of its "informative" epistemic sphere and ending, can be a celebration of possibility itself.

A passage near the end of *Lot 49* plays into this interpretation. Among Oedipa's paranoid thoughts, a similar perspective appears, transforming the Tristero into a repository of possibilities:

> Either you have stumbled indeed, without the aid of LSD or other indole alkaloids, onto a secret richness and concealed density of dream; […] *maybe even onto a real alternative to the exitlessness, to the absence of surprise to life*, *that harrows the head of everybody American you know, and you too, sweetie*. Or you are hallucinating it. Or a plot has been mounted against you, so expensive and elaborate, involving items like the forging of stamps and ancient books, constant surveillance of your movements […].[387]

Here we see, on one side of Oedipa's dichotomy, the idea that Tristero could be a liberating reality from the sense of inevitability experienced by American society. The

---

[384] GIORGIO AGAMBEN, *Creation and Anarchy: The Work of Art and the Religion of Capitalism*, Stanford CA, Stanford University Press, 2019. p. 14.
[385] GILLES DELEUZE, *Deux régimes de fous*, Paris, Minuit, 2003. pp. 298-299.
[386] AGAMBEN, *Cit*. p. 27. My emphasis.
[387] PYNCHON, *Crying, Cit*. p. 131. My emphasis.

same “exitlessness” Wiener tried to defer with order, the same Leo Marx and Tanner found in the writers of Pynchon’s generation.

This passage evokes another very important one, contained in the letter to the Sales couple of June 29, 1963. Speaking to the couple about his Argentine readings, Pynchon draws a metaphor from Borges and says that «it will be [his] basic dichotomy»[388], half-jokingly hoping to apply it one day to Argentine literature at large in the role of the critic. The dichotomy is derived from the short story *The Two Kings and Their Two Labyrinths* (1946). In this tale, the Arab King is dared by the Babylonian King to escape his impossibly complex labyrinth of walls. With the help of Allah, the Arab King successfully navigates the labyrinth and, in turn, presents the vast open desert to his rival as his own, thus returning the challenge to him. «[T]he plain and the labyrinth [writes Pynchon] The work of a malevolent God and the work of Men, both essentially the same, both designed to destroy or alienate the human spirit»[389]. Before these documents were available to the public, Pynchon had already flagged this influence by quoting the same story in relation to the character of Argentine anarchist Squalidozzi in *Gravity’s Rainbow*[390]. «We are obsessed with building labyrinths [says the anarchist], where before there was open plain and sky. To draw ever more complex patterns on the blank sheet. We cannot abide that *openness*: it is terror to us'. Look at Borges. […] Decentralizing, back towards anarchism, needs extraordinary times»[391].

In *Lot 49*, another anarchist character, Jesús Arrabal, had already spoken of exceptional circumstances, rather than planned revolution, being the key to his beliefs:

> “You know what a miracle is. Not what Bakunin said. *But another world’s intrusion into this one.* Most of the time we coexist peacefully, but when we do touch there’s cataclysm. Like the church we hate, anarchists also believe in another world. Where revolutions break out spontaneous and leaderless, and the soul’s talent for consensus allows the masses to work together without effort, automatic as the body itself. And yet, señá, if any of it should ever really happen that perfectly, I would also have to cry miracle. An anarchist miracle.[392]

[388] THOMAS PYNCHON, Unpublished Letter to Faith and Kirkpatrick Sale, June 29, 1963.
[389] *Ivi.*
[390] VANDERBEKE, *Cit*. pp. 50-51.
[391] PYNCHON, *Gravity*, *Cit*. p. 264-265.
[392] PYNCHON, *Crying, Cit*. p. 91. My italics. Also here: «The dead man [Inverarity], like Maxwell’s Demon, was the linking feature in a coincidence. Without him neither she nor Jesús would be exactly here». pp. 91-92.

Perfect anarchism exists in another world and revolutions happen when the two worlds collide, unpredictably like a Humean «kiss of cosmic pool balls»[393]. The "Age of Miracles" of which Pynchon will speak in 1984 is here evoked by these romantic anarchists in all its religious, irrational fervor, the same of the Luddite in Pynchon's article. Possibility requires faith in something outside the plans of the anarchists, another world in which the masses work "automatically" as if for cybernetic principle. It is not through *telos,* nor work, but through faith that these cyber-anarchists inspire their lives. As Vanderbeke has written: «*The Crying of Lot 49* completes Pynchon's reversal of the earlier evaluation of order as predominantly good and of entropy as evil.»[394]

Pynchon is then not an anarchist nor a Luddite but he intercepts the concerns of both. As Ali Chetwynd notes, critics have recognized the evident links between the political and metaphysical aspects of Pynchon's novels but few have delved beyond their «the flux and infinite freedom of possibilities»[395]. Pynchon's ontologies are more precise, generating a rhetoric that sees Pynchon's metaphysics as acts of defiance against specific historical constraints. By revisiting historical turning points where possibilities were closed off, Pynchon wants the reader to seize their unexpressed potential. This shift towards overcoming impossibilities rather than embracing open-ended possibilities is for Chetwynd a central theme in Pynchon's later works like *Mason & Dixon* and *Against the Day*, set in the era of Ronald Regan and Margaret Thatcher's promotion of capitalism with slogans like the famous TINA: "There Is No

---

[393] PYNCHON, Crying, Cit. p. 94. CHRISTOPHER J. MCKENNA, "'A Kiss of Cosmic Pool Balls': Technological Paradigms and Narrative Expectations Collide in 'The Crying of Lot 49.'" in *Cultural Critique*, no. 44, Minneapolis, University of Minnesota Press, 2000, pp. 29–42. Strangely, the critic only uses the quote in the title and never addresses it in the body of the text, nevertheless, he shares our view that there is an inherent connection between informatics and the disruption of detective plots. See especially pp. 34-35 and 38. The Humean "kiss of cosmic pool balls" quotation is also cited in McHale to address the issue of porosity of the fiction-reality boundary in Pynchon's literature. MCHALE, *Cit*. p. 22.

[394] VANDERBEKE, *Cit.* p. 50.

[395] ALI CHETWYND, "More metaphysician than politician: Pynchon, TINA, and the rhetorical economy of 'The World (This One)'", in *Textual Practice*, Vol. 33, No. 3, Taylor & Francis, Abingdon-on-Thames, 2019. pp. 451-471.

Alternative". *The World (This One), the Flesh (Mrs. Oedipa Maas), and the Testament of Pierce Inverarity*[396], was the first title with which a fragment of *Crying of Lot 49* was published in *Esquire* in December 1965. The critic, citing Ruth Ronen, treats this relation between worlds as a contradictory example of accessibility despite impossibility, thus outlining a relationship between possible worlds that sees the readers as the recipients of political reanimation[397].

This issue transversal to many characters in the *Pynchonverse*. It is a cry that belongs to the whole of humanity, that can be heard from all sides of Pynchon's fictional political spectrum. In a passage in *Gravity's Rainbow* the thesis is expressed by black Herrero leader of the fictional nazi force Schwarzkommando, Enzian, who connects it to waste: «Somewhere, among the wastes of the World, is the key that will bring us back, restore us to our Earth and to our freedom»[398]. The point to retain being that the flourishings of Pynchon's wasted worlds are to be harvested here, in the world of the writer. They do not represent an Eliotian wasteland, a contemplation of definitive decay, they are an infinitely productive, overflowing garbage dump of history. They pulsate stelliferously for us to grasp their possibility.

His friend Kirkpatrick Sale in his book about Luddites will define him as «the novelist whose pervading paranoia applies also to the technological realm» and reporting that he had said «that he takes comfort "however minimal and cold" from

---

[396] THOMAS PYNCHON, *The World (This One), the Flesh (Mrs. Oedipa Maas), and the Testament of Pierce Inverarity*, in Esquire, December 1965.

[397] «Other worlds are associated not only with alternative possibilities per se, but with specifically political and economic novelty: in Against the Day, for example, the counterpart to the growth of capitalism is 'a separate, lampless world, out beyond some obscure threshold', a world defined by having 'its own economic life'. But access to such alternatives is not straightforward, nor are its consequences clear. The novel ends with the Chums leaving our world behind to venture off across the dimensions, experimenting with new social structures aboard their expanding airship. […] their hope is that 'good unsought and uncompensated' can 'become at least more accessible to us' (1085). The 'us' here […] includes the reader who remains in the world they are about to sever their […] connections to. 'Accessibility', in the logic of possible worlds, measures 'sub-systems of worlds of various degrees of possibility … relative to the world actually obtaining'. Pynchon's use of the term clarifies that rather than describing states of unfettered inter-world accessibility, his novels' world-crossings ask how we might ever recuperate possibilities from functionally inaccessible past worlds back into the 'obtaining' world that contains 'us'». CHETWYND, *Cit*. pp 454-455.

[398] THOMAS PYNCHON, *Gravity, Cit*. p. 525.

Byron's lines after the Loughborough raid»[399]. His picture of his friend's approach does not seem the one of a revolutionary but, more lucidly, one of resistance against the powers and structures of God and men designed to alienate the human spirit. Both technology and the political extremist dream in Pynchon become *loci* of radical, unexpected change, potential harbingers of both chaos and new order. As much as Pynchon recognizes risks in technological progress, he remains "somberly gleeful" towards it. His interest is towards the unpredictability of the events of history, stretched between eschatological catastrophe and the unforeseen event that can overturn everything, for better or for worse, "oboy".

On June 6, 1993, Pynchon published another essay for the *New York Times Book Review*, for a series entitled "Seven Deadly Sins". He focuses on Sloth[400]. The themes of productivity and technology return, and are intertwined with the language of the divine, with story plots and with the Pavelian observations on the age of miracles associated with Luddite resistance, reminding us of Bell's "conspicuous loafing" of the tired worker. He even rehabilitates the concern for "souls", which was rejected by Wiener, and the Christian-positivist *pièce bien faite* of Spanos, qualifying his own stories with a different structure in backlight:

> Unless the state of our souls becomes once more a subject of serious concern, there is little question that Sloth will continue to evolve away from its origins in the long-ago age of faith and miracle, when daily life really was the Holy Ghost visibly at work and time was a story, with a beginning, middle and end. Belief was intense, engagement deep and fatal. The Christian God was near. Felt. Sloth -- defiant sorrow in the face of God's good intentions – was a deadly sin.
>
> Perhaps the future of Sloth will lie in sinning against what now seems increasingly to define us – technology. Persisting in Luddite sorrow, despite technology's good intentions, there we'll sit with our heads in virtual reality, glumly refusing to be absorbed in its idle, disposable fantasies, even those about superheroes of Sloth back in Sloth's good old days, full of leisurely but lethal misadventures with the ruthless villains of the Acedia Squad.[401]

---

[399] KIRKPATRICK SALE, *Rebels Against the Future: The Luddites and Their War on the Industrial Revolution: Lessons For The Computer Age***,** Reading, MA, Addison-Wesley Pub. Co., 1995. p. 258.
[400] Some believe the name of the protagonist of Gravity's Rainbow, Tyrone Slothrop, to be an acronym of "Sloth or Entropy". See for example STEPHEN BAKER, *The Fiction of Postmodernity*, Edinburgh, Edinburgh University Press, 2000. p. 131.
[401] THOMAS PYNCHON, "The Deadly Sins/Sloth; Nearer, My Couch, to Thee", in *The New York Times*, June 6, 1993. <https://archive.nytimes.com/www.nytimes.com/books/97/05/18/reviews/pynchon-sloth.html> 20/072024.

This is almost the same picture Bell painted, made from the point of view of the idle worker who, formerly a sadly and hopelessly irrational subject, becomes a rebel against work in its own idleness. If unproductivity is the somatization of Luddite sorrow, then technology is the God against which it rebels. A rebellion that ironically casts Pynchon[402]on the side of the villain, on the side of Bartleby against Poor Richard, of «speculations, dreams, fantasies, fiction» against «[l]ife in that orthogonal machine» which is urban life and which «was supposed to be nonfiction.»[403] Here Pynchon, who is citing Dickens' visit to Philadelphia, remembers the British writer's prayer for the presence of a curve in the road, of a Tomaševskian *detour* to open unexpected spaces in the rationalized city. A Brookisan deferral[404] rather than a journey from A to B[405]. More similar to one of Munari's "macchine inutili"[406] than to a target seeking torpedo.

Returning to detective fiction, the artistic side of Oedipus' tragedy, that masterful unfolding of the already-solved mystery which also appeared in "howcatchem" detective stories once deprived of its *telos* is opened to undefined expansion. Like a

---

[402] «Writers of course are considered the mavens of Sloth.» *Ivi.*

[403] *Ivi.*

[404] PETER BROOKS, "Freud's Masterplot", in *Yale French Studies*: *Literature and Psychoanalysis. The Question of Reading: Otherwise*, No. 55/56, Yale University Press, New Haven, 1977, pp. 280-300.

[405] One of Italo Calvino's stories most closely related to cybernetics and information theory is *The Adventure of a Motorist* (1967), in which a man who has quarreled with the woman he loves is traveling as fast as he can on a highway between A and B. During the course of the short story he seems to gradually transform into a beam of light carrying a message, sparking reflections on the cybernetic domain of assimilation between human purposes and artificial informational organization. Calvino addressed the topic of cybernetics in other works. In one of the most explicit he treats cybernetics as a stand-in for computer science and connects it to the combinatorial art of producing stories out of systematically organized possibilities. See ITALO CALVINO, *The Adventure of a Motorist*, in *Difficult Loves*, Boston, Mariner Books, 2017. pp. 171-182. ITALO CALVINO, *Cybernetics and Ghosts*, in *The Literature Machine: Essays by Italo Calvino*, London, Secker and Warburg, 1987. pp. 3-27.

[406] «Mettiamoci prima d'accordo sulla funzione delle macchine inutili: che siano macchine non c'è dubbio, dato che è una macchina la leva, volgarmente detta "quel pezzo di ferro lì". Resta da chiarire l'aggettivo "inutile": inutili perché non fabbricano, non eliminano manodopera, non fanno economizzare tempo e denaro, non producono niente di commerciabile. Non sono altro che oggetti mobili colorati, appositamente studiati per ottenere quella determinata varietà di accostamenti, di movimenti, di forme e di colori. Oggetti da guardare come si guarda un complesso mobile di nubi dopo essere stati sette ore nell'interno di un'officina di macchine utili.» BRUNO MUNARI, *Che cosa sono le macchine inutili e perché*, in *La Lettura*, No. 7., July 1937. p. 660.

situationist *dérive*[407] or, like Benjamin's *Flâneur*[408], Oedipa's journey could go on indefinitely. The final information, that last word of power in Deleuze's terms, is cancelled. This rebellion against resolution, this «calculated antirationalism» which «counter[s] the smugness and complacency of a scientific age»[409] qualifies itself as eminently resistant, eminently political and eminently poetic. And it does so by negating the authority of Spanos' God of the plot. Pynchon's worlds may be frustrating and even uneasily precarious, but they are so because they are meant to be fundamentally free. In contrast to the infinitely complicated labyrinth of man and the limitless and directionless one of God, Pynchon opposes a structure that is complex yet open from all sides, which can be explored infinitely from multiple angles. He achieves this by removing the only invisible barrier that every labyrinth inherently creates, that of having to find an exit, and instead creates a literary space for contemplating the richness of the work itself. Pynchon makes home in a desert of wasted stories, in the infinite potential of the suggested and discarded.

---

[407] McKenzie Wark, author in 2004 of *The Hacker Manifesto*, cited Pynchon alongside Bolaño as writers that explored situationist themes. She cites Inherent Vice, the epigram to which is "Sous les pavés, la plage!" (Beneath the pavement, the beach!) which is also the source of the title of her essay. MCKENZIE WARK, *The beach beneath the street: the everyday life and glorious times of the Situationist International*, London, Verso 2011. We shall signal however that in spite of this connection, Agamben makes the point that the situationists actually sought to create art without creating a "work of art" which Pynchon obviously does. So we should not take the analogy too literally. AGAMBEN, *Cit*. p. 3.

[408] DECHÊNE, *Cit*. p. 4.

[409] DAVID COWART, *Thomas Pynchon and the Dark Passages of History*, Athens, University of Geogia Press, 2001. p. 6. See also DAVID COWART, "Science and the Arts in Pynchon's 'Entropy'", in *CLA Journal*, Vol. 24, No. 1, Columbia SL, College Languages Association, 1980, pp. 108–15. In which it is noted that, in *Entropy*, among the literary citations that Callisto sought to understand the heat-death of the universe is the ending of Faulkner's only crime fiction: *Sanctuary*. p. 110. And does so by referring to it in terms that suggest an analogy between the depressing final state of the protagonist Temple Drake and the final state of a system. «Temple Drake, gaunt and hopeless in her little park in Paris, at the end of Sanctuary. Final equilibrium.» PYNCHON, *Entropy*, *Cit*. p. 93. Among the criticisms leveled by Jonas at the discipline of cybernetics was precisely that of addressing human issues in terms of *telos*, which, in the philosopher's view, equated to considering death itself as the destination of man as a machine. Analogously, we could interpret Pynchon's quote as reinforcing our association between the endings of crime fiction and the achievement of their *telos*, their energetic standstill, as *machines à lire*. Faulkner's choice adds a strong connotation to the example. Temple Drake emerges from a story of incredible violence, and her ending in Pynchon's terms does not fully compensate her for it, suggesting that heat-death as a *teleology* (especially Pynchon's version) is a rather tragic predicament.

We can read the multiple definitions that have been given of Pynchon's works as "anarchic" [410] in the light of a specific form of power, the cybernetic word-command of Deleuze and Tiqqun. His fiction contrasts with Doyle's. It is not the realization of a fantasy of science, it utilizes the machinery of the detective plot only to create the conditions of its frustration. Differently from Dashiell Hammett's "Monkey Wrench" method, in which Sam Spade stirs the world up with actions and lies to make the truth emerge, Pynchon's fiction is more evocative of the tradition of *flâneur* detectives that Dechêne traces back to Poe's *The Man of The Crowd*[411]. In the face of the notion that there is one best way to solve problems, one way to conclude the plot, one destiny of the universe, one possible world to be pruned out and shown, and even against the idea that solutions are computable, zeroes and ones, like Hammett's choices of "heads or tails"[412], Pynchon retains possibilities and mekes us active towards them.

Contrary to the view that oversells Pynchon as a deliverer of scientific expertise[413], I agree with Cowart that:

> Early reviewers and critics […] may have overestimated his commitment to such material. […] He has suggested, [instead], that humanists who ignore science can do little more than defer to-or rail against-the ascendancy of technologues. He has sought, too, to deny science the power that mystery tends to wield over ignorance. […] [He] has devoted his formidable powers of subversion and satire to exposing the false premises behind the technocratic syllogism.[414]

---

[410] «Pynchon's eight novels develop an historically informed perspective of the dialectical intertwining of terror and anarchy, and in doing so offer an alternative vision to that which today dominates moribund political cultures in the United States and around the world. In diagnosing the world's condition – increasing inequality, conservative domestic politics, violent foreign policy led by the United States for the establishment of open markets and democracy (in this order) – Pynchon presents the world from an alternate perspective. His novels consider the world historically, from the viewpoint of "the fork in the road America never took"». JAMES GOURLEY, *Terror and Anarchy*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019. p. 217. The reference to a fork in the road, taken from *Gravity's Rainbow*, plays more into our reading of Pynchon's fiction as unexpressed possible worlds more than to "an alternative perspective" on this world, which could be better construed as what it tries to elicit in the reader. Pynchon does not offer perspectives as much as he wants new ones to come about.

[411] DECHÊNE, *Cit*. pp. 30-37. DANIELE, Cit. p. 15.

[412] DASHIELL HAMMETT, *The Maltese Falcon*, A.A. Knopf, New York, [1929] 1930. pp. 120, 219.

[413] The works of german scholar Kittler are exemplary of this view. See for example FRIEDRICH KITTLER, "Pynchon and Electro-Mysticism", in *Pynchon Notes*, 2008. 108-121.

[414] COWART, *History*, *Cit*. p. 136. The chapter containing this quote is tellingly entitled "The Luddite Vision".

The key work here is "commitment". Pynchon was aware of his own lack of knowledge in thermodynamics, referencing J. Willard Gibbs, much like Wiener did before him, as well as (of all people) Isaac Asimov. These references appear in passages that seem to elucidate the suspended nature of Nefastis' metaphors and the inevitability of the future history that seems to arise from them.

> Do not underestimate the shallowness of my understanding. […] Since I wrote [*Entropy*] I have kept trying to understand [it], but my grasp becomes less sure the more I read. I've been able to follow the *OED* definitions, and the way Isaac Asimov explains it, and even some of the math. But the qualities and quantities will not come together to form a unified notion in my head. It is cold comfort to find out that Gibbs himself anticipated the problem, when he described entropy in its written form as "far-fetched . . . obscure and difficult of comprehension." When I think about the property nowadays, it is more and more in connection with time, that human one-way time we're all stuck with locally here, and which terminates, it is said, in death. Certain processes, not only thermodynamic ones but also those of a medical nature, can often not be reversed. Sooner or later we all find this out, from the inside. Such considerations were largely absent when I wrote "Entropy."[415]

Like a swimming instructor, Pynchon throws the readers into a liquid world (another world ready to kiss ours, like the world of the anarchist miracle) which has no coordinates, and guides them, through characters like Oedipa, to find freedom in a precarious situation, where they can teach themselves «to breathe in a vacuum»[416]. Far from being reassuring and far from being deprived of its own inherent (reactive?) comedy, this position is nonetheless open to possibility, the possibility of exploring an environment that offers little handhold, like the deep end of a pool[417]. Against the sense of inescapable teleology he finds in cybernetic narrations, Pynchon fosters possibility in a fictional world. In his beautiful essay on the matter Philip Grayson calls this «a

---

[415] PYNCHON, *Slow*, *Cit*. pp. 13-14 Near this passage, talking about *Entropy*, Pynchon also wrote «I thought I was sophisticating the Beat spirit with second-hand science». *Ibid.*

[416] PYNCHON, *Crying*, *Cit.* p.

[417] Another fascinating development perspective we cannot address is brought forward by Gilles Chamerois. This view would want that issues of technology and detective fiction like «[t]he bric-à-brac of the Arpanet's beginning in Inherent Vice (2009), the occasions for subversion it allowed, are presented from a vantage point where the Internet has become the pervasive symbol of a society of control. This filling-out of all the possibilities is a true negation of the future, constituting what Michel Henry has called "the new barbarism of our time," precisely because "all the virtualities and potentialities within it must be actualized, for them and for what they are, for their own sake."» GILLES CHAMEROIS, *Science and Technology*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019. p. 230. See also p. 231.

radical sort of hope, a hope that has no expectation of fulfillment, but which exists as a talisman against darkness and a reminder that inexplicable things have happened before and will happen again»[418].

[418] GRAYSON, *Radical Hope*, *Cit*. p. 10.

Chapter 3

The Pioneer's *Telos*: Isaac Asimov

What attracts scientists to research is the lure of the unknown. There is nothing more dreadful than to wake up one morning and think that all the fundamental problems in your field have been solved. On the day that I think all fundamental problems in cell biology have been resolved, I will retire to Sussex and keep bees, as Sherlock Holmes once said.

Kenneth Miller, *Kitzmiller trial transcripts* (2005)

per una coscienza scientifica il mondo è tutto una pasta

Emilio de Marchi, *Il cappello del prete* (1888)

Vieni a scoprire che gli scienziati sono diversi tra di loro, non sono mai d'accordo tra di loro, che hanno tutti ragione, chi più chi meno. Che non studiano per ottenere l'oro, che hanno bisogno di supporto perché lo scetticismo è già il loro pane quotidiano, pane quotidiano, pane quotidiano, è un'espressione di preghiera, la saltiamo!

Uochi Toki, *Ecce Robot* (2012)

Chapter 3.I. Work and Vision

Whereas for Pynchon we could talk, with Linda Hutcheon, about the postmodernist stance in dialectic with great narratives, using and accusing the implication with postmodernity and its systems of power[419], with Asimov, however contemporary he might be considered, doing it in the same terms would be misleading. From the point of view of the relationship of writers with science, if we read Leslie Fiedler—or Pynchon himself, postmodernism appears as a site of confrontation, and it does so by drawing from the genres «most associated with exploitation by the mass media»[420]. The Asimovian matter, on the other hand, is much better illuminated when explored in the terms of its own author, who, as we will see, viewed the relationship between

[419] HUTCHEON, *Politics*, *Cit*. pp. 26-27.
[420] FIEDLER, *Cross the Border*, *Cit*. p. 336.

humanity and scientific progress in terms of adaptation rather than conflict. Starting from this premise, we will focus on that part of Asimov's work that blends detective fiction and science fiction.

Fiedler downplayed the role of the detective genre in the 1960s-1970s literary landscape. He distanced postmodernist literature from detective-inspired works like those of Robbe-Grillet, claiming that those French forms were still animated by a highbrow and aloof spirit that he considered outside of the postmodernist spectrum of values, which he saw as bearing a much more populistic tendency. Bringing Burroughs, Burgess, and Barth as examples, the critic points out the more transversal idea of how after WWII «two things became clear […] that the future was upon us, […] and […] that the end of Men, by annihilation or mutation, was a real, even immediate possibility»[421]. For Fiedler, the new postmodernist fiction was breaking down the barriers of criticism between high and low literature in depicting this posthuman future/present which affected society at large and had no use for the aloofness of high literature and its experimentations as a stance to confront them. The new literature, instead, could be taken *both* as a mark of high cultural capital in the sense of Bourdieu *and* as consumer literature, aimed as it was at addressing incumbent problems that bore with them the mark of fatality and/or radical change of the human itself. The low genres that were being digested and mutated by the new generations had large implications:

> […] to Close the Gap means also to Cross the Border between the Marvelous and the Probable, the Real and the Mythical. The world of the boudoir and the counting house and the realm of what used to be called Faerie, but has for so long designated mere madness. Certainly the basic images of Pop forms like the Western, Science Fiction and Pornography suggest mythological as well as political or metapolitical meanings.[422]

From this perspective, the author we set to address could almost be as postmodern as Pynchon.

Isaac Asimov was aware of this trend towards blending genres among his contemporaries, so much so that in the introduction to the collection of short stories entitled *Asimov's Mysteries*, he mentions three cases where the Western, the sports

[421] *Ivi*, p. 340.
[422] *Ivi*. p. 346.

story, and the romance had become the foundations on which his contemporaries Arthur C. Clarke, Clifford D. Simak, and Philip Jose Farmer had respectively built their science fiction stories *Home on the Range*, *Rule 18*, and *The Lovers*[423]. It is with them in mind, and not the French experimentalists[424], that he construes his involvement in wanting to mix detective fiction and science fiction.

As we have seen, the tropes of postmodernism for Fiedler are found in Pynchon: the "matter of metropolis" and the myth of the "present future" in which the non-human world, be it hostile or benign, is metaphorized not in the form of elves or dwarves of the Faerie, but of machines as powerful and uncanny. Ideas like these will accompany Pynchon's detective fiction well into the future. It suffices to think of *Inherent Vice*'s ARPA-net, ancestor of internet, which is seen by Pynchon's hippie detective Doc Sportello as a "science-fictional Christmas tree" and a panoptical nightmare at the same time[425]. The "supermachines" of the 1960's, for Fiedler, unlike their simpler predecessors, insisted on taking care of people rather than demanding that people take care of them, and in doing so engendered, other than fear and loathing, also a new «great religious revival»[426]. People and therefore writers felt that they «live[d] honestly only by what machines [could not] do better than they»[427] - and that is why some were suggesting «that not Work but Vision [was] the proper activity of men and […], therefore, contemplative life may, after all, be preferable to active life»[428]. This is part of what we saw in Pynchon's sinful luddite sloth as it was part of the stance of fringes

[423] ISAAC ASIMOV, *Introduction*, in *Asimov's Mysteries*, New York, Dell, 1968. p. 13.
[424] Indeed, Asimov was not an experimentalist in literary endeavors. He considered himself a «primitive» of the literary practice and «not much of a stylist» apart from his concern for clarity and straightforwardness against overly obscure and ornate language. ISAAC ASIMOV, *Revisions*, in *Gold: The Final Science Fiction Collection*, HarperCollins, New York, [1982] 1995. pp. 381, 384. ISAAC ASIMOV, *The Unforgivable Sin*, in *Asimov's Galaxy: Reflections on Science Fiction*, Doubleday, New York, [1982] 1989. pp. 41-44.
, HarperCollins, New York, [1982] 1995. pp. 381, 384.
[425] PYNCHON, *Inherent*, *Cit*. p. 53.
[426] FIEDLER, *Cit.,* p. 350.
[427] *Ibid.*
[428] *Ibid.*

of the Haight-Ashbury inner circle towards full automation. The link between religious language and labor, as emerged in Bell, also pertains to this domain.

Asimov, although encompassing the better part of the post-modern period with his production, held a different position. His interest in the concepts of work and vision was limited and subjected to projects of different natures, particularly regarding the consequences of the impact of scientific progress on the fate of humanity. Not at all unaware of the risks of his profession, Asimov did not seek escape routes from a sense of lost freedom or humanity. Instead, he found in rationality and ingenuity the ability to foresee the future and adapt to its changes, which to him was the ultimate foundation of humanity's role in the world. In view of this aim, the author's perhaps most important preoccupation throughout his life was popularizing and educating about science, which he firmly believed to be the only source of solutions to the problems of humanity. It is easy to recognize that nothing was further from his sensibility than the neo-romantic resistance to technology described by Leo Marx, not to speak of the neo-Luddism advocated by Kirkpatrick Sale. One need only consider Asimov's opinion of Tolkien's *The Lord of the Rings*, in which, despite the author's declarations, he perceived a hidden anti-technological theme he openly disapproved of[429]. Asimov, like Wiener, championed rationalism and technological advancement in response to the imminent crises depicted by Fiedler. The political terms of his scientific popularization were subsumed to this problem-solving logic, inscribing Asimov to the cultural tendency that Daniel Bell and Tiqqun theorized. In Asimov's works, the conclusive endings of detective fiction do not disappear in the postmodern era but take on a unique character that reflects his own relationship with science, one that lacks much of the conflicted spirituality that accompanied Doyle's positivism but remains no less heroic, complex and teleological.

In this chapter we will analyze Asimov's science fictional detective fiction within this scope and place it in the broader spectrum of the genre's history by invoking the

[429] ISAAC ASIMOV, *Symbolism*, in *Gold: The Final Science Fiction Collection*, HarperCollins, [1985] 1995. pp. 401-402.

author's beliefs toward science as pillars of his maintenance of "conservative" forms of the detective plot.

3.II. Obscurantism

Patricia Warrick, one of the first critics of the relationship between cybernetics and literature, described Asimov's work in these terms:

> In [Asimov's] robot stories most of the population resents robot research and resists the use of robots, […] the rare individual with a creative mind is the exception. The nineteenth-century Luddites, smashing weaving looms in England, were as programmed to a fixed pattern as the machines they attacked.[430]

A very important concept in Asimov is what he called the *Frankenstein Complex*[431]. Instead of being the affirmation of the grief for the death of the age of miracles as in Pynchon, the fear of the mechanical creature in Asimov is the sign of an obscurantist prejudice. He wrote: «Knowledge has its dangers, yes, but is the response to be a retreat from knowledge? Or is knowledge to be used as itself a barrier to the dangers it brings?»[432] The question is obviously a rhetorical one. For Asimov, the fear of the machine becoming self-aware and rebelling against their creators was irrational[433]. The machine for him, as a product of engineering, is only capable of doing harm within the limits of its design. All the problems and the solutions generated from it stem from the way it is built. Accordingly, Asimov vowed that «never, never was one of [his] robots to turn stupidly on his creator for no purpose but to demonstrate, for one more weary time, the crime and punishment of Faust»[434]. From this idea derive the famous laws

---

[430] PATRICIA WARRICK, "Asimov and the Morality of Artificial Intelligence", in J. G. Cunningham (ed.), *Science fiction* San Diego, CA, Greenhaven Press, 2002. p. 170.
[431] *Ivi*. pp. 169-170.
[432] ISAAC ASIMOV, *Introduction*, in *The Rest of the Robots*, Garden City, Doubleday, 1964. p. xii.
[433] «[S]cience fiction writers did not treat robots realistically but used them as cautionary objects, as villains or heroes designed to point up the human condition. In 1939, however, Isaac Asimov, [In a note: Yes, the author of this book.] only nineteen at the time, tiring of robots that were either unrealistically wicked or unrealistically noble, began to devote some of the science-fiction stories he was publishing to robots that were viewed merely as machines and built, as all machines are, with some rational attempt at adequate safeguards.» ISAAC ASIMOV, *Asimov's New Guide to Science*, Hammondswoth, Penguin, [1960] 1987. pp. 798-799.
[434] ISAAC ASIMOV, *Introduction*, in *The Rest of the Robots*, *Cit.* p. xiii. Cited from a different source in PATRICIA WARRICK, "The Contrapuntal Design of Artificial Evolution in Asimov's "The

which are the immovable conditions of the machine, implanted in the deepest programming of his Robots. They are so famous that citing them seems pleonastic, but we shall, as they often act as true alethic constraints of his detective plots. They are:

> 1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
> 2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
> 3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.[435]

At least at the beginning of Asimov's career, a robot cannot break these rules in any way[436]. «[I]t is impossible for a robot to harm a human being; that long before enough can go wrong to alter that First Law, a robot would be completely inoperable. It's a mathematical impossibility»[437]. Once machine rebellion is eliminated rather peremptorily from the field of possibility, the robots of Asimov find a different way of presenting narratological problems to the humans of his plots. These problems lie in the iron logic of the rules themselves. A robot cannot break a rule, but two rules, for instance, can conflict with each other. In the short story *Runaround*, contained in the *I, Robot* sylloge (1950)[438], a robot is behaving erratically while trying to retrieve selenium for a base on Mercury. The selenium source contains unforeseen danger to the robot. Under normal circumstances, it would observe the Second Law and retrieve the resource anyway, but the Third Law had been strengthened in its programming because

---

Bicentennial Man"", in *Extrapolation*, Vol. 22, No. 3, Kent OH, Kent State University Press, 1981. p. 234.

[435] This specific formulation, which is one among innumerable, is contained in ISAAC ASIMOV, *Mirror Image*, in *The Complete Stories Vol II*, New York, Doubleday, [1972] 1992. p. 409.

[436] During the writer's career, humanity will encode different laws in different robots (*Little Lost Robot*) and machines will have various occasions to break their own laws for one reason or another in several stories, of which we will cite a few. It will even reach the point where machines themselves develop a Zeroth Law, more problematic than the others, that prevents them to harm humanity as a whole, allowing them, at the limit, to harm an individual if it is for the greater good. It first appears in *The Evitable Conflict* but it is only given a name in *The Robots and Empire*. ISAAC ASIMOV, *Little Lost Robot*, in *I, Robot*, Bantam, New York, [1950] 2004. ISAAC ASIMOV, *The Evitable Conflict I, Robot*, Bantam, New York, [1950] 2004. ISAAC ASIMOV, *Robots and Empire*, Collins, Glasgow, [1985] 1986.

[437] ISAAC ASIMOV, *Robbie*, *I, Robot*, Bantam, New York, [1950] 2004. p. 9.

[438] ISAAC ASIMOV, *Runaround*, in *I, Robot*, *Cit*. pp. 30-55.

of its being an expensive and hard-to-substitute model. As the order to retrieve the selenium was written without particular emphasis, the robot could not decide whether to obey it or protect itself from danger and starts revolving around the selenium source, unable to decide. Eventually, the humans involved realize that the First Law, which protects them from harm, can override the conflicting laws and force the robot out of its stall, so they decide to deliberately put themselves in danger to force the robot to abandon its impasse. In the malfunctioning of the robot neither technology nor science are to blame. In Asimov's world, technoscientific progress does not involve a limitation of human possibilities but the opposite. «[S]cientific-economic change is master and political change is the servant […] technological changes lie at the root of political change»[439]. Each new machine enables humanity to do things that were hitherto impossible. Psychological closure towards the future that machines make possible, frightened conservatism, irrationality and irrationalism, the limits of humanity and its weaknesses are the forces that truly limit possibilities. The idea of wanting to save money in *Roundabout* is an example.

Already at the beginning of his career (*Roundabout* was originally written in October 1941, Asimov had started publishing in the late 1930s) the problem of the Robot is a human problem, a problem of priorities, of foresight of unseen possibilities inscribed in the building of the machine. Asimov's ideas are not only important to understand his fiction but are also essential if one wants to trace the history of neo-scientific detective fiction and its interactions with science fiction. In the space of this chapter, we will cite Asimov's essays from different historical periods, including the works that the famous popularizer published in the years corresponding to the period of the early to middle Pynchon, roughly from the mid-1940s to the end of the 1970s. As we will see, Asimov's thinking, trained in the use of the scientific method and herald of rationality with few compromises, embodies regular features that tend not to change

[439] ISAAC ASIMOV, "Social Science Fiction", in *Science Fiction: The Future*, Dick Allen (Ed.), New York, 1971, p. 268.

over the decades. This very stability that characterizes scientific thought in Asimov will be an important factor in the interpretation of the texts.

When dealing with the concept of *entropy*, Pynchon had cited Asimov's explanation as one of the few he could understand given his scientific knowledge. At the time when Pynchon had written the introduction to *Slow Learner*, in which those reflections were reported, Asimov had already published at least two important accounts of the term entropy[440]. One is the chapter *Order! Order!* contained in Asimov *On Physics* (1974), another is the chapter *The Increase of Entropy* in the volume *A Choice of Catastrophes: The Disasters that Threaten our World* (1979). Aside from the interesting legal drama flavor of the first title, among these discussions that may have informed Pynchon, we are interested in an epistemological reflection in particular:

> How can we tell from a few observations made by scientists under laboratory conditions over a few centuries that momentum will be conserved a million years from now, or was conserved a million years ago? How can we tell whether it is conserved right now a million light-years away in another galaxy, or right in our neighborhood under conditions as alien as those in the center of the sun? We *can't* tell. All we can say is that at no time under any conditions have we observed the law violated; nor have we detected anything which indicates that it ever might be violated. Furthermore, all the consequences we deduce on the assumption that the law is true seem to make sense and to fit in with what is observed. Scientists therefore feel they have ample right to assume (always pending evidence to the contrary) that the conservation of momentum is a "law of nature" that holds universally through all of space and time and under all conditions.[441]

This passage demonstrates a very important starting point for understanding how Asimov's approach to science differs from that of Doyle and certain critics of postmodernity. It reveals, in fact, a form of skepticism that focuses on three main points.

Firstly, it unproblematically recognizes that the predictive capabilities of science are not divinely limitless. Secondly, it prevents the laws that science extracts from reality from wanting to be absolute and unchanging. Scientific knowledge is never dogmatic, the ideal scientist wants to be ready, as it is in the Popperian principle, to

[440] These are by no means the only. Pynchon, who wrote that he had read Asimov only after he had written *Entropy*, could have read any of the former.
[441] ISAAC ASIMOV, *A Choice of Catastrophes: The Disasters That Threaten Our World*, New York, Simon and Schuster, 1979. p 27.

abandon any theory or formulation as soon as it exceeds the facts[442]. A few years earlier Asimov had put the idea in practice:

> […] after World War II, new techniques of exploration of the sea bottom uncovered […] the existence of crustal plates […]. "[P]late tectonics," […] became the cornerstone of geology. I personally witnessed this turnabout. In the first two editions of my Guide to Science […], I mentioned continental drift but dismissed it haughtily in a paragraph. In the third edition (1972) I devoted several pages to it and admitted having been wrong to dismiss it so readily. (This is no disgrace, actually. If you follow the evidence you must change as additional evidence arrives and invalidates earlier conclusions. It is those who support ideas for emotional reasons only who can't change. […])[443]

Thirdly, the ideal scientist does not fear doubt or approximation. Asimov expresses this idea very clearly in one of his essays: *The Relativity of Wrong* (1986, 1988). In this essay, the writer says he received a letter from a student of English literature, who can be recognized as an enthusiastic follower of the worst trends in the postmodern deconstruction of scientific thought, who tells him the following:

> The young specialist in English Lit […] went on to lecture me severely on the fact that in *every* century people have thought they understood the Universe at last, and in *every* century they were proved to be wrong. It follows that the one thing we can say about our modern "knowledge"' is that it is *wrong*.[444]

Certain features of 1990's Science Wars come to mind. Asimov, maintaining his ironic tone, remembers when John Campbell (his well-known editor, lifelong friend, and occasional provocateur) had proposed the same problem to him, to which he had replied at the time:

> "John, when people thought the Earth was flat, they were wrong. When people thought the Earth was spherical, they were wrong. But if *you* think that thinking the Earth is spherical is *just as wrong* as thinking the Earth is flat, then your view is wronger than both of them put together."[445]

---

[442] On the same theme of the self-recognized limits of science and the permanence of its validity innumerable words have been written. I have found a helpful summation of many arguments within this debate in MAURO DORATO, "L'Ossessione dello Scientismo", in *Almanacco di Scienze*, Supplement to *MicroMega*, No. 3, 2008. pp. 79-90.

[443] ISAAC ASIMOV, "Asimov's Corollary", in *Skeptical Inquirer*, No.3, Vol. 3, Spring 1979. pp. 65-66. See also ISAAC ASIMOV, *Self-Correcting*, in *The Tyrannosaurus Prescription and 100 Other Essays*, Prometheus, New York, [1982] 1989. p. 167-168.

[444] ISAAC ASIMOV, *The Relativity of Wrong*, Garden City, Doubleday, [1986] 1988. p. 214.

[445] *Ibid*.

According to Asimov, there are different levels of wrongness, and being wrong in one way is not necessarily as severe as being wrong in another. «[R]ight and wrong are fuzzy concepts»[446] he writes. Believing that the Earth is a sphere is less wrong than believing that it is flat. However, both are still incorrect because the Earth is actually an oblate spheroid or a close approximation of it. As scientific knowledge progressed, the understanding of the Earth's shape became more refined, requiring more careful and subtle investigations to change.

One basic idea emerges reaffirmed: there is progress in human affairs. In Asimov's works, human history in the universe is depicted as a continuous increase in knowledge. This connects to his discourse on robotics. Progress, in the words of Asimov, often assumes a development in technology[447], a practical solution to a concrete problem of survival. In the imagination of Asimov, historical progress works by accumulation of knowledge, followed by developments in technology, followed by action on the world[448]. Each previous iteration in the three endeavors informs the next: many developments in technology also leading to increases in knowledge and so on[449].

The objection of the young English lit specialist is not the only instance where Asimov deals with the postmodern trends in the deconstruction of science. In his popular *Asimov's Guide to Science* (1960) the author addresses the "uncertainty principle" and the terms with which many literary critics (drawing from Lyotard) interpreted it for the sake of explaining the lack of certainty in postmodernist works, also in the domain of detective fiction:

> The uncertainty principle has profoundly affected the thinking of physicists and philosophers. It had a direct bearing on the philosophical question of *causality* […]. But its implications for science are not those that are commonly supposed. One often reads that the principle of indeterminacy removes all certainty from nature and shows that science after all does not and never can know what is really going on, that scientific knowledge is at the mercy of the unpredictable whims of a universe in which effect does not necessarily follow cause. Whether this interpretation is valid from the standpoint of philosophy, the principle of uncertainty has

[446] *Ivi*. p. 215.
[447] ASIMOV, *Catastrophes*, *Cit*. p. 44, 256, 262, 264, 290, 320, 340, 344-345.
[448] ISAAC ASIMOV, *Pure and Impure*, in *The Roving Mind*, Prometheus, New York, [1979] 1997. pp. 97-103.
[449] ISAAC ASIMOV, *Science and technology*, in The Tyrannosaurus Prescription and 100 Other Essays, Prometheus, New York, [1979] 1989. pp 169-170.

> in no way shaken the attitude of scientists toward scientific investigation. If, for instance, the behavior of the individual molecules in a gas cannot be predicted with certainty, nevertheless on the average the molecules do obey certain laws, and their behavior can be predicted on a statistical basis, just as insurance companies can calculate reliable mortality tables even though it is impossible to predict when any particular individual will die. In most scientific observations indeed, the indeterminacy is so small compared with the scale of the measurements involved that it can be neglected for all practical purposes. One can determine simultaneously both the position and the motion of a star, of a planet, of a billiard ball, or even of a grain of sand, with complete satisfactory accuracy. As for the uncertainty among the subatomic particles themselves this does not hinder but actually helps physicists. It has been used to explain facts about radioactivity and about the absorption of subatomic particles by nuclei, as well as many other subatomic events, more reasonably than would have been possible without the uncertainty principle.[450]

Again, the pragmatism of the scientist puts the philosophical reflections of the non-scientist postmodernist in perspective. Many ideas that Asimov had already expressed in his fiction or that would inspire future works can be perceived in this passage. For example, in the perfecting of statistical prediction of the future, there is an echo of cybernetics and, of course, of *Psychohistory*, the key concept in the incredibly popular *Foundation* saga, described by the fictional "encyclopedia galactica" in exergue at the third chapter of the first volume of the series as:

> […] that branch of mathematics which deals with the reactions of human conglomerates to fixed social and economic stimuli. […] Implicit in all these definitions is the assumption that the human conglomerate being dealt with is sufficiently large for valid statistical treatment. […] A further necessary assumption is that the human conglomerate be itself unaware of psychohistoric analysis in order that its reactions be truly random[451]

Or again in the preface to *Foundation and Empire* (1951):

> Psychohistory dealt not with man, but with man-masses. It was the science of mobs; mobs in their billions. It could forecast reactions to stimuli with something of the accuracy that a lesser science could bring to the forecast of a rebound of a billiard ball. The reaction of one man could be forecast by no known mathematics; the reaction of a billion is something else[452]

Another suggestion within these passages is the return of the Humean example for predictability that appeared in Pynchon as well, which in Asimov becomes the center of the 1967 Sci-Fi crime story *The Billiard Ball* (1967), in which the themes of

[450] ASIMOV, *Guide to Science*, *Cit*. p. 377-378. Emphasis in the original
[451] ISAAC ASIMOV, *Foundation*, Panther, New York [1951] 1960. p. 16. Ellipses in the original.
[452] ISAAC ASIMOV, *Foundation and Empire*, Panther, New York, [1952] 1962. p. 7.

rivalry among scientists and the scientific constraints of the plot take center stage. The story is written as a journalist's recollection of the events surrounding the invention of an anti-gravity device in the mid-21st century. The story delves into the relationship between the device's creator, billionaire inventor Edward Bloom, and his former classmate James Priss, a Nobel Prize-winning theoretical physicist who contributed to making the device. The two are expert billiards players and bitter rivals. Priss is challenged to execute a shot on a table equipped with the anti-gravity device in the form of a ray of light shining on the table. As the ball enters the device's field, it mysteriously disappears and Bloom suddenly collapses, dead, with a clean hole carved in his chest.

According to Bloom's predictions, the weightless ball in the ray was expected to rise slowly along its length, but Priss had correctly understood that it would not. Priss finally explains the scientific reason behind the catastrophe, feigning ignorance and lack of foresight. He reveals that the explosion occurred because an object detached from gravity would not behave like a weightless object; instead, it would move at the speed of a massless object, such as a photon, that is at the speed of light. The narrative ends with the narrator-journalist's question: what if Priss had quickly understood the impending danger and calculated the trajectory needed for the billiard ball to harm his rival, saving his reputation from being ruined in the eyes of all? The correct understanding of science grants for correct foresight, correct foresight can be used to accomplish murder. Contrary to Doyle's tendency to bend or ignore the science of his time to give his plot the desired conclusion, the piece of scientific trivia drawn from the author's knowledge effectively becomes the kernel of the plot, the alethic rule that allows it to unfold. Asimov, who on more than one occasion admitted to composing "from the end" according to the Poe-Narcejac rule[453], often prefers actual natural laws

[453] Asimov describes his writing process as follows: it starts with a science fiction situation, identifies a problem, devises a solution, creates a character on whom the narrative can rely, and then proceeds scene by scene. The prominence of the solution within this "problem solving" structure that the author projects back to his whole career as emblematic is clear. Asimov claims that once first passages like the ending were clear, he never found himself straying off course, even while inventing each twist and turn as he went along. ISAAC ASIMOV, *Ideas*, in *Gold: The Final Science Fiction Collection*,

as pivotal points, which he also finds in his starting world (in this case, Einstein's general relativity), making it the very cornerstone of the narrative, as if making the notion itself digestible were part of the purpose of his storytelling.

The Billiard Ball has recently become the subject of an essay by the French philosopher Meillassoux, who uses it as an epitome of *science fiction* in opposition to what he calls *extro-science fiction*[454]. In the former, Kantian and Popperian, the laws and paradigms of science can change but science itself, in its current epistemology, remains unchanged. In the latter, more radically Humean, even science itself is threatened in its epistemological strength. This cannot be truer for Asimov and his science-fiction, for whom, as we have seen, the continuous revision of once established truths does not limit the continuous validity of the scientific method and the constant increase of knowledge.

This corresponds to Asimov's beliefs about reality. However, the adhesion to actual rules of science *in Asimov's fiction* is not as straightforward as it might seem, especially within the domain of his "mysteries".

For example, in the peculiar 1956 story titled *Pâté De Fois Gras*[455], contained in the *Asimov's Mysteries* sylloge, Asimov pretends to write on behalf of an employee from the Department of Agriculture who, in July 1955, learns about a cotton farmer in Texas who owns a goose that lays golden eggs. By ambiguously situating his narrative in reality, Asimov showcases the attempts to apply the science of his time to an obviously absurd scenario. He even suggests within the story that the piece being read is real and has been submitted to a science fiction magazine with the intention of making the absurdity more palatable for readers, thereby secretly disseminating it—similarly to what he had done with the spoof paper on the fictional molecule of

HarperCollins, New York, [1990] 1955. pp. 321-326. Ideas, revisions? These are essays in Roving mind.

[454] QUENTIN MEILLASSOUX, *Science-Fiction and Extro-Science Fiction*, Univocal, Minneapolis, [2013] 2015.

[455] ISAAC ASIMOV, *Pâté De Fois Gras*, in *Asimov's Mysteries*, Dell, New York, [1956] 1968.

thiotimoline some years prior[456]. In this way, Asimov entertains the reader while introducing various sophisticated concepts of physiology and biochemistry, ultimately leading to the true science fiction element: a mutation that occurred in the goose after exposure to nuclear tests.

In a much later essay, Asimov revisits this relationship between reality and fiction. He recounts, in the form of one of the mysteries of his fictional detective club, the *Black Widowers*, a real-life mystery he experienced. Asimov was invited for an interview in an office building. Due to a series of coincidences, the cameraman who was supposed to film it could not be found even though he was simply in the room next door. In the article, entitled *Fact and Fiction*[457], Asimov shares how an avid reader of his mysteries was outraged by the story to the point of writing to him about it. She argued that it was impossible for no one to have noticed the man's presence, and that the building depicted in the story did not exist. She had even presented a map of the area that led her to these conclusions. Asimov reflects that science-fiction stories do not create such problems because in their creation a writer has the full control over his/her fantasy, advising his readers to be cautious when writing about real events, as the compromise with the idiosyncrasies of reality can disrupt the judgments of credibility of the reader. Here Asimov is intuitively playing on the theory of Genette that asserts that the true attractions for the reader's "realistic" engagement are literary (and non-literary) conventions, types and stereotypes, rather than adherence to the fluidity of reality.

---

[456] «[…] fiction not only stands apart from the 'hard' sciences, but is actually defined as opposed to the criteria of exact methods such as objectivity, factuality and provability […]. Science might pretend to exclude fiction, but fiction does not need to exclude at least the appearance of science. We have seen that fiction is about contents and pragmatics. There is no reason to think that fiction cannot be presented in the form of a natural science paper or report combining fictional content and factual discourse. […] Asimov explained in Once in a Trillion the method he used to write the paper stating that, "once this assumption is made, everything else follows more or less plausibly," before warning readers that they should not be fooled by "this plausibility" » MARIANO MARTÍN RODRÍGUEZ, "The Literary Spoof Paper: An Overview", in *Journal of the Fantastic in the Arts*, Vol. 28, No. 2 (99), 2017, p. 257.

[457] ISAAC ASIMOV, "Fact and Fiction", in *Asimov's Science Fiction*, Vol 11., No. 4, April 1987. pp. 4-8.

Furthermore, it is also in view of the foreseeable catastrophes of the future that Asimov portrayed science fiction as a privileged didactic genre of the contemporary era, subsuming the accuracy of its content to this intent:

> Science fiction is the one branch of literature that accepts the fact of change, the inevitability of change. […] That doesn't mean that a science fiction story should be predictive, or that it should portray something that is going to happen, before it can be important. It doesn't even have to portray something that might conceivably happen. The existence of change, the acceptance of change, is enough. […] If enough people read science fiction or are, at least, sufficiently influenced by people who read science fiction, enough of the population may come to accept change (even if only with resignation and grief) so that government leaders can plan for change […]. And then, who knows, civilization might survive.[458]

This form of educational purpose is towards change itself. The narrative fiat allows for Meillassoux's Popperian principle of science-fiction. Asimov can alter the rules of his fictional world at an alethic level, creating situations that science deems impossible. What remains constant in these cases, however, is his approach and purpose. He employs the scientific method and maintains an open-mindedness toward the changes he aims to inspire in the reader. One critic in particular was skeptical of this premise, and it was a sociologist. To Charles Elkins, not even Asimov's *Foundation* novels align with the author's own declaration of intents. Elkins argues that the novels do not depict how scientific advancements influence society or human behavior, as humans in the stories remain unchanged despite significant technological developments. He cites Asimov and criticizes his intellectual process concerning history, holding that humanity does not have a definitive grasp on the future by means of studying the past[459]:

> Asimov […] does not believe that scientific advances will entail any changes in men's mutual relationships: "Hate, love, fear, suspicion, passion, hunger, lust...these will not change while mankind remains"; history repeats itself (in large outline at least) "with surprising specificity." Citing Toynbee's cyclical theory of history as a basis for social theorizing and extrapolating from it into the future-a procedure which Toynbee explicitly rejected-Asimov creates a future political structure modeled on the Roman and British empires. "In telling future history," he relates, "I always felt it wisest to be guided by past history. This was true of the 'Foundation'

[458] ISAAC ASIMOV, *The influence of Science Fiction*, in *Gold: The Final Science Fiction Collection*, HarperCollins, New York, [1981] 1996. pp. 285-287.
[459] CHARLES ELKINS, *An approach to the social foundation of American SF*, < https://www.depauw.edu/sfs/backissues/13/elkins13.htm> 23/09/2024.

> series too." That past history should serve as a guide for future history is a dubious assumption at best. It certainly undercuts any notion of significant change. Moreover, it is a fetter on the imaginative possibilities of the speculative novel. Instead of events growing out of the inner logic and premises of the narrative situation, the plot and characters are forced to conform to a predetermined template.[460]

In presenting this critique, Elkins approaches Narcejac and identifies in Asimov's introduction of invariant principles and future predictions a clear teleological mechanization of the plot. This, in his view, stands in stark contrast to the aim of any literature that seeks to engage the reader's rationality, inviting them to understand the plot as a rational progression arising causally from previous events. As we have observed, Brooks, Genette, PWT, and even Narcejac himself do not regard this issue as problematic, as the intrinsic rationale of *any* work of fiction can only be discerned a posteriori through the act of reading.

In summary, 1) Asimov at times uses fiction to convey real scientific processes and concepts. In stories like *Pâté De Fois Gras* there is an intrinsic pleasure in applying the logical consistency of the method to even the most absurd scenarios. 2) On the other hand, adherence to "reality", especially to everyday life, can reveal facts that challenge the reader's stereotypical thinking. 3) While the science fiction setting serves to introduce the reader to change, Asimov deliberately chooses what changes or remains constant within this framework.

---

[460] CHARLES ELKINS, "Isaac Asimov's "Foundation" Novels: Historical Materialism Distorted into Cyclical Psycho-History", in *Science Fiction Studies*, Vol. 3, No. 1 (Mar., 1976), p. 27. As evidenced by this article, Asimov was aware that his concept of Psychohistory had been interpreted through a Marxist lens, and he categorically denied ever being influenced by communist doctrines. He reflected that if it was possible to interpret his texts in light of books he had not read, then his thesis that Tolkien was a neo-Luddite was equally valid. Anticipating the science wars that would follow, he even mocked the tendency to apply Marxist theories to science in one of his spoof essays on thiotimoline. See ISAAC ASIMOV, *Ideas*, *Cit*. p. 402. He cited the fake article «E. Harley-Short, Philosophical Proceedings & Reviews, 15, 125–197 (1946). "Determinism and Free-Will. The Application of Thiotimoline Solubility to Marxian Dialectic."» ISAAC ASIMOV, "The Endochronic Properties of Resublimated Thiotimoline", in *Only a Trillion*, Ace Books, New York, [1957] 1976. p. 108. Indeed, thiotimoline, with its unique property of dissolving before it even touches water, evokes reflections akin to those found in Pynchon's work, where Slothrop experiences erections prior to the impact of each V2 rocket. In both instances, there is a reversal of the cause-and-effect relationship, mirroring the debates within cybernetic circles regarding the concept of telos, as noted by Malapi-Nelson.

This demonstrates how it is possible to identify various purposes in Asimov's relationship between reality and fiction. It is now up to us to determine which of these informs the *telos* of his detective works.

In spite of these various forms of the rapport between fiction and reality, one can still perceive a guiding principle in Asimov's writing. This principle is progress as a constant in the history of humankind, which is indispensable in the catastrophes that his epoch foresaw, as shown by Wiener and Andersson. In this, as J. Joseph Miller noted, he is ethically a Utilitarian rather than a Kantian[461]. He privileged calculations of best scenarios to the retainment of autonomy in ethical choices which he can be seen to portray even as a nuisance. Every instance in which progress is halted, whatever the concern might be, for Asimov coincides with a form of obscurantism to be fought. In one of his earlier stories entitled *The Evitable Conflict* (1950)[462], the four powerful supercomputers that control the economy of the world are committing mistakes, damaging part of the population and thus contravening the first law. The reader learns that a group of humans, known as *Medievalists* and suffering from Frankenstein's Complex, is trying to undermine the Machines. The mistakes the Machines made have led to economic inefficiencies particularly impacting these individuals, who identify themselves as the "Society for Humanity". Susan Calvin, the famous robo-psychologist, concludes that these errors are intentional actions by the Machines, acts of sabotage against the technophobes. The Machines are protecting themselves from the medievalists to steer humanity towards a future of peace and prosperity. Calvin explains that the Machines have interpreted the First Law as a mandate to take total control, even if it means harming some individuals, to prevent greater harm to all humanity. In the end, she and her interlocutor Byerley engage in a debate about whether the Machines' actions are ultimately beneficial. While Byerley is initially alarmed by the idea of humanity losing control of its destiny, Calvin argues that the Machines can manage Earth's resources more efficiently than humans, eliminating the need for

[461] J. JOSEPH MILLER. "The Greatest Good for Humanity: Isaac Asimov's Future History and Utilitarian Calculation Problems", in *Science Fiction Studies*, vol. 31, no. 2, 2004, pp. 189–206.
[462] ASIMOV, ISAAC, *The Evitable Conflict,* in *I, Robot*, Bantam, New York, [1950] 2004. pp. 240-272.

interhuman conflicts and bringing world peace within reach. After all, humanity has never truly been in full command of its future, and since survival has always been dictated by external factors like economic and environmental conditions, leaving the decision-making power in the Machine's hands may not only be philosophically equivalent to the previous relationship between humanity and the world, but it could also be the best course of action in virtue of the godlike virtues of the Machines embodied by the Three Laws[463].

The contrast with Pynchon is stark. From these passages, it is possible to understand how the interests of the two writers towards science are located on opposite sides of a political-philosophical barricade. In Miller's terms: the Kantian vs. the Utilitarian. On one hand, the concerns of a para-Luddite towards work, control, and freedom, on the other hand, the worries of a rationalist scientist towards obscurantism, luddite resistance in the sense of Snow, irrationalism and concrete threats against which the scientific approach offers technological as well as ethical solutions. Pynchon's choice to place his fiction in a world where solutions to mysteries are abandoned in favor of openness to possibilities, in Asimov is replaced by worlds in which, as the critics note, science as a way of relating humans and the world remains stable, and where characters move among solid laws that are either eventually accepted or navigated around, manipulated through a thorough knowledge of themselves. In Asimov's case, as we have seen, even the importance of scientific accuracy in fiction, which is indeed central in his writing, is subsumed by the task of adapting the reader to change by immersing him/her in a counterfactual "what if?" scenario. Despite this, as we have seen, Asimov presents ideological traits that lead him to view human history as controlled by laws, highly complex, certainly probabilistic, but all potentially calculable.

[463] The character of Byerley, a politician, had previously appeared in a story where it was suggested that he could not be human due to his remarkable virtues. The narrative concludes with his argument that if his virtues are as solid as those of a robot, then a robot would make an even better ruler than him. ISAAC ASIMOV, *Evidence*, *I, Robot*, Bantam, New York, [1950] 2004. pp. 206-239.

An interesting point is that, in Elkin's view, these laws coalesce in what he called a "cruder version" of Marxian Historical Materialism, which on one hand revives «the old puzzle of historical inevitability (predestination) versus free will, which itself flows out of the often unsuccessful yet desperately necessary, and therefore always repeated, struggles of men to control their personal futures and the future of their societies»[464], and on the other hand sees a continuous return of history in which from era to era everything changes so that nothing changes. In the *Foundation* Trilogy the theme of determinism is heavily discussed[465]. For example, when a character learns of Seldon's predictions, he questions, "Then we stand clasped tightly in the forcing hand of the Goddess of Historical Necessity?" to which his interlocutor responds, "Of Psycho-Historical Necessity"[466]. This highlights the perceived inevitability of Seldon's laws. However, contrary to Elkin's view, Gunn notes how Asimov had claimed that psychohistory's roots lie not in Marxism but in Campbell's ideas about symbolic logic, to which he applied his ideas about indeterminacy.

> Symbolic logic, if further developed, Campbell told the young Asimov in their first discussion, would so clear up the mysteries of the human mind that human actions would be predictable. Campbell more or less forced Asimov to include some references to symbolic logic in the first story, "Foundation"[…] Asimov knew nothing about symbolic logic and did not believe, as Campbell insisted, that symbolic logic would "unobscured the language and leave everything clear." Asimov made a comparison to the kinetic theory of gases, "where the individual molecules in the gas remain as unpredictable as ever, but the average action is completely predictable."[467]

Thus, Gunn specifies, the early stories convey an anti-deterministic spirit rather than a deterministic one, suggesting that without the intervention of intelligent and courageous individuals, crises would often remain unresolved. Seldon's predictions, akin to divine will, are hidden from the characters and only become clear in hindsight[468]. The narrative emphasizes that solutions are not obvious to most characters

---

[464] ELKINS, *Distorted*, Cit. p. 28.
[465] JAMES GUNN, *Isaac Asimov: The Foundations of Science Fiction*, Oxford University Press, Oxford, 1982. p. 38.
[466] Elkins cites the same passage. ELKINS, *Distorted*, Cit. p. 28.
[467] GUNN, *Cit.*, p. 41.
[468] «Seldon's prophecies are revealed only after the fact» *Ibid.*

at any given time, except for a few. By alethic rule, the predictions of psychohistory cannot become epistemically codexal, under penalty of their non-fulfillment. Moreover they are framed as probabilities, necessitating the exercise of initiative to come to fruition. With his use of world-building and the dissemination of information among characters (the alethic and epistemic spheres) Asimov manages to balance determinism and free will to the point of making Gunn conclude that the trilogy would be unappealing if it depicted characters perpetually defeated by psychohistorical necessity, as such a narrative would be «so depressing that it would not have remained popular for more than a quarter of a century»[469].

These narrative strategies concerning predictions of the future (and, more broadly, the mediation between the two accounts of Elkins and Gunn) play a crucial role in Asimov's detective fiction. From a literary studies perspective, what interests our research is to see how Asimov's approach to science enters these types of fiction and regulate their plots. To analyze these contrasts in the realm of detective fiction more thoroughly, one must consider how the genre develops through Asimov's career, although, given the volume of the work of the New York disseminator, one is forced to programmatically accept losses.

3.III. Asimov and Detective Fiction

Asimov's childhood was marked by the figure of his father[470]. As a Jewish immigrant from Russia, Judah Asimov had a forceful interest in his son's scientific culture as a way of access to American capitalist social mobility. Asimov himself recalled how science fiction, due to its content which could easily be sold to his father as educational, was one of the few genres his father allowed him to be exposed to[471]. Nevertheless, Asimov remembers how, starting around 1929 and throughout his life, he expanded his readings to include, among other things, various forms of popular literature including

[469] *Ivi.* p. 42.
[470] *Ivi*. pp. 3-26. See also ISAAC ASIMOV, *My Father*, in *The Roving Mind*, Prometheus, New York, [1983] 1997. pp. 344-348.
[471] ISAAC ASIMOV, *In Memory Yet Green: The Autobiography of Isaac Asimov 1920-1954*, Avon, New York, 1979. pp. 94-95.

detective adventures by Conan Doyle[472], R. Austin Freeman[473], the Nick Carter pulps[474], Agatha Christie[475] and Frederick Brown[476]. When it came to describe how the idea of mixing the two genres came together, he departed from a rather "Golden Age" concept of "cheating". I shall quote at length:

> […] the mystery form […] seemed [the] most difficult to amalgamate with science fiction. Surely this is unexpected. […] Science itself is so nearly a mystery and the research scientist so nearly a Sherlock Holmes. […] And yet science fiction writers seemed to be inhibited in the face of the science fiction mystery. […] in the late 1940s […] I was told that "by its very nature" science fiction would not play fair with the reader. […], the detective could say, "But as you know, Watson, ever since 2175, when all Spaniards learned to speak French, Spanish has been a dead language. How came Juan Lopez, then, to speak those significant words in Spanish?" Or else, he could have his detective whip out an odd device and say, "As you know, Watson, my pocket-frannistan is perfectly capable of detecting the hidden jewel in a trice." Such arguments did not impress me. It seemed to me that ordinary mystery writers […] could be just as unfair to the readers. They could deliberately hide a necessary clue. They could introduce an additional character from nowhere. They could simply forget about something over which they had been making a great deal of fuss, and mention it no more. They could do *anything*. The point was, though, that they *didn't* do anything. They stuck to the rule of being fair to the reader. […] It seemed, then, a matter to be taken obviously for granted that the same would apply to a science fiction mystery. You *don't* spring new devices on the reader […] In fact, you carefully explain all facets of the future background well in advance so the reader may have a decent chance to see the solution. The fictional detective can make use only of facts known to the reader *in the present* or of "facts" of the fictional future, which will be carefully explained beforehand. Even some of the real facts of our present ought to be mentioned if they are to be used—just to make sure the reader is aware of the world now about him.[477]

Asimov seems to dictate a technique for the release of the alethic rules of the *storyworld* (Suvin's *novum*) in science fictional detective fiction: they must all be provided in advance to allow the reader's inferences a fair chance. The ideas that Asimov declares to have heard regarding detective fiction seem to be hinged on the cheating of two rules, one is about the disclosure of information, and the other is about the unjustifiable power of the detective in the form of a futuristic device, which suggest Asimov's second-hand background in the tradition of the decalogues of rules of the game of *whodunit*, from Van Dine's *Twenty Rules for Writing Detective Stories* (1928) to

[472] ASIMOV, *Introduction*, in *Asimov's Mysteryes*, *Cit.* p 14.
[473] *Ibid.*
[474] ASIMOV, *Memory*, *Cit*. p. 71.
[475] ISAAC ASIMOV, *Speculation*, in *The Roving Mind*, Prometheus, New York, [1983] 1997. p. 88.
[476] ASIMOV, *Memory*, *Cit*. p. 543.
[477] ASIMOV, *Introduction*, in *Asimov's Mysteryes*, *Cit.* pp 13-15.

Roland *Knox's (Ten) Commandments* (1929). Firstly, knowing that a science fiction writer exercises a particularly axiomatic control over the alethic rules of their *storyworld*, Asimov suggests that if one wants to blend genres, it is necessary to declare the *novum* one wishes to introduce *before* the potential detective revelation. It is indeed characteristic of the *novum* not to be intuitive for the reader because it is not part of his/her initial world[478] and instead belongs to the starting "axioms" from which the hypothesis of the science fiction story begins[479]. Unlike in the case of Holmes, who emerged before the rules of his genre and had a hidden *Rule M* to drive his plot from the *primum movens* of his metaphysics, the science fiction mystery must play the game fairly. Secondly, the possibility of introducing non-existent technology into the reader's world suggests another important set of instructions: Arthur C. Clarke's three laws, first published in 1962. Especially the third: «Any sufficiently advanced technology is indistinguishable from magic»[480].

If any advanced enough science is akin to magic then it has the power to break Knox's second rule, which states that «[a]ll supernatural or preternatural agencies are ruled out as a matter of course»[481], behaving, as it shows in the example, as a *Deus Ex Machina* that solves the *Mystère* at once.

Asimov adds two points: one is that scientific research itself can, by analogy, be conceptualized as a mystery story with the researcher as a Sherlock Holmes. We can take this suggestion in the reverse, as the statement that a mystery narration could be fitting, in the mind of Asimov, for narrating scientific progress itself as a succession of

---

[478] «[…] the principle of minimal departure-states that we reconstrue the central world of a textual universe in the same way we reconstrue the alternate possible worlds of nonfactual statements: as conforming as far as possible to our representation of AW. We will project upon these worlds everything we know about reality, and we will make only the adjustments dictated by the text.» RYAN, *Possible*, *Cit.* p. 51.

[479] UMBERTO ECO, *I Mondi della Fantascienza*, in *Sugli Specchi e Altri Saggi*, Bompiani, Milano, 1990. pp. 173-179.

[480] ARTHUR C. CLARKE, *Profiles of the Future: An Inquiry Into the Limits of the Possible*, Harper & Row, New York, 1973. p. 21. Note 1.

[481] RONALD A. KNOX, *The Best English Detective Stories of 1928,* Liveright, New York, 1929. Cited in HOWARD HAYCRAFT, *Murder For Pleasure: The Life And Times Of The Detective Story*, D.Appleton-Century Company, New York, 1941. pp. 225, 281.

mysteries and solutions. The second is that Asimov was of course conscious that both real and fictional facts are involved in a detective science-fiction and that both ought to be exposed to the reader if the ground of the game of sci-fi *whodunit* is to be leveled. This suggests that revealing real facts of science, a sidelined didactic purpose, was part of his project to prove that the mystery mode could indeed be mixed with science fiction. With these premises in mind, we can account for some peculiar moments of Asimov's Mystery production, leading to, and contemporary to the Positronic Robot Series we set to analyze.

During the war, on January 13, 1943, while working at the Philadelphia Navy Yard, Asimov begins to write a story entitled *Author! Author!* which deals - rather postmodernly - with a mystery writer's fictional detective who suddenly comes alive. In the story, Graham Dorn, a mystery writer, discovers that his fictional creation, the caricatural detective Reginald de Meister, has materialized into reality. De Meister is presented as an enemy of the author even on paper. Dorn, who intends his character to be a scathing parody of detective fiction, has him take cocaine, and speak in a cartoonish faux-British accent[482]. The influence of Conan Doyle and his relationship with Holmes becomes even more explicit when the character starts calling Dorn his "Watson", but the expensive tastes and generally refined appearance of the character also suggest the influence of sophisticated New Yorker detectives Philo Vance and Nero Wolfe. The story seems to play on the Sherlockian Fandom phenomenon, to which Asimov will become an active part only later. At a conference, an excited fan begs the author to allow her to call him by the name of his detective, but also speaks of him as a "God", reminding us of Eco and Spanos.

> '[…] I think it is wonderful to be an author like you. It must be almost like being God.' […] To be able to create living characters out of nothing; to unfold souls to all the world; to put thoughts into words; to build pictures and create worlds[483].

[482] S. S. VAN DINE. "Twenty Rules for Writing Detective Stories", in *The American Magazine*, September 1928. <http://gaslight-lit.s3-website.ca-central-1.amazonaws.com/gaslight/vandine.htm> 23/09/2024.
[483] ISAAC ASIMOV, *Author! Author!*, in *The Early Asimov; or, Eleven Years of Trying Vol. III*, Panther, St.Albans, [1943] 1979. p. 18.

What may seem like platitudes are, in fact, key elements in the story, which revolves around Dorn's ability—or inability—to control his creation, which, unlike robots, has no constraints preventing it from ruining his life. The author answers to the woman with thinly veiled sarcasm, as his reader reinforces her own description of the godly freedom of the author by praying to allow his character to have a more fulfilling love life. Then she goes on to contradict herself: «"Oh, Mr. de Meister – do, do please let me call you Mr. de Meister. Your creation is so real to me, that I can't think of you as simply Graham Dorn. […]"»[484]. Graham, now outrageously identified with a character he despises, goes home and starts writing a letter to his editor announcing the end of the series when somebody taps on his shoulder, it is the detective, now alive and real.

> Do you realize, old man, that if you stop writing de Meister stories, my existence will become that dull, wraithlike one of all superannuated fictional detectives. I'd have to gibber through the gray mists of Limbo with Holmes, Lecocq and Dupin.'[485]

As if in a self-conscious manipulation of the performative authenticative power of writing fiction, De Meister argues that his existence depends on Dorn continuing writing and justifies his existence by Dorn's fans belief. If they believe his existence, then he is real. This is played in the boundary between fiction and fiction-within-fiction. Once entered TAW by the belief of his readers, De Meister not only assumes Dorn's identity but also woos his fiancée. Dorn then decides to sabotage his character by manipulating the information he has received from the detective, by altering his romantic entanglements[486]. He introduces a jealous lover, Sancha Rodriguez, that promptly appears to accuse the detective of cheating. They eventually fade back into the realm of imagination, restoring order to Dorn's life. One detail within this display of "postmodern" self-consciousness is important from our perspective. In this story, the fantastical nature of the character's appearance in flesh and blood is linked, with Asimov's careful attention, to the present in which he was writing. The delicate

[484] *Ivi.* p. 17.
[485] *Ivi*. p. 23.
[486] There is a very interesting passage in which this relationship reverses and he simply cannot write any new word to the series once his character has taken hold over his own destiny. His only solution will be to find a still unpublished draft and modify the story which is both already existing and not fully canonized as biography of the character. *Ivi*. p. 39.

detective laments the possibility of being drafted for World War II, which the author had inserted in one of his books. The caricature of the detective thus describes his position as a fictional creature in relation to historical reality:

> 'Why you had to bring up draft registrations in your last book, I really don't know. This urge to be topical; this fiendish desire to be up to the minute with the news is the curse of the mystery novel. A true mystery is timeless; should have no relation to current events[487].

This places Dorn in a position analogous to Conan Doyle, who, stifled by his character, could not publish a serious novel of "higher" literature with social implications (Dorn planned one concerning a Coal Mine Town[488]) because the detective "pays his bills"[489]. This suggests how Asimov's stance, which triumphs by manipulating the barriers among different levels of fiction[490], was a rebellion against an atemporal, escapist reality-fiction relationship for one that prioritizes impact on the present. As we have seen, Asimov will assert that science fiction is one of the most important genres of his time precisely because it allows human imagination to grapple with "real" problems of the present and the future. We could argue with Lavocat, that fiction within fiction is somehow always involved in dealing precisely with the barrier between reality and fiction, with a look to «nous inspirer un désir utopique de la réalité, […] mis au service de la fiction elle-même»[491] only that this time, it does so through the reader's rejection of the ridiculousness of the detective villain who would have wanted his mystery stories to be atemporal works of pure perfect fantasy like Snow's escapist literature in the eyes of Pynchon. Consequently, Asimov's own opinions point towards an interpretation of his own Science-fictional detective fiction as once more an occasion

---

[487] *Ivi.* p. 36.
[488] On the social connotation of Coal Mining Novels and their tradition see STEPHANE ELISE BOOTH, "The American Coal Mining Novel a Century of Development", in *Illinois Historical Journal*, Vol. 81, No. 2, Illinois Historical Society, Springfield IL, 1988, pp. 125–40.
[489] ASIMOV, *Author!*, *Cit*. p. 20.
[490] MARIE-LAURE RYAN, "Stacks, Frames and Boundaries, or Narrative as Computer Language", in *Poetics Today: Narratology Revisited II*, Vol. 11, No. 4, Duke University Press, Durham, Winter 1990. pp. 873-899.
[491] LAVOCAT, *Fait et Fiction*, *Cit*. p. 494.

to contemplate real change, at once inevitable and mutable by nature, this time through history.

In June 1948, he writes *The Red Queen's Race*, a tale involving time-travel and a detective remindful of Continental OP or of the "tough-guy" detectives of Frederick Brown he enjoyed[492], which is destined to be unusual in Asimov's career. In this tale, a scientist who had collaborated in the Manhattan project, driven by a profound sense of guilt and a misguided ideology regarding the great empires of antiquity (think of Elkins), intends to send back in time a contemporary chemistry book written in ancient Greek, believing this will spark an anticipated technological revolution and change the world for the better. He succeeds in his endeavor but is found dead at the experiment site. The detective questions his colleagues and learns of the plan, becoming fearful of soon experiencing the possible erasure of his existence and of all the people he knows due to the butterfly effect of the book's return to the past. While investigating, he meets the translator of the book into ancient Greek, who, having understood the physicist's plans and having read about his unsound theories regarding antiquity, had taken care to translate only the parts he knew were coherent with the intuitions of ancient philosophers. The case remains conspicuously unsolved[493], but the world is saved.

This plot development introduces a tendency found in the Positronic Robot saga to relegate the resolution of the case to a secondary position compared to partially related but exceedingly weighty global consequences. Furthermore, it introduces one of the concepts that will later become dearest to Asimov, here in a strange position of disavowal. The philosophy professor describes one of the reasons why he realized that the physicist's plan is flawed and its consequences involving the possible worlds of the plot, which is why he implemented his own plan:

> It was difficult for me to jump to the obvious conclusion, since the achievements of modern science transcend the imaginings of philosophy in so many ways. But I learned the truth eventually, and it was at once obvious that Tywood's theory of changing history was infantile.

---

[492] ASIMOV, *Memory*, *Cit*. p. 530. He published this story right after his first spoof essay on Thiotimoline.

[493] It is marked with a question mark in the documents of the Bureau that employs the detective. ISAAC ASIMOV, *The Red Queen's Race*, in *The Early Asimov; or, Eleven Years of Trying Vol. III*, Panther, St. Albans, [1949] 1979. p. 146.

> There are twenty million variables for every instant of time, and no system of mathematics - no mathematic psychohistory, to coin a phrase - has yet been developed to handle that ocean of varying functions[494].

One of the earliest formulations of *Psychohistory*, full three years before *Foundation*, appears in a work of detective fiction. Since future prediction of human affairs is not achievable in this *storyworld*, the plan of the professor is misguided and must be stopped. This is practiced in connection with the passion for ancient history that Elkins saw in Asimov. Trying to exercise control over history is not impossible or wrong, but it becomes so because there is yet no way to calculate the countless variables that make up history.

These two stories, combined with the robot-riddles the characters solved in *I, Robot*, showcase Asimov's early interest in mysteries. On April 19, 1952, Asimov visits his editor Horace Gold, who suggests a robot novel. Asimov had only written robot short stories and was unsure if he could carry a whole novel based on the robot concept:

> "Sure you can," Gold said. "How about an overpopulated world in which robots are taking over human jobs?" "Too depressing," Asimov replied. "I'm not sure I want to handle a heavy sociological story." Gold encouraged him, saying, "Do it your way. You like mysteries. Put a murder in such a world and have a detective solve it with a robot partner. If the detective doesn't solve it, the robot will replace him."[495]

This sparked the idea for *The Caves of Steel*, the first novel we will deal with, which Asimov described as “a pure murder mystery set against a science fiction background”. He believed it was a perfect fusion of the two genres, marking the first such flawless blend in his view[496].

The next important passages in our incomplete review of Asimov’s detective fiction happen twenty years later, when the Positronic Robot saga had already begun. The introduction of the detective character Wendell Urth, inspired in his likeness by Norbert Wiener himself[497], adds a personal touch to Asimov's writing. The character's quirks and preferences mirror aspects of Asimov's own personality, among which the

[494] *Ivi.* p. 144.
[495] ASIMOV, *Memory*, *Cit*. p. 648.
[496] *Ivi.* p. 648.
[497] *Ivi.* p. 694.

claustrophilia he developed spending his boyhood days in the enclosed space of the family candy shop, turned within the fiction in a full-fledged agoraphobia.

The character appears in the collection *Asimov's Mysteries* (1968) in four instances, three short stories and a novelette: *The Singing Bell* (1955), *The Talking Stone* (1955), *The Dying Night* (1956) and *The Key* (1966)[498].

In all these stories, a detail stands out. The resolution of the case always involves an inference that relies on the recollection or discovery of an important notion relevant to the case. In many cases it is an actual scientific notion. In the first story, it is the value of the force of gravity on the moon; in the second, the definition of what an asteroid is; in the third, the idea (believed to be true at the time of writing) that Mercury always has one face turned away from the Sun; and in the fourth, a multilingual pun linking the words "clue" and "key".

The third case is perhaps the most interesting. Through Asimov's justified error, it reveals a functioning of the plot that can be extended to all the others. Instead of reasoning in terms of the open possibilities of human affairs (motives, opportunities, which are often given from the outset), the detail that allows the case to be solved is a starting notion of a general nature, perceived as true in the world of the writer. This means that, at least theoretically, a reader who knows the piece of scientific trivia could access the answer very early in the plot. Narratively, this results in the investigation being merely a *delay until that notion is remembered* instead of being *a delay until the truth is securely inferred* as it often is in Holmes. Once the scientific facts are at hand, the theory is tested, and the case is solved. This will become useful when discussing how sci-fi detective worlds are constructed in Asimov.

In 1970, the writer joined *The Trap Door Spiders*, an exclusive literary society in New York consisting of male members who gathered for discussions, meals, and debates. The club, historically made up of prominent science fiction figures, served as

[498] ISAAC ASIMOV, *The Singing Bell*, in in *Asimov's Mysteries*, Dell, New York, [1955] 1968. pp. 17-33. ISAAC ASIMOV, *The Talking Stone*, in in *Asimov's Mysteries*, Dell, New York, [1955] 1968. pp. 34-54. ISAAC ASIMOV, *The Dying Night*, in in *Asimov's Mysteries*, Dell, New York, [1956] 1968. pp. 72-98. ISAAC ASIMOV, *The Key*, in in *Asimov's Mysteries*, Dell, New York, [1966] 1968. pp. 201-232.

the inspiration for Isaac Asimov's fictional team of problem solvers, the *Black Widowers*, featured in a popular series of mystery short stories that began in 1971. In this series, a society of men is offered regular mysteries and argue on the solution, which is often provided by their demure waiter Henry.

These stories, along with others, exemplify the interpretation that critics like Patricia Warrick and James Gunn have made over time of Asimov's work as consistently linked to mystery and problem-solving[499]. Warrick called it the "puzzle-solving mode of plot development"[500] and applied it also to robopsychologist stories such as *Runaround* and *The Evitable Conflict*. In the eyes of these two critics, and as it is confirmed by the author himself when comparing the scientific researcher to a Sherlock Holmes, the plots of the scientific method itself are akin to mysteries waiting to be unraveled. While this may seem intuitive, a comparison with works mentioned in previous chapters, with the ancient concept of *Firasah*, or with explicitly postmodern later works like Eco's *The Name of the Rose*, reveals how experimental, methodological, simplified, and formalized science has not always been the backbone of detective fiction the way it is in Asimov. Not even in Holmes, where the idea of method and empirical verification were so central, did one witness a narrative form so programmatically tied to the progression of scientific research as Asimov portrayed it.

In an essay previously mentioned, Asimov even goes as far as to declare that he writes out of a "desire" for the world to correspond to his idea of reason, outlining the basics of our reading of his relationship with fiction:

> Alas, not only are people human; not only are scientists human; but I'm human, too. I want the universe to be as I want it to be and that means completely logical. I want silly, emotional judgments to be always wrong. Unfortunately, I can't have the universe the way I want it, and one of the things that makes me a rational being is that I know this.[501]

This of course does not involve the fictional universe, which, as we see, can be provided with heroes of reason and irrational antagonists.

---

[499] WARRICK, *Imagination*, *Cit*. p. 58. GUNN, *Cit*. p. 43.
[500] WARRICK, *Imagination*, *Cit*. p. 40.
[501] ASIMOV, *Corollary, Cit.* pp. 66-67.

In 1973, Asimov was proposed for membership in the *Baker Street Irregulars* (BSI), the most important group of American Sherlock Holmes enthusiasts dedicated to *The Game*. As per requirements of *The Game*, The BSI holds an annual banquet near Holmes's supposed birthday, where members treat the Sherlock Holmes stories as factual and attribute them to John Watson, with Arthur Conan Doyle as the literary agent. Asimov was proposed for membership by Edgar Lawrence, a member of the Trap Door Spiders, and was officially invested in 1976[502] with the name "The Remarkable Worm", taken from a passage in Doyle's story *The Problem of Thor Bridge*. Asimov later accepted to contribute to a book about Holmes by analyzing James Moriarty's fictional opus "Dynamics of an Asteroid". He expanded this analysis into a Black Widower story titled *The Ultimate Crime*. Despite declaring not to be a Holmes enthusiast, Asimov became involved in BSI activities, including giving toasts at banquets and writing sentimental verses about Sherlock Holmes of which some are still archived in the BSI website[503].

However, Asimov faced challenges at the BSI due to the Sherlockian story-accurate heavy smoking environment, which he found intolerable, and possibly because of his criticism of the scientific inaccuracy of Doyle's stories. As time passed, the BSI's leader and admirer of Asimov, Julian Wolff, retired and passed away, leading Asimov to stop attending the banquets as the new leadership did not require him to. Nevertheless, the works on Holmes mentioned in the first chapter[504] as well as the limerick that appears in exergue date back to this period. From these examples we can draw hints towards explaining the connection between Asimov's detective fiction and the world outside the text.

3.IV. Asimov's Robot Detective Series

[502] ISAAC ASIMOV, *In Joy Still Felt: The Autobiography of Isaac Asimov 1954-1978*, Avon, New York, 1980. pp. 627-628, 666, 671, 699-700, 730, 785, 786.
[503] The Baker Streets Irregulars Trust, Asimov, Query, <http://www.bsitrust.org/search?q=Asimov> 24/09/2024.
[504] I shall add another one which has the same content of the ones I already mentioned ISAAC ASIMOV, *Sherlock Holmes as Chemist*, in *The Roving Mind*, Prometheus, New York, [1980] 1997. pp. 127-134.

The series of novels featuring the human detective Elijah Baley and the highly advanced "humaniform" Robot R. Daneel Olivaw is often taken to be part of the larger and more encompassing *Positronic Robot Series* and includes five stories. Its main character Elijah is present in *The Caves of Steel* (1953 serially then 1954 in volume), *The Naked Sun* (1957), *The Robots of Dawn* (1983), the short story *Mirror Image* (1972), and he is seen in flashbacks several times and talked about frequently in *Robots and Empire* (1985), point of connection with the Foundation Series and set roughly 160 years after his death. Of these stories, especially the first two and the fourth share common macro-characteristics. 1) In them, "plainclothesman" detective Elijah is called upon solving a mystery with the help of humaniform robot R. Daneel Olivaw. 2) There are "rigid" laws of sociology, so rigid that they govern the judgements of the characters over the possibility/impossibility of an event taking place. 3) The stakes of the plot vastly transcend the crime itself: overarching political issues make the resolution of the case crucial on a global scale in the reference worlds. 4) The detective is not the most knowledgeable individual on the scene and is often wrong. During the course of the story, Baley presents his view of the matter and is frequently corrected by Daneel and his vast database or by some other more knowledgeable character, forcing him to change his mind. 5) The resolution of the case and the retribution of the culprit are not one with the conclusion of the novel, qualifying Asimov's specific blend of detective fiction and science fiction. 6) What concludes the novel is a change in the unbreakable status of a sociological law of the world in which the crime took place.

The stories are set circa three millennia ahead of Earth's timeline, in a period marked by the discovery of hyperspace travel and the colonization of worlds relatively near to Earth. Fifty planets have been colonized and are collectively referred to as "Outer Worlds". The human mutants that inhabit these planets (called Spacers) are one with technology, they have perfected their genetics and vastly prolonged their life but have become afraid of germs, which they have somehow eliminated from their areas. They restrict childbirth to maintain their opulence and seclusion and rely heavily on robot labor, which is the reason of their affluence, their squeamishness about

discomfort, and their low population density. In contrast, Earth is plagued by overpopulation, accommodating eight billion individuals, three times the population of Asimov's 1950s, in large underground dome-cities (the titular *Caves of Steel*). On Earth, strict regulations are set against the use of robots of which the earthmen are suspicious. Earth's life conditions have made its inhabitants used to enclosed, systematically controlled city living, to the point that they have developed a radical agoraphobia that makes it impossible for them to leave the security of their caves.

In the first novel, the spacers have noticed that their civilization, although advanced, is stagnating due to their long life and atrophied tendency to procreate, so they started creating outposts on earth, convinced that they can persuade the short-lived and fast-paced earthmen to start a new wave of colonization of space, aided by robots. The pursuit is arduous because of the crippling prejudice and suspicion of technology of the earthmen. One day, Roj Nemenuh Sarton, a Spacer Ambassador residing in a Spacer enclave adjacent to New York City, and who has been advocating for the Earth government to relax its anti-robot regulations, is found dead outside his residence with an energy blaster wound on his chest. The New York dome police commissioner Julian Enderby chooses his former classmate Elijah, enlisting the assistance of sophisticated robot R. Daneel Olivaw, built by famous Spacer scientist Han Fastolfe and by Sarton himself in the exact likeness of the latter. Daneel and the Spacers attribute Sarton's death to the *Medievalists* (the name returns), a group of Frankenstein-complex-ridden neo-luddites who long for a return to pre-dome-city life. Elijah is skeptic about anyone daring to traverse the vast countryside between the City and Spacetown, as Earth inhabitants rarely venture beyond the City limits due to their inescapable fear of the outside which is treated as a powerful rule influencing the detection process:

> But both the City and Spacetown are open to the countryside in all directions. It is possible for a Terrestrial to leave the City at any of numerous exits and strike out cross country to Spacetown, where no barrier will stop him." The tip of Baley's tongue touched his upper lip and for a moment stayed there. Then he said, "Cross country?" "Yes." "Cross country! Alone?" "Why not?" "Walking?" "Undoubtedly walking. Walking would offer the least chance of

> detection. […].” “Impossible! There isn’t a man in the City who would do it. Leave the City? Alone?”[505]

From a PWT perspective one could deem such instances affected by the Axiological operator G:

> […] the general effect of the G-operators is to transform the world's entities (objects, states of affairs, events, actions, persons) into values and disvalues. Axiological codex is a valorization of the world by a social group, a culture, a historical period. But valorization is strongly dependent on personality structure, and so the axiological modalities are eminently prone to subjectivization: what is a value for one person might be a disvalue for another one. The overall axiological structuring of fictional worlds is a product of diverse combinations and hierarchies of codexal and subjective G-operators.[506]

For the Earthmen, going outdoors or coexisting with robots are “undesirable”, even terrifying practices, meaning they are regulated by an operator ~G (Bad). However, the status of these axiological rules is more complicated. Instead of being simply presented as a characteristic of the *storyworld*, this operator is somehow “historicized” by Asimov. The Earthmen have their irrational fears due to the conditions of the world in which they live and the customs they developed in its regard. This inevitably involves the epistemic and alethic spheres. There are starting conditions that have generated a situation in which certain practices have taken on value. This means that right from the beginning, despite the authoritative presentation of the solidity of these axiological rules on Earth, they appear questionable, just as they are in the minds of the Spacers whom Asimov presents as more similar to his rationalist model regarding these fears, but who are also plagued by their own axiological idiosyncrasies, such as the terror of touching the Earthmen for fear of being infected. This, as will be seen, generates a plot that can be likened to the one presented by Doležel as an example, but which simultaneously transcends it: that of the *quest*[507]. This type of plot, which has previously been associated by many critics like Truzzi[508] with detective fiction, concerns the attainment of a desired object. In Asimov, this object will be more of an

[505] ISAAC ASIMOV, *The Caves of Steel*, in *The Robot Collection: The Robot Novels*, Doubleday, Garden City NY, [1953-1954] 1983. pp. 49-50.
[506] DOLEŽEL, *Heterocosmica*, *Cit.* pp. 123-124.
[507] *Ivi.* p. 124.
[508] TRUZZI, *Cit.* pp. 56-57

abstract one: the change of the very axiological starting conditions first by the character Elijah and then, consequently, by the entire population of his world. To achieve this, he must undergo a form of "Bildung", overcome his own prejudice, his own subjective ~G operator, while simultaneously reconstructing the true K-world about the circumstances of the crime.

Within this *storyworld*, as the character of Fastolfe will suspect in the third novel, there are «laws of humanics»[509] as there are laws of robotics, that is laws of behavior that seem to transcend from the axiological to the alethic, where "would not" and "cannot" threaten to mix. Walking outside is indeed impossible for the killer, who is Julius Enderby himself, secretly a member of the medievalists, who has used his robot R. Sammy to bring him a gun on the scene of the crime from outside the dome without telling it what it was for, thereby avoiding the first rule.

In the course of the novel, Elijah, in scenes that mimic classic detective fiction's "final revelations", had accused Daneel, once of being Sarton in disguise and once of being the murderer:

> Baley saw no reason for delay. He said, "I believe I have penetrated the mystery surrounding the death of Dr. Sarton." […] "Do you mean," said Fastolfe, "that you know the murderer?" "No," said Baley, "I mean there was no murder." […] "Do you mean that Dr. Sarton is alive?" "Yes, sir, and I believe I know where he is." "Where?" "Right there," said Baley, and pointed firmly at R. Daneel Olivaw[510].

The chapter in which this accusation takes place ends abruptly in a dramatic cliffhanger. In the next, the characters present (Enderby, Fastolfe and another roboticist) take turns in explaining why Baley was wrong. They point out his misunderstanding of robotics, which had led his earthman's prejudice towards believing that Daneel was too similar to a human to not be one. This prejudice, they point out, is what makes the dream of Spacers so difficult to realize on Earth. The new colonization of space would in fact require what the spacers call a C/Fe society: a society in which carbon-based creatures and iron-based creatures coexist.

---

[509] ISAAC ASIMOV, *The Robots of Dawn*, Doubleday, Garden City, NY, 1983. p. 108.
[510] ASIMOV, *Caves*, *Cit.* p. 83.

Daneel himself also covers this role of approver/disprover of Elijah's lines of reason, constantly punctuating the detective's monologues with corrections or with expressions of approval such as «"I have no quarrel with your reasoning."»[511] or «"In that, you are right, Partner Elijah"»[512]. This is the manifestation of the role of the robot in the series. Daneel, with his infallible memory, inability to harm, and solid reasoning skills but lacking personal interest in solving the case, becomes the intellectual sparring partner of Elijah, who in turn might be impulsive but is also intuitive and deeply involved. It is the combination of the two that leads to the final resolution and triggers the change in Elijah's heart, the true objective of the plot and the reason that makes him the first man to embark on the C/Fe society. The robot Daneel after all was designed to closely resemble a human precisely to facilitate this scenario. This is why Enderby's original aim was not the roboticist his creator but the robot himself[513]. He only misses his target because he loses his glasses, clue that will ultimately be his demise. This subtext of obscurantist segregationist ideology, visible in Elijah and in the symbolic act of "losing of one's glasses", can perhaps be found in the namesake of the protagonist. He carries in fact the name of the biblical prophet who in the words of *Asimov's Guide to the Bible* (1967, 1969) was described as capable of bringing unity but hostile against diversity: «a strong leader, […] the most dominating prophetic figure since Samuel. [And,] [i]n the face of persecution, […] increasingly intolerant of other worship», and also as «remembered by later generations with a veneration second only to Moses»[514], which will ultimately be Elijah's destiny after his death, as depicted in *Robots and Empire*.

To achieve the status that his name implies, Elijah will have to break down those rigid sociological laws stemming from the obscurantist fear of the *Medievalist* killer. He must learn to see Daneel as an equal and must succeed in stepping out of his private

[511] ISAAC ASIMOV, *The Naked Sun*, in *The Robot Collection: The Robot Novels*, Doubleday, Garden City NY, [1953-1954] 1983. p. 236
[512] ASIMOV, *Robots of Dawn*, *Cit*. p. 37.
[513] My use of masculine pronouns for Robots mimics the use done in the book.
[514] ISAAC ASIMOV, *Asimov's Guide to the Bible: the Old and New Testaments*, New York, Avenel Books, 1981. pp.

cave of steel. In the stories of the series, only special individuals can do this, and in most cases, this role is entrusted to Baley himself. The arrest of Enderby takes place in the final chapter, where Elijah correctly reconstructs how things had happened in front of the commissioner, who confesses. In matters post-human like those depicted in the series, the utilitarianism that Miller highlighted transcends mere law on the axiological plane:

> In the first novel The Caves of Steel Baley and Daneel discover Police Commissioner Enderby to be guilty of killing the Spacer, but as it was his look-alike robot that Enderby was actually planning to destroy, the "murder" they were investigating turned out to be accidental. Instead of being charged with the deed, Baley suggests the Spacers put him to work promoting the cause of interplanetary expansion, thus Enderby ends up working for the Spacer cause as a kind of penance. No charges laid, but a kind of poetic justice served.[515]

The ending sees Elijah wishing his son Bentley to become one of the first new humans to be educated in a C/Fe society. Then Daneel quotes John 8:11, and an image concludes the novel:

> "I didn't think I would ever say anything like this to anyone like you, Daneel, but I trust you. I even—admire you. I'm too old ever to leave Earth myself, but when schools for emigrants are finally established, there's Bentley. If someday, perhaps, Bentley and you, together …" "Perhaps." R. Daneel's face was emotionless. The robot turned to Julius Enderby, […] He hesitated, then, almost as though he were surprised at his own words, he said, "Go, and sin no more!" Baley, suddenly smiling, took R. Daneel's elbow, and they walked out the door, arm in arm.[516]

This is the true ending of the story, not so much the re-establishing of the initial state of the plot but the launch towards a different future. In the eyes of the Spacers, true bearers of superior knowledge, the initial situation of the plot was tragic. Stagnation, akin to a Pynchonian entropy, would eventually lead to ruin over time. Rather than disturbing a state of quiet or a Sherlockian boredom, the case immediately presented itself as a battle for the fate of the various forms of humanity in the universe. In a later essay on *Science Fiction Mysteries* (1987), Asimov declares to having had this intent.

---

[515] SAGE LESLIE-MCCARTHY, "Asimov's Posthuman Pharisees: The Letter of the Law Versus the Spirit of the Law in Isaac Asimov's Robot Novels", in *Law, Culture and the Humanities*, No. 3, 2007. p. 410.

[516] ASIMOV, *Caves*, *Cit.* pp. 201-202.

Asimov contrasts the two genres, stating that the mystery story represents «the triumph of order», where crime disrupts social harmony and the protagonist must restore balance by identifying and punishing the culprit. In contrast, the science fiction story embodies «the triumph of disorder», because it is set in a society markedly different from our own due to scientific advancements. In this context that assimilates alethic difference with disorder, he emphasizes that science fiction does not aim to restore order but rather, once again, to explore change, asserting that «if we were to return to our society, if order were to be restored, the science-fiction story would be a flat failure»[517].

Asimov acknowledges the possibility of blending the two genres, citing examples where science plays a role in mysteries and vice versa. However, he notes that his friend Campbell believed a perfect fusion was impossible. To challenge this notion, Asimov wrote *The Caves of Steel as* a science-fiction mystery where both elements are equally strong and support one another, followed by sequels to demonstrate that this fusion was not accidental. In this work, in fact, the two endings almost completely coincide. Elijah announces that he has learned to love Daneel just as Daneel absolves Enderby, sending him to his future of poetic punishment.

Despite this however, it can be observed with Miller that the judicial aspect of these novels always takes a backseat to the science fiction elements. It seems that the focus is not so much on punishing criminals as it is on ensuring the "science fictional" future of humanity through the breaking of their prejudices and bad intellectual habits. Within the novel, the sociological "laws" dictated by Earth's conditions hindered the necessary progress for salvation, while the regressive dreams of the Medievalists turned towards a past that had nothing more to offer. In Asimov's universe, it is thus given to Baley, through his coexistence with Daneel, to become the spearhead of a revolution in human thought. Where no one, especially not the killer, could break free

[517] ISAAC ASIMOV, *Science Fiction Mysteries*, in *The Tyrannosaurus Prescription and 100 Other Essays*, Prometheus, New York, [1987] 1989. pp 226-227.

from their constraints, Elijah succeeds by understanding that Daneel, despite remaining a profoundly different creature from him, possesses virtues that other humans do not.

In the second novel, the effects of this breaking down of barriers mark the beginning of the story. *The Naked Sun* revolves around the murder of Rikaine Delmarre, a renowned fetal scientist on the planet Solaria. Elijah Baley is tasked with investigating the case by the Solarian government, accompanied once again by Daneel. Earth's sociologists have reached conclusions regarding the current Galactic scenario. The disparity of population and the differences in the psychology and lifespan of Earthmen and Spacers this time is deemed unstable by authorities on earth, who lack knowledge about life on the other planets. Elijah, who has gained galactic fame for his past results, has once again the double mission of solving the crime, and in the meantime obtain information that would level the stakes in favor of earth.

One of the first scenes sees Elijah having to exit not only the dome, but Earth altogether, and work in a world exposed to the great outdoors. The psychological barrier which is part of his "sociological" background is more evident than ever, and puts itself in the line of reason:

> Baley was losing his sight. Reason alone was not enough. Baley told himself over and over: Men lived in the open all their lives. The Spacers do so now. Our ancestors on Earth did it in the past. There is no real harm in wall-lessness. It is only my mind that tells me differently, and it is wrong. But all that did not help. Something above and beyond reason cried out for walls and would have none of space. As time passed, he thought he would not succeed. He would be cowering at the end, trembling and pitiful. The Spacer they would send for him (with filters in his nose to keep out germs, and gloves on his hands to prevent contact) would not even honestly despise him. The Spacer would feel only disgust.[518]

Once Elijah's view is unobstructed, Asimov deploys hyperbolic language and nominal style to accentuate the incapacitation of reasoning that the chaos of open space exercises on the mind of the earthman. In this somewhat dramatic scene, crowned by a final pacifying anaphora that imitates Elijah's eyes getting used to the open light, he manages to take a look at the "naked sun" directly:

[518] ASIMOV, *Naked Sun*, *Cit*. p. 221.

> He faced the enormous wash of blue and green, incredible quantities of it. He could feel the undisciplined rush of air against his face but could make out no details of anything. A moving something dashed past. It might have been a robot or an animal or an unliving something caught in a puff of air. He couldn't tell. The car went past it too quickly. Blue, green, air, noise, motion—and over it all, beating down, furiously, relentlessly, frighteningly, was the white light that came from a ball in the sky. For one fleeting split moment he bent his head back and stared directly at Solaria's sun. He stared at it, unprotected by the diffusing glass of the Cities' uppermost-Level sunporches. He stared at the naked sun[519].

The relative soar in style underlines once again how, like all earthmen of the robot series, like Wendell Urth, like Asimov himself in a lesser manner, Elijah is agoraphobic to the extreme. On Solaria, a controlled population of 20,000 relies heavily on robots for all tasks making so that the machines vastly outnumber the local Spacers who live segregated lives, having come to develop a fear of personal contacts even more extreme than that of Earthmen, to the point that every physical encounter is impossible for their "sociological" situation.

The prime suspect is Gladia Delmarre, wife of the victim, as she was present during the murder which is the rarest circumstance possible on a planet in which every contact is confined to rare exceptions among family members, medical reasons or state mandated reproduction encounters. However, she claims no memory of the event, and the murder weapon is missing. As Baley uncovers more about Solarian culture, he learns of Gladia's strained relationship with Delmarre due to the societal norms of Solaria that she finds stifling, like the secluded life and lack of physical contact. She is considered a sexual deviant simply for not disliking physical presence and actively attempting to spend time with her husband. It is eventually revealed that Delmarre's neighbor, Jothan Leebig (living miles away on the underpopulated planet), was involved in a dangerous project to equip war spaceships with positronic brains posing a threat to human safety all over the universe, and that Delmarre had threatened to reveal his plans. The villain is once again plagued by his planet's form of obscurantism more than any other character. A "mad scientist"[520] type, Leebig wants to build

[519] *Ivi.* p. 232.

[520] «[…] emerging in the literature of this period is the first explicit connection between scientists and the machinery of war. Previously, evil scientists were depicted as individuals bent solely on their own advancement, but by the early twentieth century, by linking technology with the new and more

artificial intelligent warships to conquer the other spacer worlds and therefore grant himself that the law of his land be extended everywhere, so that he is not forced to meet nobody in person ever again. To do so he set to develop a way for engineers to build robots that circumvent the "impossibility" of breaking the first law, the Hippocratic "robots shall not do harm". So powerful is his fear that when he thinks the police is coming to arrest him in person, he does not hesitate to take his own life. In the end, it is disclosed that Gladia inadvertently killed Delmarre in a moment of emotional distress caused by Leebig's manipulation. Baley, who in the meantime has fallen for the beautiful Solarian, decides to protect Gladia from legal repercussions, as she chooses to leave Solaria for the different Spacer planet of Aurora.

In a scene that echoes the tension and language of an erotic novel, Elijah and Gladia confront their planet's most deeply engraved rules as they touch hands in public, also defying the Spacer taboo regarding contact with germ-ridden Earthmen:

> Again a silent moment while they faced each other at ten paces. Then Gladia cried suddenly, "Oh, Elijah, you'll think it abandoned of me." "Think what abandoned?" "May I touch you? I'll never see you again, Elijah." "If you want to." Step by step, she came closer, her eyes glowing, yet looking apprehensive, too. She stopped three feet away, then slowly, although in a trance, she began to remove the glove on her right hand. Baley started a restraining gesture. "Don't be foolish, Gladia." "I'm not afraid," said Gladia. Her hand was bare. It trembled as she extended it. And so did Baley's as he took her hand in his. They remained so for one moment, her hand a shy thing, frightened as it rested in his. He opened his hand and hers escaped, darted suddenly and without warning toward his face until her fingertips rested featherlight upon his cheek for the barest moment. She said, "Thank you, Elijah. Good-bye." He said, "Good-bye, Gladia," and watched her leave. Even the thought that a ship was waiting to take him back to Earth did not wipe out the sense of loss he felt at that moment.[521]

Once again Elijah has changed in a way that allows for humanity to grow. He and Gladia, special individuals, have what it takes to break the taboos that stilt the progress of humanity and motivate the antagonist's schemes. The secondary nature of the moral

---

effective military weapons, writers are signaling the increasing reliance of society on its scientists for the nationalistic posturings that were to lead to two world wars and the cold war.» ROSLYNN D. HAYNES, *From Faust to Strangelove: Representations of the Scientist in Western Literature*, Johns Hopkins University Press, Baltimore, 1994. p. 189. Asimov's villain mixes the older figure of the individualistic mad scientist one could find in Wells with this connection to the military apparatus that Roslyn dates back to the beginning of the century. See also pp. 265-266. For her view on cybernetics which is consistent with mine.

[521] ASIMOV, *Naked Sun*, *Cit*. pp. 395-396.

sphere of the murder is, once again, evident. The murderer is Gladia, but she goes unpunished. She might be the culprit, but the accused is the motive, it is the Solarian irrational taboo of personal presence embodied by the suicidal would-be warlord Leebig. As Sage Leslie-McCarthy notes, this holds testimony to Asimov's interest in the spirit of the law more than in its literal interpretation[522]. Here, as in *Caves of Steel*, there is no emotional element to death, nor an interrogation over evil. There are societal, political stakes, whose solution lies in progress, and in the individuals capable of breaking conventions to bring them about.

Leebig is an epitome of bad science in the criteria of Asimov: one that has abandoned reason in favor of a dark, unyielding irrational fear. Other examples of the limitations in the personality of scientists appear in the short story *Mirror Image*, written between the second and the third novel. Baley receives an unexpected call from Daneel concerning a conflict between two respected Spacer scientists aboard a ship. Both scholars have presented nearly identical papers on a groundbreaking mathematical technique, each claiming they were first to have the idea, and approached the other purely for confirmation only to have them steal the concept and pass it as their own. The ship's captain must resolve the dispute before reaching the planet where the papers are to be presented. Daneel has called Baley, as an impartial outsider, to mediate the situation. Both Spacers have personal robots, identical models, who were present during the discussion between the mathematicians. The robots' testimonies mirror each other, except that one must be lying to protect its master's reputation. Baley, unable to directly communicate with the Spacers due to their special status, interviews the robots via telepresence. Initially, both robots unproblematically admit that their programming would force them to lie to shield their masters' reputations. However, Baley manipulates the situation by highlighting the consequences of the crime for each mathematician based on their career stages. By appealing to the robots' loyalty and understanding of their masters' vulnerabilities, Baley uncovers the truth. He suggests to the robot of the younger mathematician that his master, after the scandal

[522] See LESLIE-MCCARTHY, *Cit*.

would still have the chance to restore his reputation, whereas the elder's would be irreparably tarnished by such a lapse in judgment during his later years. Conversely, he argues to the older mathematician's robot that his master's reputation would endure due to its longstanding nature, while the younger's would be utterly destroyed by a mistake done at such an early point. Consequently, the younger mathematician's robot switches its story to protect the elder man, while the elder's robot malfunctions in its attempt to maintain innocence. Baley deduces that the elder scientist is the plagiarist based on the robots' responses and their reactions to his probing.

Daneel confirms Baley's inference, acknowledging that if Baley is right, the legal equivalent of a confession has been obtained through the law-bound robots. However, he points out the potential reverse application of Baley's reasoning: a robot could easily disregard an instruction to lie if it was required to tell the truth, whereas a truth-telling robot might malfunction if it were convinced it needed to lie. Baley concedes that either scenario could have occurred, but the outcome aligns with his initial suspicion: a younger scholar, eager to explore a new idea, would likely seek advice from someone he admired and studied. In contrast, an older professor would be less inclined to consult a younger one before attending a conference with his peers. The difference between Daneel's thought and Elijah's is very clear here. Daneel embodies the purest form of rationality that Asimov envisions, focusing on logic and on the functioning of the objects-robots. In contrast, Elijah is involved in the world and possesses a practical wisdom and experiential understanding of human habits similar to that of a hard-boiled hero, although less incisive. Both perspectives are essential for solving the case.

There is a difference between characters like Elijah and the scientists in *Mirror Image*. Asimov has no qualms about portraying human fallibility, even in scientists. There is something in Elijah that even scientists surpassing him in experience lack. A gift of adaptability that ultimately allows reason to have a superior grip over his pride, his self-interest, and the lawlike taboo limitations of his society. In Asimov's worlds, there is no need for a hyperbolic perfect scientist like Holmes. *Rule M* does not apply. As seen in *The Caves of Steel*, Elijah freely, and often dramatically projects K-worlds

and proudly compares them to TAW, offering Eco's Meta-Abductions and giving the genre's proverbial "final" explanations. These worlds often have to contend with knowledge superior to his own. As Daneel possesses a vastly larger database, so scientists more experienced than a mere detective can provide more detailed information on TAW, effectively informing his subsequent abductions. His classic detective cliffhangers, appearing in the middle of the novels, serve to enhance the effect of his mistakes. Nevertheless, his value persists and is recorded not in an "immense fund of exact knowledge" like that of Holmes but in his ability to recognize that he knows less than many and that he has to learn what others already know.

However, if *Rule M* does not apply, the pruning of possible worlds does. The detective still ends up having his K-World correspond to TAW but does so through constant (even embarrassing) trial and error, and confrontation with more accurate world data, gathered from trustworthy resources. Asimov's endings are therefore conservatively teleological *but not* as fatalistic in flavor, or at least not in the same way. They convey the feeling of emerging from a crossfire between the individual's abductions and the world in the way described by Eco: "a frightening matter". In spite of Gunn's observations on determinism, the ultimate teleology of the plot might still be seen as deterministic in the terms of Narcejac. Asimov, as we have seen, even admitted using the "backward" style of composition we have come to know. But this teleology is not logically held together by the detective-character's hyperbolic power. There is no alethic endowment of superior perceptiveness like *Firasah* nor procrustean epistemic sphere to provide the detective with needed knowledge, there is instead a simple property of adaptability to change bestowed on the character. The superior abilities are instead attributed to the robot (as a representative of advanced technology that is now practically human) and to the scientists, who act as the *pruners* of the plot's possibilities, voicing the fictional facts and educating both Elijah and the audience throughout the story. However, as Narcejac suggested, the *machine à lire* needs energy. The plot requires clear stakes to move forward, and Asimov provides exorbitant ones. He separates these two functions, which were previously concentrated in the single

detective character, into two distinct figures: one, Daneel, who is perfectly rational but (or we could say, therefore) disinterested if not by second-hand and for design; and the other, Elijah, who may lack marked powers but, being capable of responsibility, serves as the emotional core around which the plot revolves.

Asimov's external narrator is not as kind with its detective as Holmes', and that is because Asimov's worlds act *as if* deprived of the need a Spanosian God of the Plot, they need a different kind of savior, one that lives within the world and can embrace the progressively self-effacing and asymptotic relativity of wrong. Once Asimov described his idea of a hero by dismantling two of the greatest clichés in myth-derived storytelling: the emotional and brawny hero Achilles and the intelligent yet devious hero Ulysses[523]. He rejected both in favor of an intellectually superior heroes who used reason for good without curses, punishments, or prices to pay for their gifts. Susan Calvin and, partly, Elijah Baley are this type of heroes. As we will see, and partly anticipated, there can be found a principle that governs the narrator's point of view, a reason for a beginning, middle, and especially an end as is represented.

The third novel continues the trend. *The Robots of Dawn* begins with Elijah, sitting outside in the shade of a tree, undergoing training to overcome what is left of his agoraphobia, when he is summoned to investigate a crime on the Spacer world of Aurora. The case involves an incredibly unusual "roboticide", the destruction by mental block of the mind of R. Jander Panell, an extremely rare humaniform robot of the same type as R. Daneel. The robot's creator, Han Fastolfe from the first novel, is suspected, but denies involvement. Fastolfe hires Elijah, fascinatingly, by telling him that he himself, Fastolfe, is the only one knowledgeable enough about robots to have been able to kill Jander, but that he has not. Elijah has to prove it without his help in order to definitely dispel every suspicion. Fastolfe is also a key figure in the pro-Earth Auroran faction and must be cleared for the now usual macro-political reasons. If his reputation is tarnished, then his faction, which is in favor of promoting the Earthmen-

[523] ISAAC ASIMOV, *That Old-Time Violence*, in *The Roving Mind*, Prometheus, New York, [1975] 1997. pp. 37-39.

driven colonization of space, would lose its most important supporter leading to galaxy-wide consequences. During the investigation, Baley is joined once again by Daneel and meets R. Giskard Reventlov, an earlier model robot formerly under the possession of Vasilia Fastolfe, daughter of the scientist.

As Baley delves into the case, he meets again with Gladia Delmarre, now called Gladia Solaria because of her status as an immigrant, and Jander's former owner. He also meets Vasilia, who reveals an incestuous love for her father, a matter considered customary on Aurora, where occasional sex is exchanged extremely easily and taboos against incest are not culturally enforced. Baley also questions Santirix Gremionis, an unfortunate suitor of both Vasilia and Gladia, and Kelden Amadiro, a member of an important robot society and political adversary of Fastolfe.

Like it happened in the other novels, the question of Jander's deactivation is secondary. It is considered a minor matter, and Fastolfe is unlikely to be legally punished for ruining a robot which was his own to begin with. The interest of the parties at play are once again political and broad in scope to the point of bordering on the destiny of humanity. Amadiro, like Enderby in the first book, is interested in putting a stop to Fastolfe’s project of galactic colonization and the role of earthmen in it. His goal is for Aurora to exclusively lead the colonization of the Galaxy. Humaniform robots play a crucial role in his strategy, as he believes Spacers are too accustomed to the comforts of civilization to be suited for the challenges of wild or even normal-robot-tamed worlds. Despite this, Fastolfe is the sole capable constructor of humaniform robots and adamantly refuses to collaborate under any circumstances in providing the science behind the construction of Jander and Daneel. Amadiro’s institute's efforts to build similar robots have been unsuccessful.

Towards the end of the novel, Baley questions Amadiro and through a stratagem forces him to reveal that he was conducting experiments on Jander at a distance, probing him with questions that tested the limits of the three laws in his programming. To do so he had manipulated Gremionis to spend time with Gladia, moving her away from the robot and interrogating Jander at a distance. Baley's account is coherent, but

lacking concrete evidence, it may not hold against Amadiro's denial. However, Baley challenges Amadiro with a crucial question. During their conversation, Amadiro referred to Jander as Gladia's husband. Once again, Galdia's sexuality is central to the story. She had fallen in love with the robot who was identical to a human in every aspect. Amadiro's attempt to evade the question raises suspicion, since the only source of this secret information could have been Jander himself.

Elijah then unravels the mystery by explaining that while Daneel was under constant surveillance of Fastolfe, Jander, being with Gladia, was more accessible for Amadiro's clandestine questioning through telepresence. Amadiro manipulated Vasilia's resentment towards her father to redirect her suitor Gremionis' attention to Gladia, providing the politician with the opportunity to interact with Jander discreetly during the time the two spent together away from the robot.

When Baley suggests that Amadiro's experiments might have led to Jander's deactivation, Amadiro's subsequent outburst inadvertently confirms his involvement, making his political situation hopeless. The Chairman of Aurora, Rutilan Horder, present at the scene in quality of makeshift judge, then decides to side with Fastolfe, compelling Amadiro to comply with Earth's colonization rights. For all pragmatic purposes the case is solved, avoiding a full investigation and political conflict, but a problem remains. The only one that could have indeed destroyed Jander, unquestionably remains Fastolfe, Elijah had lied. The answer to the mystery is once again definitely separated from the solution of the case.

The events at the end of the novel reveal a different truth. Observing R. Giskard's strange behavior during the investigation, Baley confronts him and learns that its former owner Vasilia, herself a roboticist, unknowingly granted the robot telepathic abilities during childhood experiments when the robot acted as her nanny. Giskard reveals that it was he who, reading Fastolfe's mind, shut down Jander to prevent Amadiro's plans to create humaniform robots and lead the colonization to the earthmen's demise. But there is more, and it is connected to why the robot decided to intervene. Being capable of looking into the mind of humans, Giskard has had a

glimpse of a science to come. This is the realization of something that Fastolfe is seen musing about at the beginning of the book, the future discipline of *Psychohistory* that Asimov had elaborated years prior, now appearing in the mind of Giskard as the shadows of obscure laws manifesting in the minds of humans, through which the Robot has been manipulating the story all along. To safeguard this secret, Giskard blocks Baley from disclosing the truth:

> Baley said curiously, "Do you see the future?" "No, sir, but studying minds as I do, I can tell dimly that there are laws that govern human behavior as the Three Laws of Robotics govern robotic behavior; and with these it may be that the future will be dealt with, after a fashion-someday. The human laws are far more complicated than the Laws of Robotics are and I do not have any idea as to how they may be organized. They may be statistical in nature, so that they might not be fruitfully expressed except when dealing with huge populations. They may be very loosely binding, so that they might not make sense unless those huge populations are unaware of the operation of those laws." "Tell me, Giskard, is this what Dr. Fastolfe refers to as the future science of 'psychohistory'?" "Yes, sir. I have gently inserted it into his mind, in order that the process of working it out begin. It will be needed someday, now that the existence of the Spacer worlds as a long-lived robotized culture is coming to an end and a new wave of human expansion by short-lived human beings-without robots-will be beginning. "And now"-Giskard rose to his feet-"I think, sir, that we must go to Dr. Fastolfe's establishment and prepare for your leave-taking. All that we have said here will not be repeated, of course." […] He shook his hand in the most human gesture Baley had ever seen him make. Baley took it. The fingers were hard and cool in his grip. "Good-bye--friend Giskard." Giskard said, "Good-bye, friend Elijah, and remember that, although people apply the phrase to Aurora, it is, from this point on, Earth itself that is the true World of the Dawn."[524]

The Robots saga and the Foundation saga are thus connected, with Earth being once again the place in which the spark of future colonization is started. The concept of a rigid sociological discipline resurfaces, manifested through rules akin to those of robotics in the minds of human beings via the telepathy of a robot. This idea, which had sparked Vasilia's anger towards her father, led her to describe him as follows in the earlier pages of the novel:

> One thing interests Dr. Han Fastolfe. One thing. One thing only. That is the functioning of the human brain. He wishes to reduce it to equations, to a wiring diagram, to a solved maze, and thus found a mathematical science of human behavior which will allow him to predict the human future. He calls the science 'psychohistory.' I can't believe that you have talked to him for as little as an hour without his mentioning it. It is the monomania that drives him[525].

[524] ASIMOV, *Robots of Dawn*, *Cit*. pp. 417-418.
[525] *Ivi.* pp. 222-223.

Vasilia is not a heroic character in *Robots of Dawn*, her bitterness after the refusal of her father to give in to her erotic desire seems to mark her in the eyes of her author with the stigma of irrationality.

As we have seen, *Psychohistory* grew from a foggy perspective into a justifiable dream between 1949 and 1951 in relation to Asimov's mystery fiction. My contention is that one can understand it in terms of cybernetics, which had been divulged to the public just the year prior.

3.V. Stories of Science: Rationalism, Narrations and the Pioneer

Isaac Asimov's extensive bibliography, particularly his works on science popularization and essays, contains relatively limited references to cybernetics. It is mentioned in his science manuals and encyclopedias, but as a mathematical discipline related to machine design and the analysis of behavior and intelligence, it appears to be less emphasized compared to fields where Asimov had greater familiarity and expertise, such as chemistry and biology. However, during his lifetime Asimov had the opportunity to know Wiener, even with a certain degree of intimacy. Patricia Warrick suggested that their point of contact might have been Campbell, who had briefly been a student of the famous mathematician at MIT in 1931. There is no doubt that Campbell's own short-lived academic career influenced him, so Wiener's ideas may indeed have reached Asimov through Campbell during their discussions. However, Warrick herself admits that Asimov does not recall Campbell mentioning Wiener in their conversations[526]. Nevertheless, Asimov had the chance to meet Wiener independently of Campbell. In his autobiographies, based on his diaries, Asimov recalls several encounters with Wiener, including a meeting at the mathematician's home in New York on November 8, 1952, possibly at the invitation of Wiener's daughter, who was then a graduate student in biochemistry (Asimov's field) at Boston University. Asimov was impressed by Wiener, recognizing him as the "greatest mathematician" he had ever met. He described him as absent-minded, prone to

[526] WARRICK, *Imagination*, *Cit.* p. 54.

rambling, but overall lovable[527], to the point, as we said, that he would use his figure as the model for that of his detective Wendell Urth.

The two remained in contact, and over the years, Wiener dined with Asimov several times and even appeared with him on radio programs and TV shows, collaborating to popularize topics related to cybernetics. Wiener was an admirer of detective stories and often urged Asimov to publish either a "mystery" story or a book of interviews together[528]. However, and for unclear reasons, Asimov was not enthusiastic about the idea of publishing with Wiener and admits to having evaded the mathematician's proposals animated by a form of unease he does not describe but nonetheless transpires from his autobiography.

In spite of this, a notable occasion arose whereby Asimov was approached by his publisher to specifically discuss cybernetics. On January 21, 1957, Austin Olney of Houghton Mifflin Co. (with whom Asimov had recently signed) wrote to him about his intention to release a translation of an introduction to cybernetics titled *La Pensée Artificielle* by the then well-known French popularizer Pierre de Latil. The publisher likely already had at least a draft of the translation by Y. M. Golla, as he referred to the book by its English title, *Thinking by Machine* (1957). In his letter he asks Asimov, who was seeing rising fame as a science fiction writer and popularizer, to write the preface[529]. In his response of January 22, Asimov expressed gratitude for the attached copy and showed interest in sharing his thoughts on the book, which likely formed the basis of the preface we can now read. However, he quickly noted, «It is only fair to warn you that despite my robot stories, I know nothing about robotics really (Alas, that terms such as automation and cybernetics are coming into use and that no one is using robotics, a term which, as far as I know, I myself invented)»[530]. The essay that Asimov wrote is quite brief and centers on warning the public that the dissemination of science

[527] ASIMOV, *Memory*, *Cit*. p. 664.
[528] ASIMOV, *In Joy*, *Cit*. p. 161-162, 228-229.
[529] AUSTIN OLNEY, Unpublished Letter to Isaac Asimov January 21, 1957. bMS Am 2105 (10). Houghton Library, Harvard University.
[530] ISAAC ASIMOV, Unpublished Letter to Austin Olney January 22, 1957. bMS Am 2105 (10). Houghton Library, Harvard University.

and the presence of a large population of scientists will be crucial in addressing future challenges, such as the development of intelligent machines, nuclear power, overpopulation, and famine[531].

Apart from Wiener being in direct, although arguably feeble, contact with Wendell Urth, and the repeated and denied requests of the mathematician to work with Asimov at a mystery story, there are other slight points of connection between the two. In the third episode of the TV show *Pathfinders*, produced by the *National Educational Television and Radio Center*[532] and dedicated to Wiener's career after his death, this interest in mysteries resurfaces. Wiener's former student James Rhyne Killian recalled an episode in which the mathematician attempted to guess the ending of a piece of detective fiction entitled *The Bishop Murders* (1929) by S. S. Van Dine. In the TV show, Killian, who was an editor of the *MIT Technology Review*[533], recounted the episode in which Wiener published his attempt in the periodical in March of the same year, before the entire story, which was being serialized, was available to him. In the article, Wiener reported that he had tried multiple times to solve the crime before Philo Vance, even contacting Van Dine to share some of his preliminary theories he had then discarded, only to them to be proven true by the author who had succeeded in eventually leading the mathematician down the garden path[534].

The idea of playing a whodunit game by trying to deduce the culprit before the detective is one of the most popular ways to engage with detective fiction, but in a story such as this in which «Riemann-Christoffel symbols, tensors and abstruse chess moves fly about like leaves in an autumn storm or communications from the dead in a spiritualistic séance»[535], we could connect this practice to cybernetics. In *Human Use*

---

[531] ISAAC ASIMOV, *Introduction*, in Pierre de Latil, Y. M. Golla (Trans.), *Thinking by Machine*: *A Study of Cybernetics*, Houghton Mifflin, Boston, 1957. pp. vii-x.
[532] NATIONAL EDUCATIONAL TELEVISION AND RADIO CENTER, *Pathfinders; 3; Norbert Weiner*. Boston, MA: Library of Congress, American Archive of Public Broadcasting (GBH and the Library of Congress), Boston, MA and Washington, DC. < http://americanarchive.org/catalog/cpb-aacip-512-w08w951n95> 25/09/2024.
[533] NORBERT WIENER, "Murder and Mathematics", in *MIT Technology Review*, March 1929. pp. 271-272.
[534] *Ivi.* p. 272.
[535] Ivi. p. 271.

of Human Beings Wiener discusses the ability of chess-playing machines to "predict" their opponent's moves. Wiener was already aware of the potential to use modern computing machines to play «a passable game of chess»[536]. Drawing on suggestions from Shannon, he proposed that such a machine could serve as the initial step in developing a system to predict enemy moves in military situations. As Asimov suggested in the essays we quoted, and as it happens in psychohistory, even though human realities did not lend themselves to precise and definitive determinations, they still allowed for the estimation of probabilities within well-defined laws. While this increased the complexity of the task, it did not render it technologically insurmountable. The existence of prediction machines, such as those used to regulate anti-aircraft fire that Wiener helped build during WWII, exemplified this concept. Movement prediction and computerized determination of the most advantageous decision, within certain constraints, were technically feasible. Wiener cited a clergyman, the Dominican Père Dubarle, who a few years prior had written a review of his *Cybernetics*. The quote illustrated the mathematizing tendency of cybernetics to attempt to bridge the gap with the unverifiable perfect determinism of the universe, which Wiener had excluded in his earlier chapters as part of obsolete Newtonian physics. Dubarle envisioned a machine capable of collecting information on markets and production to determine probable future developments «as a function of the average psychology of human beings»[537].

This elicits the influence cybernetics had on the minds of the public and was even recognized by the scientist as valid. Even through hypotheticals—and the limits of probability they indicated—the possibility of extracting functions of human behavior to predict the most probable future and make strategic military or political decisions better than humans was now contemplated. It existed in the space between an excluded

[536] WIENER, *Human Use*, *Cit*. p. 175. See also NORBERT WIENER, *Introduction*, in *Cybernetics, or Control and Communication in the Animal and the Machine*, MIT Press, Cambridge, MA, [1948] 1985. p. xiv. Which mentions a checkers machine studied at IBM.

[537] *Ivi.* p. 178.

possibility of determinism and its indefinite probabilistic approximation. Asimov raised similar issues in his literature, the words of Vasilia and Giskard about Fastolfe echo. In *The Evitable Conflict*, where the megamachines that manage humanity's well-being also consider the efforts made by humans to actively resist their beneficial dominion, also exemplify Dubarle's hypotheses reported by Wiener. In representing science-fictional forms of such hypotheses, Asimov could be read as establishing a cybernetic principle within his fiction: from the perspective of behaviors and teleology, the human animal that "uses" its own kind is indistinguishable from machines, whose behaviors can be predicted and steered (kyber-).

In the practice of guessing the ending of a mystery, Wiener values Van Dine's intelligence in keeping close to the real possibilities of the world, citing real scientific principles and praising him for his accuracy, which allowed for few oversights[538]. Besides, Wiener often illustrated the conflicts between machines and humans, and more in general the themes that Asimov raised as those pertaining to the future of humanity, using examples from literature. We have cited *The Thousand and One Nights* but there is also W. W. Jacobs' *The Monkey's Paw*, in which a father wishes for a hundred pounds using a demonic relic, «only to find at his door the agent of the company for which his son works, tendering him one hundred pounds as a consolation for his son's death at the factory»[539], which becomes the definitive story on unforeseen consequences. Goethe's poem *The Sorcerer's Apprentice* exemplifies a character narrowly escaping ruin after dealing with forbidden knowledge[540]. By comparing technology to magic, Wiener illustrates the risks of design without proper consideration of its outcomes. He referred to this predicament as "sorcery", the sin of appropriating God's powers[541]. The conflict between man and machines is conceptualized as a

[538] Van Dine did not escape some (rare!) corrections and by the time the article came out had had chance to thank the mathematician for them. WIENER, Murder, Cit. p. 171, Note. S.S. VAN DINE, Unpublished Letter to Norbert Wiener January 2, 1929. Correspondence, 1929, Norbert Wiener Papers, File — Box: 2, Folder: 31. Identifier: 1, Part of the Massachusetts Institute of Technology. Libraries. Department of Distinctive Collections Repository.
[539] WIENER, *Human Use*, Cit. p. 185.
[540] Wiener, God and Golem, Cit. p. 57.
[541] *Ivi.* p. 52.

"game" (most likely a chess game) between the Devil and God for a human soul, drawing parallels to conflicts depicted in religious works like the *Book of Job* and *Paradise Lost*. In these stories, the omnipotence and goodness of God ensure that the Devil is always defeated[542]. In the context of artificial intelligence, machines that learn to play games through experience represent a threat from which there is no God to save their creators, only their cunning.

This encapsulates the essence of science popularization. Cybernetics may have provided Asimov with some basic insights that are then reflected in his reference worlds. There are possible statistical laws "of humanics" that could potentially allow for predicting the future actions of a population given a sufficient number of cases and given that the smallest number of people knows about the prediction itself. Complicating this view is Asimov's insistence on the power of sociological laws that he imposes on his fictional worlds. While working narratologically on the same level, each of his worlds has its own "world-subjective" rules, around which the story unfolds. These rules are systematically broken by the end of the book, but the role of breaker is not given to just anyone; it is the prerogative of special characters, narratively tasked with paving the way for progress and breaking the mechanical resistance of neo-luddites, reactionaries, and all kinds of characters who respond more to their particularistic, irrational interests than to reason. As in the story of the *Red Queen*, the axiological problem of whether it is right or wrong to exercise control over history (of the past in this case, of the future in the *Foundation* series) is subsumed to the computational power of the characters. Once Psychohistory is introduced and a Gotha of enlightened minds interested in the common good according to utilitarian logic is established, calculating the direction of history no longer presents an ethical problem. It is the equivalent of predicting any other complex system, unproblematic on the scale of the destiny of individuals like weather forecasting. This in the words of Suvin would make Asimov's fiction turn progressively from an Epic of scientific foresight to a Mythology of historical determinism:

[542] *Ivi.* p. 16.

> The epic events must be presented as historically contingent and unforeseeable (and thus as a rule historically reversible), while the mythological events are cyclical and predetermined, foreseeable descents from the timeless into the temporal realm. The verse or prose epic has, so to speak, foregrounded the plot, which was a foregone conclusion in mythology. In this epic plot, best developed in the novel, 'the "before" causally determines the "after", and the series of such determinations cannot be retraversed backward ... but, according to the epistemological model by which we explain our empirical world, it is irreversible'. Thus, an epic text, as distinct from a mythological one, will be meaningful only if each syntagmatically successive element is the result of an axiological paradigmatic *choice*, as opposed to axiologically pre-established or automatized sequentiality[543].

If we accept this interpretation, the fact that Elijah must adapt when enlightened minds like Fastolfe have already done so may create the impression that these seemingly fortuitous changes are, in hindsight, also predetermined. It is the living conditions of the scientists who travel through space and encounter various cultures that shape their understanding of what Elijah must learn: that his limitations are relative and that the future must continue to progress. In support of Suvin's thesis, one could also reference *The Last Question* (1956), often regarded as the furthest story in the Asimovian timeline. In this narrative, Multivac, a self-adjusting (read: cybernetic) computer, aids humanity in its expansion beyond Earth. Across various eras, different characters repeatedly inquire about how to prevent the heat death of the universe, but Multivac can only respond with «insufficient data for meaningful answer». As humanity evolves and spreads throughout the cosmos, its advanced descendants continue to pose the same question, yet they receive the same unsatisfactory reply. Ultimately, after the universe has perished, Multivac's final descendant, AC, discovers the solution to reversing entropy but has no one to share it with, culminating in its declaration: «let there be light!»[544], that establishes the Asimov-verse cyclical time and God as an hyperbolic machine reaching total-knowledge.

Asimov's detective fiction however includes both of the tendencies elicited by Suvin. The story of his humanity wants to be both free and predictable, it moves from revolution to revolution, guided, in the mind of Asimov, by leaders with unique

[543] DARKO SUVIN, *Defined by a Hollow: Essays on Utopia, Science Fiction and Political Epistemology*, Peter Lang, Oxford, 2010. pp. 510-511.
[544] ISAAC ASIMOV, *The Last Question*, in *The Best of Isaac Asimov*, Doubleday, Garden City, [1956] 1974. pp. 157-170.

abilities, capable of making the right choice within a framework that evokes determinism but remains probabilistic. Elijah remains human; his resistance to progress is the first to be overcome so that he embodies the position of the Asimovian hero. His most famous exclamation, "Jehoshaphat!" can be connected to a passage in Asimov's Bible guide describing the name of character of the Old Testament as: "Yahveh has judged", which he uses when confronted with a reality of the world he does not like but must accept[545].

The leader figures of Asimov are still metaphysical heroes, but their metaphysics is, to borrow Meillassoux's definition, that of science fiction as opposed to extro-science fiction. They succeed when they reject "world-subjective" variable rules while accepting more profound, invariable rules like the laws of science, facts and the metaphysical inevitability of change. Their method is uncertain, experimental and inserted within a social context that mimics the human limitations of real scientific communities. They still succeed by *fiat*, but they do so towards a different *telos* than the justice of the detective. Like the scientists of *The Relativity of Wrong*, characters in Asimov do their best with the information they have and are ready to discard their theories when a more fitting explanation is provided. Their narrative *telos* works differently from both *Rule M* and Pynchon's flourishing of worlds. The pruning takes place, but it sees the protagonist in the role of the corrected one. Scientists and robot that are superior to him in knowledge hold authority over his qualities with their data. In addition, the epistemic progression of the plot is directed towards Elijah's axiological transformation, as he learns to embrace what geniuses like Fastolfe have already envisioned: the C/Fe society, colonization.

As Saint-Gelais and Emmanuel Buzay[546] noticed, and as Asimov wanted in the pursuit of not "cheating" the reader, in science fiction, especially in sci-fi detective

[545] ASIMOV, *Bible*, *Cit.* p. 32.

[546] In science fiction the reader expects a change from his/her reality and negotiates it at each time. RICHARD SAINT-GELAIS, *Empire*, *Cit*. p. 218. In science-fictional detective fiction the writer has to procure the salient parts in advance. RICHARD SAINT GELAIS, "Détections science-fictionnelles", in *Tangence*, No. 38, Université du Québec, Trois-Rivières, 1992, p. 79. EMMANUEL BUZAY,

fiction, the rules of the world are absorbed as *Novum* by the reader gradually throughout the narrative, whose composition is careful to offer the useful bits in advance. The fact that Elijah is an Earthman helps in this, as he is forced to discover the novelties that each planet and society presents alongside the reader. However, these laws, as in the ideals of scientific enlightenment and Meillassoux's science-fiction, are not presented as absolute metaphysical truths. They can be set aside, especially when they are generated by a sociological prejudice born from the living conditions of a planet. This, united with the character of conquest attributed to progress in Asimov, leads us to call the *telos* of his stories a *Pioneer telos*, eliciting at once the double meaning the word has in the colonial and scientific context. There is no question of labor; the robots' work for Asimov is at worst not a problematic issue in the real world, it is a positive one at best and is given as a pre-narrative fact on the alethic plane. There is also no question of liberation from a teleological plot of history. The problem of freedom is treated as a problem of knowledge: as long as the large population remains unaware of being predicted and stirred by "the goddess of psychohistory", the characters can act and their acts can be narrated as free.

In line with the prospects emerging from Wiener's texts, the bottom line of the metaphysics of Asimov seems to be a basic probabilism that grants this freedom while being tinted with the prospect of hyperbolically precise future prediction. What PWT tells us about Asimov is that the problem of his fictional worlds is not ontological but axiological. His ideology of accepting change is reflected in the plotting of his detective fiction on this modal plain. The saga of Elijah Baley, more than any of his other works, demonstrates how this adaptation of the protagonists is central, and it is narrated as if it is not granted, as stemming from their psychological characteristics combined with the plots of the stories like in a *Bildungsroman*. As in certain simple theological speculations, if there is a destiny, it is known only to the mind of God, represented in the plots of the atheist Asimov through the special individuals (both robots and humans,

Contemporary French and Francophone Futuristic Novels: The Longing to be Written and its Refusal, Palgrave Macmillan, London, 2022. pp. 41, 45.

Giskard and Seldon) who have access to it. The knowledge of the laws of humanics and psychohistory is entrusted to them and their K-Worlds that correspond to TAW and kept secret by them so that the predictions can come to fruition.

Then, how do the two tendencies elicited by Suvin convene in Asimov's stories from a logical standpoint? An explanation can be found in classical literature about oracles. Marco Dorati, in his book on the role of prophecy in ancient Greek literature, refers to this dynamic as the "mechanism of protection of prophecy"[547]. He finds it in the *Odyssey*—one of the favorite readings of the young Asimov[548]—while employing PWT as a methodology. In the episodes featuring the prophecies of Tiresias and Circe, Odysseus receives information about the fate of his companions and his return to Ithaca:

> This mechanism is activated – without questioning the effectiveness and truth of the divine word – to prevent the characters involved from becoming aware of elements that, if known, would alter their actions. At different times, the prophecy is either misunderstood, forgotten, or, as in this case, not conveyed or distorted in its presentation. The elements necessary to create a cognitive short circuit are potentially present in the story world, but the connection is not made: the short circuit does not activate, and thus no interference with the action occurs. By remaining unaware of the prophecy, the companions [of Ulysses] cannot make the choices and take the actions that—since their salvation is a real but missed opportunity—would ultimately have led to a different outcome. In this way, knowledge of the future remains accurate, but, indeed, "useless."[549]

This, in the eyes of the critic, occurs within a «framework of partial determination»[550] guaranteed by a «higher power»[551]. Since the prophesied events actually come to pass and are spoken by the divine voice of a deceased prophet, they indeed constitute what Dorati refers to as "windows to the future".

In Asimov's works, however, the terrain is metaphysically uncomfortable. The existence of a destiny, as it might have been understood by a classical writer, is consistently denied, yet it resurfaces as a limit to an extremely accurate understanding of probabilities that frightens some of his characters but that they must accept. What

---

[547] MARCO DORATI, *Finestre sul Futuro: Fato, profezia e mondi possibili nel plot dell'Edipo Re di Sofocle*, Fabrizio Serra, Pisa, 2015.p. 68. All quotes from this book are my translations.
[548] ASIMOV, Memory,
[549] DORATI, *Cit*. p. 68.
[550] *Ivi*. p. 61.
[551] *Ivi*. p. 62.

governs the unfolding of Asimov's *storyworld* and the freedom of its characters are the laws of humanics, which, while they can be interpreted as a «higher power that ensures outcomes regardless of the characters' will»[552], are not the same as the voice of a deity.

Dorati observes that the functioning of plots containing windows to the future reflects a coexistence of two conflicting logics that do not resolve: a "deterministic" one in which the future is already written (which cannot be narrated), and an "anthropomorphic" one in which the only stories that can be told, in accordance with basic human experience, are those where events arise from the choices of characters[553]. This would be consistent with the view of certain real-life so-called hard-determinists who believe that if free will does not exist, this means that it probably never existed, which does not bear any automatic change in our perception of being free and in our way to conduct our lives in the illusion of making choices. In literature, as in Asimov, this freedom is maintained through purely narrative devices, such as the mechanism of protection of prophecy. Characters like Seldon and, in our case, Giskard, operate within the plot as mere subjects who "know more". The pseudo-prophetic origin of their superior knowledge, revealed only at the end, does not influence the narrative any more than if it had originated from other means that are less alethically marked as *novum*. Giskard could arguably have had countless other reasons for influencing the plot beyond the laws he glimpsed with his telepathic powers.

Asimov's stories, the Robot detective cycle at least, remain political in nature, revolving around what scientific knowledge can do for politics: the same rhetoric that is still present in today's discussions about scientific literacy in the context of combating climate change. Unlike Wiener, Asimov does not see artificial intelligence

---

[552] *Ivi*. p. 63.

[553] Dorati identifies a logical contradiction in wanting to narrate a fully determined world, arguing that such a world lacks the private domains where characters believe they make free choices, ultimately leading them to fulfill their predicted destinies, which to him is integral part of narration itself as a concept. In Asimov's worlds, the predetermined individual choices of ancient tales of prophecy do not exist; instead, predictions are statistical and therefore applicable only to large numbers. Nevertheless, some characters perceive these predictions as coercive, in line with trends highlighted in cybernetics. Asimov's heroes, however, are those who embrace the advancement of predictive science and utilize it for the greater good, concealing their predictions to prevent them from being undermined by the irrational desires of individuals. *Ivi*. pp. 243-245.

itself as a problem, or at least not one of simoniac sorcery or classical/Goethean hybris. Overpopulation, pollution and atomic conflict, all potentially caused by human irrationality, are seen as much greater issues. The problems and shifts in relationships between humans and machines are perceived as changes in attitudes and entries into a world of possibilities generated by technological progress. Every technological problem is an engineering problem, and so are the issues related to robots. Science itself, the way the world works, is beyond dispute. Thus the unquestioned external narrator and the role of Daneel and the scientists as the pruners of possible worlds, thus the merit of Elijah in guiding the plot and give the final answers from "the shoulders of giants". Given the scientific method, realities will eventually emerge as if automatically. Like it happened for Foucault and his Newtonian-Mendelian scientists, reality is out there for a gifted individual to discover, and what hinders the superior enlightenment mind is obscurantism. What is less obvious in the mind of Asimov is how people react to the inevitabilities of the world. Do they resist change, or do they adapt? In this predicament, projected on the characters, lies the structure of his detective saga.

In this relationship with foreseen progress lies also his complexity, as facts are consciously accompanied by reflections: by the positioning of humanity towards the future. In the entry of his encyclopedia of science about robotics, possibly the dearest to the author who believed to have coined the term, we read a passage that in my view summarizes the axiological tendencies of his sci-fi detective fiction:

> Can we help but wonder whether computers and robots may not eventually replace any human ability? Whether they may not replace human beings by rendering them obsolete? Whether artificial intelligence, of our own creation, is not fated to be our replacement as dominant entities on the planet?
> One might be fatalistic about this. If it is inevitable, then it is inevitable. Besides, the human record is not a good one, and we are in the process, perhaps, of destroying ourselves (along with much of life) in any case. Perhaps it is not computer replacement we should fear, but the possibility that it will not come along quickly enough.
> We might even feel triumphant about it. What achievement could be grander than the creation of an object that surpasses the creator? How could we consummate the victory of intelligence

> more gloriously than by passing on our heritage, in triumph, to a greater intelligence — of our own making?[554]

What Asimov is telling us is that we could ease into the unease, even learn to stop worrying and love the machine.

[554] ASIMOV, *New Guide*, *Cit*. p. 801.

Conclusion

Worlds I would destroy for ever,
Since I can create no world,
Since my call they notice never,
Coursing dumb in magic whirl.

Karl Marx, *Feelings* (1836). Translation by Alex Miller (1975).

There have historically been two main trends in the history of detective fiction. One, which, borrowing once again a term we already abused, we might call of the *longue durée*, seeks examples of the "mindset" of the detective along with its narrative structure within the entire history of western literature, down to its mythological and religious origins. Many of the authors I cited along the thesis: Bloch, Ginzburg, Del Monte and Messac, are examples of this tendency. It is common in this mode to reference *Genesis* in the episodes of God's interrogations of Adam and Cain, or the *Book of Daniel* in the episode, canonical for the catholic church, of the chaste Susanna, where the prophet exposes her accusers by questioning them separately. This approach also includes the analogy that, starting from the mental framework of the Neolithic hunter who understands the passage of the animal from its tracks, descends down to Zadig and the episode of the palfrey and the bitch, in which the subtle prince reconstructs the appearance and characteristics of the two animals based on the traces they left along their path.

The other method, more frankly focused on crime, belongs to the approach of historians like Julian Symons, who argue that when discussing detective fiction, one should rigorously start from the existence of the historical figure from which it takes its name, highlighting its specific milieu of origin between the late modern age and contemporary times, placing it in its historical context and analyzing it for its original

characteristics rather than its continuities and valuing what within it speaks of its time. Asimov also shared this view[555].

Ideally, the historian of the detective genre is not forced to be so rigid in these divisions. The critical tradition here employed shows how a detailed historical approach, which considers the sources and context of each author, does not exclude a dialogue with a longer past, in which ideas of justice, science, visibility of crime and guilt, and capacity for inference return and change in different authors and works. Divisions like this prove more useful if the goal of the debate is the correct application of categories, a factor that in the works we studied has not always been fundamental, as demonstrated by the fact that Tani labeled "anti-detective fiction" works that did not feature detectives, suggesting a dialectic of parallelism and deviation between very different types of mystery stories.

The objective of this thesis has been to demonstrate how, in certain respects, stories like Pynchon's *The Crying of Lot 49* and Asimov's Elijah Baley and Daneel Olivaw saga can be construed as to belong to the same narrative tradition, opinions on the sociology of genre and on the quality of writing left aside. Written roughly in the same period and influenced by similar sources, the works in question present different positions regarding the relationship between reality and fiction, as well as differing instrumentalizations of the role of science in fictional worlds that correspond to different structurings of their plots. My thesis aims to position itself halfway between the two extremes of the genre historians' dichotomy. When discussing authors' reactions to scientific suggestions, as Leo Marx has taught us, the past has a way of resurfacing. Forms of reaction that belong to different periods tend to reemerge, as they are embedded in the culture and discourse in which the authors are immersed. For this

[555] In an aforementioned essay on the relationship between mysteries and science fiction, Asimov notes that both genres emerged only after society had developed sufficiently to support them. He argues that «you couldn't very well write mysteries until society had developed organized police forces to combat crime», and similarly, science fiction required advancements in science and technology to make the concept of an advanced future plausible. Both genres trace their roots back to the early nineteenth century, with Edgar Allan Poe providing significant early inspiration. ASIMOV, *Science Fiction Mysteries*, Cit. p. 226.

reason, Henry Adams, according to Leo Marx, resorted to ancient sacred imagery to contain in his writing the sense of power he felt in front of the dynamo. Much later, cybernetics, particularly from its own literary staging characterized by entropy, degradation, human-machine homologation, and bleak images of the future, awakened para-religious languages such as Pynchon's "honest-to-god Demon" and Asimov's "goddess of psychohistory". The analysis of the cultural background of detective fiction that we have conducted with Messac provides a basis for explaining these connections between scientific and religious languages that are recorded in the hyperbolic sensationalism of detective fiction, which is made up of extraordinary events, remarkable individuals, and stakes that, in the cases we have examined, touch on exorbitant heights in one way or another. Thus, the truth of Holmes underpins the logic of his world, the conflict with the narrator's authenticating faculties underpins the very possibility of a non-mechanized future for Oedipa, and the survival and possible futures of all sentient human races depends on Elijah and Daneel's mission. What Wiener's discipline did was unprecedentedly introducing the perspective that there was no substantial difference between the behaviors of machines and those of humans, and, aided by its consequences registered by Daniel Bell and Jenny Andersson on the fields of labor and politics, opened in the minds of writers the idea that, even in a world governed by a mixture of deterministic and probabilistic laws, knowledge of a sufficient number of factors could allow for the unfailing prediction of human behavior. It was against this perspective that Lyotard characterized the laws of indeterminacy as "postmodern science" and attacked what he saw in disciplines like cybernetics a revival of what he considered the "myth" of determinism.

I want to draw attention to another key episode of satire of rationalism in Voltaire's *Zadig*, which has been little studied by the critics of detective fiction, that deals with crimes and punishments more than the episode of the palfrey and the bitch. In this episode, the protagonist decides to follow a hermit on his wanderings. This hermit carries with him a "book of destinies" [livre des destinées][556] from which he

[556]VOLTAIRE, *Zadig ou la Destinée*, Gallimard, Paris, [1747] 2020. p. 126.

reads. All along their journey the hermit performs what seem to both Zadig and the reader to be a series of unprompted acts of injustice masked as rightful retribution. He steals gold from a rich host that had been welcoming to them, gives it to a servant who had mistreated them and even sets fire to an innocent philosopher's house. Finally, the two find refuge with a widow and her nephew. After their stay, the boy guides the travelers to a bridge on their way to leave. Once there, the hermit calls the boy over to him and suddenly throws the fourteen-year-old into the river, drowning him. He claims that Providence, through his book of destinies, has revealed the boy would have killed his aunt within a year and Zadig within two. The hermit then unveils his identity as the angel Jesrad, asserting that Zadig, more than any other man, deserves to be well-informed about Fate. Jesrad explains that wickedness is necessary to maintain the order of the world and to ensure the survival of goodness. According to the angel, nothing occurs by chance and therefore advises a horrified Zadig that he should submit to his book of destinies[557].

In this episode from 1747, we can see the intuition that, from Voltaire's critical perspective, underlies Sherlock Holmes *telos*, and his heirs: Asimov's mysteries and Philip K. Dick's *Minority Report*. When we read the book of destinies alongside the book of life from Holmes and the book of nature from Ginzburg, we understand how, narratively speaking, the structure of the prototypical detective story revolves around the relationship between humanity and the inner workings of the world symbolized by the book. Cybernetics found fertile ground in these long-standing cultural topoi. From Narcejac's perspective, the author's mind, writing in a Poe-like manner, starting from the end, acts like the mind of God in the episode with the angel-hermit in *Zadig*. But then, one might ask, if Holmes acts like the angel of its own plot, why aren't Conan Doyle's mysteries as terrifying as Jeserad's punishments? An obvious answer could be that they are not contrary to the reader's morality like the angel's. The historical answer, perhaps anticlimactic, is that in different eras, from different perspectives, among different authors and works, different ideas provide reassurance while others

[557] *Ivi.* pp. 126-136.

provoke unease. In Conan Doyle's works, the notion that there exists a human mind (rather than a divine or angelic one) that is superior to that of mere animals and their peers, ensuring a privileged relationship with a transcendent justice, is more significant than guaranteeing freedom through disorder. As Wiener also thought, in religious plots it is the good will of God that grants success against the forces of evil. In this sense, spiritualism is positivist, as it places humanity once again at the center and in a position of control, which, when threatened by the very freedom of the criminal to commit the crime, does not fear to invertedly curtail freedom itself with the chains that restrain the criminal. Much more so when the criminal is punished by a higher justice, or when the failure of the detective in an ethnically or racially connotated environment is undercut by the reestablishment of a "natural" state like in *The Yellow Face*. It is the unquestionable and terrifying existence of this freedom that serves as the pivot for the *pruning of possible worlds*. It is the high-energy "entropy" (infinite possibility of message in which no message is yet given[558]) that Narcejac identifies at the outset that is the foundation of the detective story one is about to read. As Spanos wanted, the role of the bourgeois detective is to dispel a multiverse in favor of a single narration: beginning, middle and end, in which possibility is only there in the negative, contemplated only to be excluded.

This reveals that the counterfactuals and the justified skepticism of other characters in the Holmes series can evaporate in the presence of the capitalized Truth. Without claims to theoretical universalism, I have called this privileged relationship between the "subtle prince" and the world in which he lives—this derivation of the sacred *Firasah—Rule M*, and I have defined it in terms of an alethic endowment according to Doležel's terminology. The plot model that derives from it has been termed *pruning of possible worlds* to emphasize how the teleology of the detective story materializes as a progressive exclusion of K-worlds, that is, of worlds generated by abductions—stories that would reconstruct events differently than what is revealed to the characters as the real world.

[558] UMBERTO ECO, *Opera Aperta*, Bompiani, Milano, 2006. p. 111.

Based on the same terms, it has been possible to describe a fiction like *The Crying of Lot 49* in terms of a *wild flourishing of possible worlds*, where the protagonist's effort to reduce the explanation of the world to binaries of true and false, akin to the logic of computer science, proves futile. A world emerges in which the very definition of alethic rules is difficult, where the epistemic sphere of the characters dominates over ours due to the will of a narrator whose focus is stubbornly internal and who refuses to use its powers of authentication to exclude truth judgments about the *storyworld*. To this end, it has been useful to observe how Pynchon, a reader of detective fiction and likely also of Doyle, places Oedipa in positions analogous to those of Holmes when he tests his K-worlds. Where the story responds to Holmes by validating him, for Oedipa, it remains relentlessly ambiguous. Writing in the United States in the 1950s and 60s, Pynchon is interested in a conflict of power between technology and human freedom. The immanentism inherent in cybernetics and the capacity for control over history that it projects seem to exclude, in reality, the indefinite hopes of the defeated Luddites whose rage burns under the ash of fiction. It is by exploiting, as Hutcheon and Porush suggested, part of the mythologies of cybernetics and criticizing, as Jonas did, the others, that Pynchon creates in his fictional world a network that alternates between tightly woven threads and glaring holes, emptying the reader of coordinates and immersing them in a condition of painful freedom that resembles that of a William James shaded in “somber glee”. In this world, the closed endings that affirmed the capabilities of an individual disappear in favor of an open ending where all possible worlds coexist not so much in an inability to understand, but in an unexhausted sense of possibility to be harvested in the world of the reader. Losing its teleology, this world remains full of potential and Narcejac’s *machine à lire* becomes Agambenianly inactive, resistant, opening to that inexhaustible and incomputable doubt over the human element that Porush highlighted. In this, the study of cybernetics and Wiener opposes readings in which the end of the detective's certainties witnesses a detachment between probabilistic sciences and pre-Newtonian empiricism. If Wiener himself, as Porush noted, feared the indeterminate, then Pynchon affirms it as a space of the

possible, of a miraculousness that is never truly awaited but tirelessly contemplated, aimed at with the form of the *mystère expliqué*, disappointed but affirmed, parodied but refunctionalized as a signal of unextinguished suspicion, unfulfilled desire. A human billiard of worlds that, even if they do not meet, could inexhaustibly always do. In Pynchon's work, especially in *Lot 49*, technology becomes a new denied mediator of the solid, predictive, and controlled relationship that cybernetics projected along with its theological metaphors and sparking discourses of power. In the Nefastis machine and its non-resolutive character lies the place of the suspension of *Rule M* and, with it, of the investigator's relationship with the (absent? digital?) book of the world. Pynchon will later elaborate more explicitly on this detective-machine relationship when he makes his Hippie detective Doc Sportello—perhaps a revived figure of the detectives of William Hjortsberg and Chester Anderson (here excluded for reasons of space)—fear being replaced by ARPAnet, which, in the early 1970s, projected into the future where the writer already lives as Bell's indelible memory of the panopticon, capable of allowing the police to track any fugitive[559]. Thus, recovering the line of connection between machine, police, and panopticon that Daniel Bell borrowed from Aldous Huxley in his discourse on automated labor.

It is through the comparison with Pynchon that it was possible to bring to light how his contemporary Asimov found himself on the other side of the barricade regarding the relationship between man and the power of science. The latter's relationship with science is less influenced by the philosophical developments sparked by quantum physics, but it does not escape the political sphere. His resort to closed forms is indeed a return to a previous tradition, but at the same time, it stems from a different ideology. It is deprived of the need for an exceptional individual to be the medium between mankind and the deeper workings of the world. Elijah Baley can make mistakes like any scientist, while the robot Daneel, capable of retaining indefinite amounts of memory, is much more infallible as a detective than he is. Nevertheless, it is precisely from Asimov's position as a scientist accustomed to error, that Baley can

[559] PYNCHON, *Inherent Vice*, *Cit*. pp. 53-54, 365.

be corrected by other people (instead of only by facts like Holmes) and renegotiate his narratives without the world collapsing.

What Baley contributes is what Narcejac called the "energy" of the plot: its stakes and its narrative purport, through his drives, vulnerabilities and mistakes. Yet, humanism exists in Asimov. It manifests itself precisely in the centrality of man-as-scientist, bearer of reason as a rare virtue, as an alternative to violent fools (Achilles) and treacherous geniuses (Ulysses). The virtue in this new model of hero in the trilogy is to be a *pioneer* against the irrational obscurantism of a rigid planetary sociology. The foolish, like the technophobes, act like machines, the rational are the truly worthy, even if their freedom can paradoxically only manifest in their acceptance of change. In this emerges the typical narrative of science in Asimov, where a law is valid until a better one is found and there is an unshakeable respect, despite certain postmodern theories, for the scientist who approach the truth through approximation. To this is added the political significance of science, which becomes (as it was for Wiener) a bulwark of awake thought against the possible catastrophes of the world. From this derives the overwhelming and epoch-making political charge of the adventures of Elijah and Daneel, which begin and end the novels, framing them as the true purposes of the investigation that is at hand each time.

The second reflection that has emerged is that these high stakes are related to the very concepts of future and freedom that each author has developed throughout their life. How their way of narrating corresponds to their idea of what is narratable, what is necessary to narrate, and how they coexist with, react to, or reinterpret the narratives of the world created by those who are tasked with discovering and telling us how the real-world works, that is to say scientists and religious figures. The detective genre, with its deep history steeped in absolutes, its most famous characters imbued with appeals to the strictest rationality, its recent past as an empty form to be filled with new ontologies and metaphysics, and its very premise being nothing more than the representation of the search for truth, reveals itself once again to be a privileged space

where these lofty ideas become accessible, compelling and, in some way, pressing, through their use of fiction and its positioning towards reality.

I might conclude, in a sense, that if this perspective is embraced, Bloch's observation that Oedipus—a figure who has subtly emerged throughout the entire work—as a prototype of detective thinking can be expanded to encompass the more philosophical dimensions of the Greek myth related to destiny and freedom. Drawing on the association made by Narcejac between detective literature and cybernetics, and by analyzing the rhetoric with which this same discipline was disseminated, it is possible in my opinion to reinterpret search narratives such as that of Oedipa Maas and Elijah Baley as detective stories structured around reflections on themes of prediction, predestination, possibility, fate and freedom as they were addressed in various forms at the time of their writing.

The depth and recurrence of this conceptual nexus can be measured by making a few more examples of a general kind, serving the purpose of summarizing the preparatory nature of this thesis, which has been understood from the outset as a series of case studies aimed at a more comprehensive future work to account more fully for the breadth of the relationships between cybernetics and detective fiction. In his discussion of the problem of free will in the crime science fiction of *Minority Report*, Michael Huemer divides it into two main factors:

> Traditionally, *having free will* is thought to require two things: *alternate possibilities* and *self-control*. That is, a person is free only if (a) there is more than one future open to him, more than one course of action that he can perform, and (b) he controls his own actions, so that *which* of the alternative possibilities is realized is up to him.[560]

From an ideological perspective, these are respectively the concerns of our method of analysis and of cybernetics. Huemer goes on to argue that a robot with a computer brain is in control, but its programming does not allow possible futures to it but only predetermined outcomes and is therefore not free. At the same time, an atom with a

[560] MICHAEL HUEMER, *Free Will and Determinism in the World of Minority Report*, in Susan Schneider (Ed.), *Science Fiction and Philosophy: From Time Travel to Superintelligence*, Wiley-Blackwell, Malden MA, 2009. pp. 148-149.

50% possibility of decaying has possible futures but not control and thus is equally not free.

When Baudrillard explored the nature of simulacra and their relationship to reality in the context of science fiction, he argues that contemporary cybernetic simulacra reflected a Promethean ambition. As the distinction between the real and the imaginary diminishes, the potential for critical or ideal projections, also embodied by possibilities in fictional worlds, also fades. In the utopian visions of the past (like those that informed Poe in the mind of Messac), a transcendent realm emerges, contrasting sharply with the mundane reality and made as a tool of criticism or at least reflection upon it. In science fiction, for Baudrillard, this projection becomes limited. Instead of offering new possibilities, it replicates and amplifies the mechanics of the real world.

Baudrillard suggests that modern science fiction, particularly in the cybernetic and hyperreal age (which is also that of Asimov but continues beyond) results in a hallucinatory reimagining of the past rather than a genuine exploration of the future. He makes the example of Philip K. Dick's *The Simulacra* (1964) in which the American civil war is nothing but a hologram. The classical notion of an expanding universe has been replaced by a total simulation, where all coordinates—mental, temporal, and spatial—collapse into the hyperreal, the model of reality before reality. In this state, there is no world that responds to the detective like in Holmes, there is also no alternative cosmos or exoticism like there is in Asimov; instead, we find ourselves in a simulation that lacks origin, past, or future, rendering the concept of a double or parallel universe obsolete and condemning humanity to a sempiternal prison of simulation[561].

In Asimov's worlds, instead, science is not seen as an agent of coercion but as one of liberation. Its projection into the future within science fiction still has a "utopian" value in its pedagogical intent and exoticist contemplation of possibility. Not absolute, not metaphysically good, certainly dangerous, but indelibly the only bastion of hope

[561] JEAN BAUDRILLARD, *Simulacra and Simulation*, Sheila Faria Glaser (Trans.), University of Michigan Press, Ann Arbor, [1981] 1994. pp. 121-125.

for humanity. In the face of the fragilizing perspectives that it places before man, science and technology (indissolubly one and the same) are the only means to open possibilities that had not been contemplated before. Aligning with the faction of post-war futurists as highlighted by Jenni Andersson, Asimov sees in science and science fiction the contemplation of possibilities themselves rather than their closure. Similarly, his detective is a different type of hero compared to Holmes. The only thing he possesses, which marks the success of his missions, is the ability to adapt to the changes of the world. This makes him a *Pioneer* on top of being a detective, and thus the *telos* returns in his plots: a *telos of the pioneer*, "compatibilist", so to speak, halfway free and determined as Gunn observed, in which those who manage to adapt by overcoming the obscurantism and fear within themselves can be the first to open humanity to its future.

There seems to be a long-standing connection between the very concept of possibility and the capacity to move politically. In his talk on *Fato e Libertà*, delivered in 2010 at the *Festival Della Filosofia*, Emanuele Severino reminds us how in the II Century AD Alexander of Aphrodisias already wrote a treatise against fatalists, who, in his view, undermined the health of society and political life[562]. He argued that fatalism was a politically dangerous conception because if everything happens fatally, there is no longer any responsibility, and thus all the networks of the State collapse, along with social and political life. If fate could be perfectly predicted there would be no history, no virtue, no responsibility, no justice, no retribution, only mechanical furthering of an eternal present. This general feeling, which is at the basis of Voltaire's angel and of Huxley's panoptical machine-prisons[563], in these American writers seems to be dramatized in its amplest ambivalence, activating the imagination.

[562] EMANUELE SEVERINO, *Fato e Libertà*, Ritiri Filosofici < https://ritirifilosofici.it/emanuele-severino-fato-e-liberta/> 25/09/2024.
[563] HUXLEY, *Prisons*, *Cit*. pp. 15-16.

This idea is echoed in the work of contemporary (especially leftist) philosophers and cultural critics such as Timothy Snyder[564], Valentina Tanni[565] and especially Mark Fisher[566], who, citing Slavoj Žižek and Frederic Jameson, tells us that «it is easier to imagine an end to the world than an end to capitalism»[567]. The critique of cybernetic power by Franco "Bifo" Berardi[568] and Tiqqun operate on the same ground, adding cybernetics to neo-liberal ideology. So would confirm Baudrillard who in an interview was asked about the marketing triumphs of *The Matrix*, which were framed as critiques of the very system that promoted them, which takes into account its own enemies like in Wiener's chess games with the devil or Asimov's *The Evitable Conflict*. Baudrillard answered that this was precisely what rendered our era so suffocating. The system generates a false negativity, seamlessly woven into the spectacle of products, much like obsolescence is inherently designed into industrial goods. This to him represented the most effective method of assimilating any authentic alternatives[569]. Documentarist Adam Curtis would also agree, and he expresses similar connections between capitalism and cybernetics in his documentary series on the ideological use of computers in neo-liberalism *All Watched Over by Machines of Loving Grace*, which plays on the double meaning that was historically given to Richard Brautigan's famous cyber-utopic poem[570].

In this sense, it is perhaps not coincidental that in the introductory essay to his *Ghosts of My Life: Writings on Hauntology, Depression and Lost Futures*, Fisher

---

[564] See the concepts of "Politics of Eternity" and "Politics of Inevitability". TIMOTHY SNYDER, *The Road to Unfreedom: Russia, Europe, America*, Robert Dugan, New York, 2018. TIMOTHY SNYDER, *On Tyranny: Twenty Lessons From the Twentieth Century*, Robert Dugan, New York, 2017.
[565] VALENTINA TANNI, *Exit Reality: Vaporwave, Backrooms, Weirdcore, and Other Landscapes Beyond the Threshold*, Nero and Akisoma, Ljubljana, [2023] 2024.
[566] MARK FISHER, *Capitalist Realism: Is There No Alternative?*, Zero Books, Winchester, 2009.
[567] *Ivi*. p. 2.
[568] FRANCO "BIFO" BERARDI, *After The Future*, AK Press, Edinburgh, 2011.
[569] JEAN BAUDRILLARD, "The Matrix Decoded: Le Nouvel Observateur Interview With Jean Baudrillard", *International Journal of Baudrillard Studies*, Vol. 1, No. 2 , July 2004.<https://baudrillardstudies.ubishops.ca/the-matrix-decoded-le-nouvel-observateur-interview-with-jean-baudrillard/> 25/09/2024.
[570] ADAM CURTIS, *All Watched Over by Machines of Loving Grace,* BBC 2, May-June 2011. RICHARD BRAUTIGAN, *All Watched Over by Machines of Loving Grace*, The Communication Company (Self Published), San Francisco, 1967.

begins his discussion on *The Slow Cancellation of the Future* citing *Sapphire and Steel*, a 1979-1982 British science fiction television series conceived by its creator as a detective fiction in which a multidimensional police force jumps from one world to another to solve problems of space-time continuum. The finale of this series, Fisher recalls, leaves the protagonists in a 1940s styled room, suspended in a cosmic void, where the aesthetic surface of the Noir of the past has swallowed every possibility of escape. «This is the trap. This is nowhere, and it's forever»[571]. Once again, this time with dire consequences, worlds and possibility itself connect within the end of the detective's narration.

If we take Ali Chetwynd's view of Pynchon's oeuvre as a restitution of other-world-ly possibility into "this world" after their death in reality by the hands of neoliberalism, then Pynchon aligns with Fisher's view, adding through cybernetics a series of views on science, labor and technology into a complex web of metaphors for (in)evitability.

If there is a destiny, then there is no responsibility, but there may be an order, and certainly, one can position oneself in relation to it in various ways. Detective fiction, as a teleological genre, seems to have been over time a place where these positions over political metaphysics have emerged. Reassuring order in Doyle, open disorder in Pynchon, and in a middle ground between the two in Asimov.

For reasons of space and for our somewhat still disavowed concentration on U.S. literature of the 50's and 60's, it has not been possible to review all the bibliography and authors that mark the passages of this confrontation of traditions. On the side of detective fiction one easily thinks of the contributions of Chesterton, and the ambivalence of foundational characters like Poe's Dupin. Or to the scientific ideas that would emerge from studies on Futrelle and his hyperbolic "thinking machine" detective Van Dusen, or the focus on technique in Freeman's Thorndike that anticipates Asimov as well as the police procedural of McBain. The detectives of the occult, of

[571] MARK FISHER, *The Slow Cancellation of the Future*, in *Ghosts of My Life: Writings on Hauntology, Depression and Lost Futures*, Zero Books, Winchester, 2014. p. 2.

whose worlds the alethic rules unproblematically explore the paranormal, had to be almost entirely excluded as well. From Flaxman Low to its contemporary televised counterparts like *Ghost-Whisperer*, Douglas Adams' parodic *Dirk Gently* Saga, or *Psych*, which play on the various sides of the alethic regime of the impossible. We have also excluded Philip K. Dick, perhaps the most well-known American writer of sci-fi detective fiction, as well as William Gibson and his Cyberpunk crime stories, which have seen a surge in popularity over the last 30 years, including animation and video games. These narratives have generated works like *Deus Ex*, *Ghost in the Shell*, *Psycho-Pass*, and *Cyberpunk 2077* which have had tremendous success and often achieve high levels of aesthetic value while frequently revolving around the themes explored here. Perhaps the greatest omission of this research is not having contemplated, as a theoretical limit, the detective fictions that deliberately project their narratives into the past, like Eco's *The Name of the Rose*, which would have proven indispensable for a circumstantiated theoretical treatment of how notions constructed from reality enter a work of detective fiction in order to map a more complete geography of the genre.

We have conducted three readings drawing associations between literary and non-literary sources. PWT has allowed us to identify the ground for these analogies. However, the thesis did not aim to reconstruct the intentionality behind these analogies in any significant way. Therefore, the three chapters of this thesis should be seen as "offers" for a more systematic, in-depth study. Nevertheless, the critical objective of this work sees in these offers an invitation to a more complex treatment of the lines of reading evoked within it. This study, while limited in scope, underscores the necessity for further investigation into the intricate interplay of these themes, particularly in the context of cybernetics and its implications for our understanding of agency and possibility. Its approach, which has aimed to remain as rigorous as possible, presents some gaps that are offered as such to the reader. On one hand, it commits what we might call a generalization fallacy, assuming that presenting a certain number of instances in which a detective character interacts with the world somehow signifies

that the work “addresses the theme” of the relationship between humanity and the world. The second concern is the suspicion that the choice of PWT as a methodology generates a perspective that it seeks to investigate within the texts, namely that of possibility. Both tendencies, which are fallacious in themselves, have hopefully been mitigated by employing more classical methodologies of literary studies like comparison with sources and argumentation with critics. The analyzed texts, especially the non-literary works of each author, have been positioned in such a way that they “speak” with their literary texts, limiting critical interventions to generalizations. Furthermore, it has been emphasized that in these same non-literary texts, themes such as possibility and fate often recur, for which PWT provides analytical tools that, by analogy, have seemed particularly suitable. By inviting a deeper engagement with the intersections of literature and science, we can illuminate the pathways through which detective fiction is capable of not only mirroring but also critiquing the complexities of modern existence in all political directions, challenging us to reconsider the narratives we construct about truth, freedom, and the human condition.

If it is true, as Marco Dorati demonstrates, that there are two logics in stories of destiny—one that predetermines the future and cannot be narrated and another that allows us to be free to decide and can be narrated—then detective fiction, with its appeal to human rationality and its hyperboles of foresight and reconstruction of the past, serves as a particularly fitting space for the resurgence of these ideas. These concepts transition from the book of God to the book of nature, and from the book of nature to the digital narratives of the world, moving from the certainty of divine word to the tentacular control of a statistical technocracy. In this regard, considering Narcejac's idea of a closed circuit, where a story is written from the end, philosophical visions like that of Nick Land, in which capitalism transforms into an artificial intelligence that generates the tools for its own creation from the future into the present, may no longer seem surprising[572]. In this context, the fables of Wiener and the myths

[572] «[…] the history of capitalism is an invasion from the future by an artificial intelligent space that must assemble itself entirely from its enemy's resources.» NICK LAND, *Machinic Desire*, in *Fanged Noumena: Collected Writings 1987-2007*, Sequence Press, New York, [1993] 2011. p. 338.

of Asimov can help restore within our idea of science a sense of accountability and foresight.

There may be a profound psychological truth that connects freedom to narrativity and detective fiction locates itself somewhere within this spectrum. Where reason is perceived as a control over the possible, the possible finds a way to return in storytelling—like Scheherazade delaying death, or like Freud's grandson in Brooks, missing his mother, narratives serve to indefinitely postpone the fate marked by their pre-destined limit, only to then reach it, rewind and try again.

Bibliography

ADAMS, DOUGLAS, *The Salmon of Doubt: Hitchhiking the Galaxy One Last Time*, Macmillan, London, 2002.

AGAMBEN, GIORGIO, *Creation and Anarchy: The Work of Art and the Religion of Capitalism*, Stanford CA, Stanford University Press, 2019.

AMPERE, ANDRE-MARIE, *Essai sur la philosophie des sciences*, Bachelier, Paris. 1838.

ANTOINE DECHÊNE, *Detective Fiction and the Problem of Knowledge: Perspectives on the Metacognitive Mystery Tale*, Palgrave Macmillan, London, 2018.

ASCARI, MAURIZIO, *A Counter-History of Crime Fiction: Supernatural, Gothic, Sensational*, Palgrave McMillan, New York, 2007.

ASCARI, MAURIZIO, *Introduzione: L'infinito è un gioco di specchi*, in *Il detective, il lettore, lo scrittore: L'evoluzione del giallo metafisico in Poe, Borges, Auster*, Aras, Fano, 2013. pp. 21-22.

ASCARI, MAURIZIO, *La leggibilità del male: Genealogia del romanzo poliziesco e del romanzo anarchico inglese*, Pàtron Editore, Bologna, 1998.

ASIMOV, ISAAC, "Fact and Fiction", in Asimov's Science Fiction, Vol 11., No. 4, April 1987. pp. 4-8.

ASIMOV, ISAAC, "The Endochronic Properties of Resublimated Thiotimoline", in *Only a Trillion*, Ace Books, New York, [1957] 1976.

ASIMOV, ISAAC, "The Problem of the Blundering Chemist", in *Science Digest*, Vol. 88, No. 2, 1980, pp. 8-17.

ASIMOV, ISAAC, "Thoughts and Sherlock Holmes", in *The Baker Street Journal*, Vol. 37, No. 4, 1987, pp. 201-204.

ASIMOV, ISAAC, *Asimov's Guide to the Bible: the Old and New Testaments*, New York, Avenel Books, 1981.

ASIMOV, ISAAC, *Author! Author!*, in *The Early Asimov; or, Eleven Years of Trying Vol. III*, Panther, St.Albans, 1979. pp. 16-44.

ASIMOV, ISAAC, *Evidence*, in *I, Robot*, Bantam, New York, [1950] 2004.

ASIMOV, ISAAC, *Foundation and Empire*, Panther, New York, 1952.

ASIMOV, ISAAC, *Foundation*, Panther, New York [1951] 1960.

ASIMOV, ISAAC, *I, Robot*, Bantam, New York, [1950] 2004.

ASIMOV, ISAAC, *Ideas*, in *Gold: The Final Science Fiction Collection*, HarperCollins, New York, [1990] 1955. pp. 321-326.

ASIMOV, ISAAC, *In Memory Yet Green: The Autobiography of Isaac Asimov 1920-1954*, Avon, New York, 1979.

ASIMOV, ISAAC, *Introduction*, in *Asimov's Mysteries*, New York, Dell, 1968.

ISAAC ASIMOV, *Introduction*, in Pierre de Latil, Y. M. Golla (Trans.), *Thinking by Machine*: *A Study of Cybernetics*, Houghton Mifflin, Boston, 1957.pp. vii-x.

ASIMOV, ISAAC, *Isaac Asimov's Biographical Encyclopedia of Science and Technique: The Lives and Achievements of 1195 Great Scientists from Ancient Times to the Present Chronologically Arranged, New Revised Edition*, Avon, New York, NY, 1972.

ASIMOV, ISAAC, *Little Lost Robot*, in *I, Robot*, Bantam, New York, [1950] 2004. pp. 136-173.

ASIMOV, ISAAC, *My Father*, in *The Roving Mind*, Prometheus, New York, [1983] 1997. pp. 344-348.

ASIMOV, ISAAC, *Pâté De Fois Gras*, in *Asimov's Mysteries*, Dell, New York, [1956] 1968.

ASIMOV, ISAAC, *Pure and Impure*, in *The Roving Mind*, Prometheus, New York, [1979] 1997. pp. 97-103.

ASIMOV, ISAAC, *Revisions*, in *Gold: The Final Science Fiction Collection*, HarperCollins, New York, [1982] 1995. pp. 381-386.

ASIMOV, ISAAC, *Robots and Empire*, Collins, Glasgow, [1985] 1986.

ASIMOV, ISAAC, *Runaround*, in *I, Robot*, Bantam, New York, [1950] 2004. pp. 30-55.

ASIMOV, ISAAC, *Science and technology*, in *The Tyrannosaurus Prescription and 100 Other Essays*, Prometheus, New York, [1979] 1989. pp 169-170.

ASIMOV, ISAAC, *Science and technology*, in *The Tyrannosaurus Prescription and 100 Other Essays*, Prometheus, New York, [1979] 1989. pp 169-170.

ASIMOV, ISAAC, *Science Fiction Mysteries*, in *The Tyrannosaurus Prescription and 100 Other Essays*, Prometheus, New York, [1987] 1989. pp 225-227.

ASIMOV, ISAAC, *Self-Correcting*, in *The Tyrannosaurus Prescription and 100 Other Essays*, Prometheus, New York, [1982] 1989. p. 167-168.

ASIMOV, ISAAC, *Sherlock Holmes as Chemist*, in *The Roving Mind*, Prometheus, New York, [1980] 1997. pp. 127-134.

ASIMOV, ISAAC, *Speculation*, in *The Roving Mind*, Prometheus, New York, [1983] 1997. pp. 344-348.

ASIMOV, ISAAC, *Symbolism*, in *Gold: The Final Science Fiction Collection*, HarperCollins, [1985] 1995.

ASIMOV, ISAAC, *That Old-Time Violence*, in *The Roving Mind*, Prometheus, New York, [1975] 1997. pp. 37-39.

ASIMOV, ISAAC, *The Caves of Steel*, in *The Robot Collection: The Robot Novels*, Doubleday, Garden City NY, [1953-1954] 1983.

ASIMOV, ISAAC, *The Dying Night*, in in *Asimov's Mysteries*, Dell, New York, [1956] 1968. pp. 72-98.

ASIMOV, ISAAC, *The Evitable Conflict* in *I, Robot*, New York, Doubleday, 1950.

ASIMOV, ISAAC, *The influence of Science Fiction*, in *Gold: The Final Science Fiction Collection*, HarperCollins, New York, [1981] 1996. pp. 285-287.

ASIMOV, ISAAC, *The Key*, in in *Asimov's Mysteries*, Dell, New York, [1966] 1968. pp. 201-232.

ASIMOV, ISAAC, *The Last Question*, in *The Best of Isaac Asimov*, Doubleday, Garden City, [1956] 1974. pp. 157-170.

ASIMOV, ISAAC, *The Red Queen's Race*, in *The Early Asimov; or, Eleven Years of Trying Vol. III*, Panther, St. Albans, [1949] 1979. pp. 123-147.

ASIMOV, ISAAC, *The Robots of Dawn*, Doubleday, Garden City, NY, 1983.

ASIMOV, ISAAC, *The Singing Bell*, in in *Asimov's Mysteries*, Dell, New York, [1955] 1968. pp. 17-33.

ASIMOV, ISAAC, *The Talking Stone*, in in *Asimov's Mysteries*, Dell, New York, [1955] 1968. pp. 34-54.

ASIMOV, ISAAC, *The Unforgivable Sin*, in *Asimov's Galaxy: Reflections on Science Fiction*, Doubleday, New York, [1982] 1989. pp. 41-44.

ASIMOV, ISAAC, Unpublished Letter to Austin Olney January 22, 1957. bMS Am 2105 (10). Houghton Library, Harvard University.

BACHTIN, MICHAIL, *L'autore e l'eroe. Teorie letterarie e scienze umane*, a cura di Carla Strada Janovič (Ed.), Einaudi, Torino, 1988.

BACKMAN, JENNIFER, "From Hard Boiled to Over Easy: Reimagining the Noir Detective in *Inherent Vice* and *Bleeding Edge*", in *Thomas Pynchon, Sex, and Gender*, Ali Chetwynd, Joanna Freer, and Georgios Maragos (Ed.), the University of Georgia Press, Athens, 2018. pp. 19-35.
BAKER, STEPHEN, *The Fiction of Postmodernity*, Edinburgh, Edinburgh University Press, 2000.

BARZUN, JACQUES, *Detection and the Literary Art*, in *Detective Fiction: A Collection of Critical Essays*, Winks, Robin, W. (Ed.), Prentice-Hall, Englewood Cliffs, NJ, 1980.

BATTISTINI, ANDREA, *La terminologia medica nei vocabolari e nella letteratura italiana: qualche errore da evitare negli studi di Medical Humanities*, in *Narrare la medicina*, Anselmi, G.M., Fughelli, P. (Ed.), Università di Bologna, Bologna, 2017.

BAYARD, PIERRE, *Enquête sur Hamlet. Le Dialogue de sourds*, Minuit, Paris, 2002.

BAYARD, PIERRE, *L'Affaire du chien des Baskerville*, Minuit, Paris, 2008.

BAYARD, PIERRE, *Œdipe n'est pas coupable*, Minuit, Paris, 2021.

BAYARD, PIERRE, *Qui a tué Roger Ackroyd?*, Minuit, Paris, 1998-2002 .

BEER, GILLIAN, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*, Cambridge University Press, Cambridge, 2010.

BELL, DANIEL, *The End of Ideology*: *On the Exhaustion of Political Ideas in the Fifties*, revised edition, Collier, New York, NY, 1962.

BERG, BRUCE L., *Policing in Modern Society*, Butterworth Heinemann, Boston, MA, 1999.

BERTONI, FEDERICO, *Realismo e letteratura: Una storia possibile*, Einaudi, Torino, 2007, pp. 79-113.

BIDDY, ERIC, "Theodicy and the Detective Story: Holmes, Hauerwas, and Auster", in *Christianity and the Detective Story*, Anya Morlan, Walter Raubicheck (Ed.). x-xix. Cambridge Scholar Publishing, Newcastle upon Tyne, 2013. pp. 37-46.

BISCHI, GIAN ITALO, DARCONZA, GIOVANNI, *Il labirinto e la farfalla: Il postmoderno in letteratura e matematica*, Morcelliana, Brescia, 2018.

BLACK, JOEL, *(De)feats of Detection: The Spurious Key Text from Poe to Eco,* in *Detecting Texts: The Metaphysical Detective Story from Poe to Postmodernism*, Patricia Merivale, Susan E. Sweeney (Ed.), University of Pennsylvania Press, Philadelphia, 1999. pp 91-92.

BLOCH, ERNST, "A Philosophical View of the Detective" in *Discourse*: MASS CULTURE ISSUE, Vol. 2, Wayne State University Press, Detroit, (Summer, 1980), pp. 32- 52.

BOOTH, STEPHANE ELISE, "The American Coal Mining Novel a Century of Development", in *Illinois Historical Journal*, Vol. 81, No. 2, Illinois Historical Society, Springfield IL, 1988, pp. 125–40.

BORDONI, CARLO, *Il romanzo di consumo. Editoria e letteratura di massa*, Luguori, Napoli, 1993.

BRAUTIGAN, RICHARD, *All Watched Over by Machines of Loving Grace*, The Communication Company (Self Published), San Francisco, 1967.

BROCK, STUART, EVERETT, ANTHONY (Ed.), *Fictional Objects*, Oxford University Press, Oxford, 2015.

BROOKS, PETER, "Freud's Masterplot", in *Yale French Studies*: *Literature and Psychoanalysis. The Question of Reading: Otherwise*, No. 55/56, Yale University Press, New Haven, 1977, pp. 280-300.

BROOKS, PETER, *Reding for the Plot: Design and Intention in Narrative*, Harvard University Press, Cambridge, Ma, 1992.

BUCHANAN, JOSEPH RODES, *Manual of Psychometry: The Dawn of a New Civilization*, Frank H. Hodges, Boston, 1983.

BUTLER, SAMUEL, *Darwin Among the Machines*, in *The notebooks of Samuel Butler*, Henry Festing Jones (Ed.), E.P. Dutton, New York, NY, 1917. pp. 42-46.

BUTLER, SAMUEL, *Erewhon*, Penguin, London, 1976.

BUZAY, EMMANUEL, *Contemporary French and Francophone Futuristic Novels: The Longing to be Written and its Refusal*, Palgrave Macmillan, London, 2022.

CALANCHI, ALESSANDRA, "*Chiamatemi Watson*. Nuove frontiere degli 'apocrifi' angloamericani", in *Linguae &*, *I mille e uno Sherlock Holmes*, No. 2, 2007, pp. 93-106.

CALANCHI, ALESSANDRA, *Dal Sacro Canone al Grande Gioco: per una teoria degli apocrifi*. *Fictions. Studi sulla narratività*, a cura di Maurizio Ascari e Francesca Saggini, Fabrizio Serra, Pisa - Roma, anno X, 2011.

CALVINO, ITALO, *Cybernetics and Ghosts*, in *The Literature Machine: Essays by Italo Calvino*, London, Secker and Warburg, 1987. pp. 3-27.

CALVINO, ITALO, *The Adventure of a Motorist*, in *Difficult Loves*, Boston, Mariner Books, 2017. pp. 171-182.

CAPLAN, BEN, "The Extraordinary Impossibility of Sherlock Holmes", in *Res Philosophica*, Vol. 93, No. 2, St. Louis University Press, St. Louis, MO, April 2016, pp. 335–355.

CHAMEROIS, GILLES, *Science and Technology*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019.

CHANDLER, RAYMOND, *The Simple Art of Murder*, in *The Simple Art of Murder*, Random House, New York, [1939] 1988.

CHEROUX, CLEMENT, FISCHER, ANDREAS, APRAXINE, PIERRE, CANGUILHEM, DENIS, SCHMIT, SOPHIE (Ed.), *The Perfect Medium: Photography and the Occult*, Yale University Press, New Haven, 2005.

CHETWYND, ALI, "More metaphysician than politician: Pynchon, TINA, and the rhetorical economy of 'The World (This One)'", in *Textual Practice*, Vol. 33, No. 3, Taylor & Francis, Abingdon-on-Thames, 2019. pp. 451-471.

CHOMSKY, NOAM, FOUCAULT, MICHEL, *The Chomsky-Foucault Debate: On Human Nature*, The New Press, New York 2006.

CHOMSKY, NOAM, FOUCAULT, MICHEL, *The Chomsky-Foucault Debate: On Human Nature*, found at < https://www.youtube.com/watch?v=F5Wpe65sky8 > 10/04/2023.

CLARKE, ARTHUR C., *Profiles of the Future: An Inquiry Into the Limits of the Possible*, Harper & Row, New York, 1973.

CONAN DOYLE, ARTHUR, "A Test Message", in *Light: A Journal of Psychical, Occult, and Mystical Research*, 2 July 1887. Found at <https://www.arthur-conan-doyle.com/index.php/A_Test_Message> 28/06/2024.

CONAN DOYLE, ARTHUR, *A Gaudy Death: Conan Doyle tells the True Story of Sherlock Holmes's End,* in *The final adventures of Sherlock Holmes: completing the canon,* Warner, London, 1993. pp. 189-190.

CONAN DOYLE, ARTHUR, *A Study in Scarlet*, in *Sherlock Holmes: The Novels*, Penguin, London, 2015.

CONAN DOYLE, ARTHUR, *The Adventure of the Copper Beeches*, in *The New Annotated Sherlock Holmes*, Leslie S. Klinger (Ed .) (2 Vols .), W.W. Norton, New York, NY, 2005. pp. 351-383.

CONAN DOYLE, ARTHUR, *The Adventure of the Sussex Vampire,* in *The New Annotated Sherlock Holmes*, Leslie S. Klinger (Ed .) (2 Vols .), W.W. Norton, New York, NY, 2005. pp. 1555-1575.

CONAN DOYLE, ARTHUR, *The Hound of the Baskervilles*, in *Sherlock Holmes: The Novels*, Penguin, London, 2015. pp. 245-408.

CONAN DOYLE, ARTHUR, *The Man from Archangel*, 1885. Found at https://www.arthur-conan-doyle.com/index.php/The_Man_from_Archangel 31/10/2024.

CONAN DOYLE, ARTHUR, *The New Annotated Sherlock Holmes*, LESLIE S. KLINGER (Ed .) (2 Vols .), W.W. Norton, New York, NY, 2005.

CONAN DOYLE, ARTHUR, *The Yellow Face*, in *The Annotated Sherlock Holmes*, William S. Baring-Gould (Ed.),Vol I, Clarkson N. Potter, Inc., New York (New York) 1972.

CONAN DOYLE, ARTHUR, *The Youngest of the Sciences*, 1887-1891. Found at <https://www.arthur-conan-doyle.com/index.php/The_Youngest_of_the_Sciences> 30/10/2024.

CORTELLESSA, ANDREA, *L'impero Invisibile*, in *I portatori del tempo. Enciclopedia delle arti contemporanee*: *Il tempo inclinato*, Achille Bonito Oliva (Ed.), Vol. III, Electa, Milano, 2015. pp. 306-337.

COWART, DAVID, "Science and the Arts in Pynchon's 'Entropy'", in *CLA Journal*, Vol. 24, No. 1, Columbia SL, College Languages Association, 1980, pp. 108–15.

COWART, DAVID, *Thomas Pynchon and the Dark Passages of History*, Athens, University of Geogia Press, 2001.

CURRIE, GREGORY, *Imagining and Knowing. The shape of fiction*, Oxford University Press, Oxford, 2020.

CURTIS, ADAM, *All Watched Over by Machines of Loving Grace,* BBC 2, May-June 2011.

DANIELE, DANIELA, *Città Senza Mappa*, Edizioni dell'Orso, Alessandria 1994.

DARCONZA, GIOVANNI, *Il detective, il lettore, lo scrittore: L'evoluzione del giallo metafisico in Poe, Borges, Auster*, Aras, Fano, 2013. p. 61.

DE LATIL, PIERRE, *Thinking by Machine*, Houghton Mifflin, Boston, MA, 1957. pp. 6-7.

DEL MONTE, ALBERTO, *Breve storia del romanzo poliziesco*, Laterza, Bari, 1962.

DELEUZE, GILLES, *Deux régimes de fous*, Paris, Minuit, 2003.

DOLEŽEL, LUBOMIR, "Mimesis and Possible Worlds", in *Poetics Today*, Vol. 9, No. 3, pp. 475-496.

DOLEŽEL, LUBOMIR, *Heterocosmica: Fiction and Possible Worlds*, The Johns Hopkins University Press, Baltimore, 1998.

DORATI, MARCO, *Finestre sul Futuro: Fato, profezia e mondi possibili nel plot dell'Edipo Re di Sofocle*, Fabrizio Serra, Pisa, 2015.

DUBINI, DONATELLO, DUBINI, FOSCO, *A Journey in the Life of P*, Kultur Studio, 2008.

DÜRRENMATT, FRIEDRICH, *The pledge*, Knopf, New York, 1959.

DUYFHUIZEN, BERNARD, "God Knows, Few of Us Are Strangers to Moral Ambiguity": Thomas Pynchon's Inherent Vice (review)", in *Postmodern Culture*, Vol. 19, No. 2, 2009. Found at <https://www.pomoculture.org/2013/09/05/god-knows-few-of-us-are-strangers-to-moral-ambiguity-thomas-pynchons-inherent-vice-review/> 08/07/2024.

EAGLETON, TERRY, *The Illusions of Postmodernism*, Oxford, Blackwell, 1996.

ECO, UMBERTO, *Horns, Hooves, Insteps: Some Hypotheses on Three Types of Abduction*, in *The Sign of Three: Dupin, Holmes, Peirce*, Eco, Umberto, Sebeok Thomas (Ed.), Indiana University Press, Bloomington, 1980.

ECO, UMBERTO, *I Limiti dell'Interpretazione*, Bompiani, Milano, 1990.

ECO, UMBERTO, *I Limiti dell'Interpretazione*, Bompiani, Milano, 1990. pp. 250-252.

ECO, UMBERTO, *I Mondi della Fantascienza*, in *Sugli Specchi e Altri Saggi*, Bompiani, Milano, 1990. pp. 173-179.

ECO, UMBERTO, *L'Abduzione in Uqbar*, in *Sugli Specchi e altri saggi*, Bompiani, Milano, 1985. pp. 161-172.

ECO, UMBERTO, *Lector in Fabula*, La Nave di Teseo, Milano, [1979] 2020.

ECO, UMBERTO, *Limits of interpretation,* Indiana University Press, Bloomington, 1994.

ECO, UMBERTO, MIGIEL, MARILYN, *An Ars Oblivionalis? Forget It!*, in *PMLA*, Vol. 103, No. 3, Modern Language Association, Baltimore, MA, (May, 1988).

ELKINS, CHARLES, "Isaac Asimov's "Foundation" Novels: Historical Materialism Distorted into Cyclical Psycho-History", in *Science Fiction Studies*, Vol. 3, No. 1 (Mar., 1976), pp. 26-36.

ELKINS, CHARLES, *An approach to the social foundation of American SF*, < https://www.depauw.edu/sfs/backissues/13/elkins13.htm> 23/09/2024.

ENGELHARDT, NINA, *Mathematics*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge University Press, Cambridge, 2019.

ENGELS, FREDERIC, "Natural Science and the Spirit World", In *Dialectics of Nature*, Clemens Dutt (Ed.), International New York:, 1940. pp. 297–310.

FARMER PHILIP J., *Tarzan Alive: A Definitive Biography of Lord Greystoke*, New York, Popular Library, 1972.

FIEDLER, LESLIE, *Cross the Border – Close the Gap: Post-Modernism*, in *The Penguin History of Literature*, vol. 9., *American Literature since 1900*, Marcus Cunliffe (Ed.), Penguin, New York, 1993. pp. 329-352.

FISCH, MENACHEM, *William Whewell Philosopher of Science*, Oxford University Press, Oxford, 1991.

FISHER, MARK, *The Slow Cancellation of the Future*, in *Ghosts of My Life: Writings on Hautology, Depression and Lost Futures*, Zero Books, Winchester, 2014.

FOUCAULT, MICHEL, *The Order of Things: An Archeology of the Human Sciences*, Routlendge New York, [1966] 2002.

FREER JOANNA, *Politics and Counterculture*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019.

FREUD, SIGMUND, *Psicopatologia della vita quotidiana*, in Freud, S., *Opere*, Vol IV, *1900-1905 Tre saggi sulla teoria sessuale e altri scritti*, Boringhieri, Torino, 1970.

GADDA, CARLO EMILIO, *Racconto italiano di ignoto del novecento*, in *Opere*, Dante Isella (Ed.), Vol V., *Scritti Vari e Postumi*, Garzanti, 1988-93.

GALIMBERTI, UMBERTO, *L'epoca moderna e il primato della scienza e della tecnica come deriva teologica*, in *Psiche e techne. L'uomo nell'età della tecnica*, Feltrinelli, Milano 1999, pp. 293-303.

GENETTE, GÉRARD, GORMAN, DAVID, ""Vraisemblance" and Motivation", in *Narrative*, Vol. 9, No. 3, Ohio State University Press, Columbus, OH, Oct. 2001, pp. 239-258.

GENETTE, GÉRARD, *Narrative Discourse: An Essay in Method*, Cornell University Press, Ithaca, NY, [1972] 1980.

GEROULANOS, STEFANOS, WEATHERBY, LEIF, "Cybernetics and the human sciences" in *History of the Human Sciences*, Vol. 33, No. 1, Sage, New York, 2020, pp. 3–11.

GINZBERG, ALLEN, LEARY, TIMOTHY, SNYDER, GARY, WATTS, ALAN, *Changes*, in *The City of San Francisco Oracle* Vol. 1 No. 7. pp. 3, 6-15.

GINZBURG, CARLO, *Clues, Myths and the Historical Method*, Johns Hopkins University Press, Baltimore, MD, 1989.

GINZBURG, CARLO, *Il Filo e le Tracce: Vero, Falso, Finto*, Feltrinelli, Milano, 2006.

GIOVANNOLI, RENATO, *Elementare, Wittgenstein! Filosofia del racconto poliziesco*, Medusa, Milano, 2007.

GOMEL, ELANA, "Mystery, Apocalypse and Utopia: The Case of the Ontological Detective Story"*, in Science Fiction Studies*, Vol. 22, No. 3, SF-TH Inc, Greencastle, IN, (Nov., 1995), pp. 343-356.

GOURLEY, JAMES*, Terror and Anarchy*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019.

GRAYSON, PHILLIP, *Radical Hope in the Novels of Thomas Pynchon: The Moon and the Meteor*, Lexington Books, London, 2022.
GREENE, RICHARD L., *Letters to Sherlock Holmes*, Penguin, New York (New York) 1985, p. 7.

GREGORY KLEIN, KATHLEEN, *The woman detective: gender & genre*, University of Illinois Press, Urbana, 1988.

GRELLA, GEORGE, *The Formal Detective Novel*, in *Detective Fiction: A Collection of Critical Essays*, Winks, Robin, W. (Ed.), Prentice-Hall, Englewood Cliffs, NJ, 1980.

GUNN, JAMES, *Isaac Asimov: The Foundations of Science Fiction*, Oxford University Press, Oxford, 1982.

HAYCRAFT, HOWARD, *Murder For Pleasure: The Life And Times Of The Detective Story*, D.Appleton-Century Company, New York, 1941.

HAYLES, KATHERINE, *Detoxifying Cybernetics*, found at <https://medialab.timesmuseum.org/en/lectures/symposium-ii/katherine-hayles> 04/07/2024.

HAYLES, N. KATHERINE, *Complex Dynamics in Literature and Science*, in *Chaos and Order: Complex Dynamics in Literature and Science*, University of Chicago Press, Chicago, IL, 1991.

HAYNES, ROSLYNN D., *From Faust to Strangelove: Representations of the Scientist in Western Literature*, Johns Hopkins University Press, Baltimore, 1994.

HEIDEGGER, MARTIN, ""Only a God Can Save Us": The Spiegel interview", in Thomas Sheehan (Ed.), *Heidegger: The Man and the Thinker* (). Chicago, IL, [1966] 1981. pp. 45–67.

HERBERT, FRANK, *Dune*, Berkley Publishing Corporation, New York, 1977.

HERMAN, LUC, *Narratology*, in *Thomas Pynchon in Context*, Inger H. Dalsgaard (ed.), Cambridge, Cambridge University Press, 2019.

HESKETH-PRICHARD, HESKETH, PRICHARD, KATE O'BRIEN RYALL, *Ghosts Being The Experiences of Flaxman Low*, Arthur Pearson, London, 1899.

HINTIKKA, JAAKKO, *Knowledge and belief: An introduction to the logic of the two notions*, Cornell University Press, Ithaca, NY, 1962.

HITE, MOLLY, *Ideas of Order in the Novels of Thomas Pynchon*, Columbus, OH, Ohio State University Press, 1983.

HODGSON, JOHN A., ""The Recoil of "The Speckled Band": Detective Story and Detective Discourse", in *Poetics Today* , Vol. 13, No. 2, Duke University Press, Durham, NC, (Summer, 1992), p. 312.

HOLQUIST, MICHAEL, "Whodunit and Other Questions: Metaphysical Detective Stories in Post-War Fiction Author(s)", in *New Literary History: Modernism and Postmodernism: Inquiries, Reflections, and Speculations*, Vol. 3, No. 1, Johns Hopkins University Press, Baltimore, MD, (Autumn, 1971), pp. p. 135-156.

HORACE, *Odes I: Carpe Diem, Text, Translation and Commentary*, David West (Ed.), Oxford, Oxford University Press, 1995.

HUTCHEON, LINDA, *A Poetics of Postmodernism: History, Theory, Fiction, New York*, Routledge, [1988] 1990. p. 57.

HUTCHEON, LINDA, *The Politics of Postmodernism*, New York, Routledge, 1990.

HUXLEY, ALDOUS, *Prisons: With the "Carceri" Etchings by G. B. Piranesi,* Trianon Press, Paris, 1949.

JAMESON, FREDERIC, *Foreword*, in JEAN-FRANÇOIS LYOTARD, *The Postmodern Condition: A Report on Knowledge*, University of Minnesota Press, Minneapolis, 1984.

JENKINS, JOHN J., *Jenkins' Spoiler-Laden Guide to Isaac Asimov*,< https://www.asimovreviews.net/index.html> 19/09/2024.

JONAS, HANS, "A Critique of Cybernetics", in *Social Research*, Vol. 20, No. 2, The New School, (Summer 1953), pp. 172-192.

JONES, STEVEN E., *Against Technology, From the Luddites to Neo-Luddism*, New York, Routledge, 2006.

KALTSAS, KOSTAS, "Of "Maidens" and Towers: Oedipa Maas, Maxine Tarnow, and the Possibility of Resistance" in *Thomas Pynchon, Sex, and Gender*, Ali Chetwynd, Joanna Freer, and Georgios Maragos (Ed.), the University of Georgia Press, Athens, 2018. pp. 36-51.

KENNERLY, MICHELE, "Cybernetics in the Republic", in *History of the Human Sciences*, Vol. 36, No. 1, Sage, New York, Ny, (2023). pp. 80-102.

KERN, STEPHEN, *A Cultural History of Causality: Science, Murder Novels, and Systems of Thought,* Princeton University Press, Princeton and Oxford 2004.

KIPEN, DAVID, "David Kipen's Great American Novel: The Works of Thomas Pynchon," Los Angeles Times, June 30, 2016.

KLAVER, IAN MARTEN IVO, Of Orchids and Sherlockians, review of Leslie S. Klinger (Ed .), The New Annotated Sherlock Holmes, (2 Vols .), W.W. Norton, New York, 2005 and Leslie S. Klinger (Ed .), The New Annotated Sherlock Holmes: The Novels, W.W. Norton, New York, 2006, in *Linguae&*, Vol 1., 2006. pp. 87-90.

KNIGHT, STEPHEN, *Form and ideology in crime fiction*, Indiana University Press, Bloomington, 1980.

KNOX, RONALD A., *The Best English Detective Stories of 1928,* Liveright, New York, 1929.

KRACAUER, SIEGFRIED, *Il Romanzo Poliziesco*, Editori Riuniti, Roma, [1971] 1997.

KRIPKE, SAUL A., "Semantical considerations in Modal Logic", in *Acta Philosophica Fennica*, vol. 16, North-Holland, Amsterdam, 1963, pp. 85.

KRIPKE, SAUL A., *Naming and Necessity*, Harvard University Press, Cambridge, MA, 1980. pp. 157-158.

LAND, NICK, *Circuitries*, in *Fanged Noumena: Collected Writings 1987-2007*, New York, Sequence Press, 2012.

LANE, RICHARD, The Pynchon Files, < https://web.archive.org/web/20010202022400/http://www.pynchonfiles.com/ > 17/07/2024.

LAPLACE, PIERRE-SIMON, *Philosophical Essay on Probabilities*, Dale, Andrew I. (Ed.), Springer-Verlag, New York, [1814–25] 1995.

LAVAGETTO, MARIO, *Lavorare con piccoli indizi*, Bollati Boringhieri, Torino, 2003.

LAVOCAT, FRANÇOISE, *Fait et fiction: pour une frontière*, Seuil, Paris, 2016. Epub.

LE LYONNAIS, FRANÇOIS, *Préface*, in NARCEJAC, THOMAS, *Une Machine A Lire : Le Roman Policier*, Denoël/Gonthier, Paris, [1974] 1975.

LEHMANN, LAUREN, "Isaac Asimov: dark side of a bright history", in *Nature*, Vol. 579, No. 343, Springer, London, 2020.

LESLIE-MCCARTHY, SAGE, "Asimov's Posthuman Pharisees: The Letter of the Law Versus the Spirit of the Law in Isaac Asimov's Robot Novels", in *Law, Culture and the Humanities*, No. 3, 2007. pp. 398–415.

LOCARD, EDMOND, *Policiers de roman et de laboratoire*, Payot, Paris, 1924.

LODDO, MARIAROSA, *Passaggi di frontiera: note sulla parola scientifica in letteratura*, in *Letteratura e Scienza: Atti delle Rencontres de l'Archet Morgex, 16-21 settembre 2019*, Pubblicazioni della Fondazione «Centro di Studi storico-letterari Natalino Sapegno – onlus», 2021.

LOSEE, JOHN, "Whewell and Mill on the relation between philosophy of science and history of science", *Studies in History and Philosophy of Science*, vol. 14, no. 2, June 1983, pp. 113–126.

LOTMAN, JURIJ, *Culture and Explosion*, Grishakova, M., Clark, W. (Ed.), Mouton de Gruyter, Berlin, [1992] 2009. pp. 123-133.

LOVE, HETHER A., PAO, LEA, "Literary Cybernetics: History, Theory, Post-Disciplinarity", in *New Literary History*, Vol. 54, No. 2., Johns Hopkins University Press, Baltimore, 2023. pp. 1193-1205.

LYOTARD, JEAN-FRANÇOIS, *The Postmodern Condition: A Report on Knowledge*, University of Minnesota Press, Minneapolis, 1984.

MACINTYRE, ALASDAIR, "Ends and Endings", in *American Catholic Philosophical Quarterly*, Vol. 88, No. 4, Minneapolis, MN, 2014. pp. 807-821.

MALAPI-NELSON, ALCIBIADES, *The Nature of the Machine and the Collapse of Cybernetics: A Transhumanist Lesson for Emerging Technologies*, Palgrave Macmillan, Cham, 2017.

MALMGREN, CARL D., *Anatomy of Murder: Mystery, Detective, and Crime Fiction*, Bowling Green State University Popular Press, Bowling Green, OH, 2001.

MARX, LEO, *American Literary Culture and the Fatalistic View of Technology*, in *The Pilot and the Passenger: Essays on Literature, Technology and Culture in the United States*, Oxford University Press, Oxford, 1988. pp. 179-207.

MARX, LEO, *The Neo-Romantic Critique of Science*, in *The Pilot and the Passenger: Essays on Literature, Technology and Culture in the United States*, Oxford University Press, Oxford, 1988. pp. 160-178.

MAYR, OTTO, "Maxwell and the Origins of Cybernetics", in *Isis*, vol. 62, no. 4, University of Chicago Press, Chicago, IL, 1971, pp. 425–44.

MCBAIN, ED, *Cop Hater*, Pocket Book, New York, 1999.

MCCUSKEY, BRIAN, *How Sherlock Pulled the Trick: Spiritualism and the Pseudo-Scientific Method,* Penssylvania State University Press, University Park, PA, 2021.

MCHALE, BRIAN, *Postmodernist Fiction*, Routledge, New York, 1987.

MCKENNA, CHRISTOPHER J., "'A Kiss of Cosmic Pool Balls': Technological Paradigms and Narrative Expectations Collide in 'The Crying of Lot 49.'" in *Cultural Critique*, no. 44, Minneapolis, University of Minnesota Press, 2000, pp. 29–42.

MERIVALE, PATRICIA, SWEENEY SUSAN E., *The Game's Afoot: On the Trail of the Metaphysical Detective Story*, in *Detecting Texts: The Metaphysical Detective Story from Poe to Postmodernism*, Patricia Merivale, Susan E. Sweeney (Ed.), University of Pennsylvania Press, Philadelphia, 1999.

MESSAC, OLIVIER, *Brêve histoire des hypermondes, 1935-2021*, Éditions ex nihilo, Paris, 2021.

MESSAC, REGIS, *Le «Detective Novel» et l'Influence de la Pensée Scientifique,* Slaktine Reprints, Geneva, [1929] 1975.

MILLER, EMMA, "The Naming of Oedipa Maas: Feminizing the Divine Pursuit of Knowledge in Thomas Pynchon's *The Crying of Lot 49*", in *Orbit, Writing Around Pynchon*, Vol. 1, No. 1, 2012. Found at < https://www.pynchon.net/owap/article/view/30> 08/07/2024.

MILLER, J. JOSEPH, "The Greatest Good for Humanity: Isaac Asimov's Future History and Utilitarian Calculation Problems", in *Science Fiction Studies*, vol. 31, no. 2, 2004, pp. 189–206.

MONZANI, STEFANO, "La fiction théorique de P. Bayard", *Cahiers de psychologie clinique*, Vol. 55, No. 2, DeBoek, Louvain-la-Neuve, 2020, pp. 39-65.

MORSON, GARY SAUL, *Narrative and Freedom: The Shadows of Time*, Yale University Press, New Haven, 1994.

MUNARI, BRUNO, *Che cosa sono le macchine inutili e perché*, in *La Lettura*, No. 7., July 1937. pp. 660-665.

NARCEJAC, THOMAS, *Une Machine A Lire : Le Roman Policier*, Denoël/Gonthier, Paris, 1975.

NATIONAL EDUCATIONAL TELEVISION AND RADIO CENTER, *Pathfinders; 3; Norbert Weiner*. Boston, MA: Library of Congress, American Archive of Public Broadcasting (GBH and the Library of Congress), Boston, MA and Washington, DC. < http://americanarchive.org/catalog/cpb-aacip-512-w08w951n95> 25/09/2024.

O'BRIEN, JAMES F., *The Scientific Sherlock Holmes: Cracking the Case With Science and Forensics*, Oxford University Press, Oxford, 2012.

OLNEY, AUSTIN, Unpublished Letter to Isaac Asimov January 21, 1957. bMS Am 2105 (10). Houghton Library, Harvard University.

PAVEL, THOMAS, *Fictional Worlds*, Harvard University Press, Cambridge, MA, 1986.

PEPPER, ANDREW, *The Contemporary American Crime Novel. Race, Ethnicity, Gender, Class*, Edinburgh University Press, Edimburgh, 2000.

PORCARELLI, ANDREA, "I «Fondamenti» Teorici Dello Spiritismo e le Inquietudini della Cultura di Oggi", in *Divus Thomas*, *L'incontro con Dio: Gli ostacoli odierni: materialismo ed edonismo*, Vol. 96, No. 1, Edizioni Studio Domenicano, Bologna, Gennaio-Aprile 1993, pp. 66-103.

PORUSH, DAVID, "Reading in the Servo-Mechanical Loop", in *Discourse: On Technology (Cybernetics Ecology, and the Postmodern Imagination)*, Vol. 9, Wayne State University Press, Detroit, MI, (Spring-Summer 1987), pp. 53-63.

PORUSH, DAVID, *The Soft Machine: Cybernetic Fiction*, New York, Methuen, 1984.

PREZZAVENTO, PAOLO, *Thomas Pynchon: A Stranger in a W.A.S.T.E. Land*, in Giancarlo Alfano, Mattia Carratello (ed.) *La Dissoluzione Onesta: Scritti su Thomas Pynchon*, Napoli, Cronopio, 2003. pp. 189-202.

PRINCIPE, LAWRENCE, *Science and Religion*, The Teaching Company, Chantilly, Va. 2006.

PYNCHON WIKI, 7x7, <https://cl49.pynchonwiki.com/wiki/index.php?title=7_x_7> 08/07/2024.

PYNCHON WIKI, *7x7*, <https://cl49.pynchonwiki.com/wiki/index.php?title=7_x_7> 08/07/2024.

PYNCHON WIKI, *Against the Day*, <https://against-the-day.pynchonwiki.com/wiki/index.php?title=Cricket_in_Against_the_Day> 08/07/2024.

PYNCHON WIKI, *The Crying of Lot 49*, Chapter I <https://cl49.pynchonwiki.com/wiki/index.php?title=Chapter_1> 08/07/2024.

PYNCHON, THOMAS, "The Deadly Sins/Sloth; Nearer, My Couch, to Thee", in *The New York Times*, June 6, 1993.

PYNCHON, THOMAS, *Entropy,* in *Slow Learner*, Vintage, London, [1984] 2022. pp. 81-98.

PYNCHON, THOMAS, *Gravity's Rainbow*, Vintage, London, [1973] 1995.

PYNCHON, THOMAS, *Inherent Vice*, New York, Penguin, [2009] 2014.

PYNCHON, THOMAS, *Introduction*, in *Slow Learner*, Vintage, London, [1984] 2022.

PYNCHON, THOMAS, *Is it O.K. to be a Luddite?*, in *New York Times Book Review*, 28 October 1984. < https://www.nytimes.com/1984/10/28/books/is-it-ok-to-be-a-luddite.html > 19/07/2024.

PYNCHON, THOMAS, *Low Lands,* in *Slow Learner*, Vintage, London, [1984] 2022. pp. 55-77.

PYNCHON, THOMAS, *Minstrel Island*, unpublished draft, Spring 1958.

PYNCHON, THOMAS, *The Crying of Lot 49*, Vintage, London, [1965] 2000.

PYNCHON, THOMAS, *The World (This One), the Flesh (Mrs. Oedipa Maas), and the Testament of Pierce Inverarity*, in Esquire, December 1965.

PYNCHON, THOMAS, Unpublished letter to Faith and Kirkpatrick Sale, May 28, 1962.

PYNCHON, THOMAS, Unpublished letter to Faith and Kirkpatrick Sale, June 2, 1963.

PYNCHON, THOMAS, Unpublished Letter to Faith and Kirkpatrick Sale, June 29, 1963.

PYNCHON, THOMAS, Unpublished letter to Faith and Kirkpatrick Sale, June 29, 1963.

RICHTER, VIRGINIA, *Literature After Darwin: Human Beasts in Western Fiction 1859-1939*, Palgrave Macmillan, London, 2011.

RODRÍGUEZ, MARIANO MARTÍN, "The Literary Spoof Paper: An Overview", in *Journal of the Fantastic in the Arts*, Vol. 28, No. 2 (99), 2017, pp. 253–70.

RONEN, RUTH. *Possible Worlds in Literary Theory*, Cambridge University Press, Cambridge, 1994. pp. 18-30.

ROSENBLUETH, ARTURO, WIENER, NORBERT, BIGELOW JULIAN, "Behavior, Purpose and Teleology", in *Philosophy of Science*, vol. 10, no. 1, 1943, pp. 18–24.

RUSH, ALLEN, *Spermatikos Logos*, < https://shipwrecklibrary.com/the-modern-word/pynchon/spermatikos-logos/ >17/07/2024.

RYAN, MARIE-LAURE, "Stacks, Frames and Boundaries, or Narrative as Computer Language", in *Poetics Today: Narratology Revisited II*, Vol. 11, No. 4, Duke University Press, Durham, Winter 1990. pp. 873-899.

RYAN, MARIE-LAURE, « Cosmologie du récit. Des mondes possibles aux univers parallèles », in *La Théorie littéraire des mondes possibles*, Françoise Lavocat (Ed.), CNRS Éditions, Paris, pp. 53-81.

RYAN, MARIE-LAURE, *Possible Worlds, Artificial intelligence, and Narrative Theory*, Indiana University Press, Bloomington, 1991.

RZEPKA, CHARLES J., *Detective Fiction*, Polity, Cambridge 2005.

SAINT-GELAIS, RICHARD, "Détections science-fictionnelles", in *Tangence*, No. 38, Université du Québec, Trois-Rivières, 1992, pp. 74-84.

SAINT-GELAIS, RICHARD, *Fictions transfuges. La transfictionnalité et ses enjeux*, Seuil, Paris, 2011, p. 107.

SEBEOK, THOMAS A., UMIKER-SEBEOK, JEAN, *"You Know My Method": A Juxtaposition of Charles S. Peirce and Sherlock Holmes,* in *The Sign of Three: Dupin, Holmes, Peirce*, Eco, Umberto, Sebeok Thomas (Ed.), Indiana University Press, Bloomington, 1980.

SEILER, EDWARD, *Asimov Online*, <http://www.asimovonline.com/asimov_home_page.html> 19/09/2024.

SELL, OTTO, *Die Sauberen Schweine* < https://www.ottosell.de/pynchon/ > 17/07/2024.

SIMONETTI, PAOLO, ""Bye Bye Black Dahlia": Pynchon, Coover e il "vizio intrinseco" della detective fiction", in *Fictions: Studi sulla narratività* Vol. X, Maurizio Ascari, Francesca Saggini (ed.)*, Crime e Detective Fiction nel Novecento: Voci a Confronto*, Pisa: Fabrizio Serra, 2011, pp. 45-53.

SPANOS, WILLIAM V., "The Detective and the Boundary: Some Notes on the Postmodern Literary Imagination", in *boundary 2*, Vol. 1, No. 1, Duke University Press, Durham, NC, (Autumn, 1972), pp. 147-168.

SPANOS, WILLIAM V., *God and the Detective: The Christian Tradition and the Drama*, in *Christianity & Literature*, Vol. 20, No. 2, Sage, New York, 1971. pp. 16-22.

SPURRETT, DAVID, "Lyotard and the Postmodern Misunderstanding of Physics", in *Theoria*: *Science and Civilization*, No. 93, Berghahn Books, Brooklyn, NY, 1999.

SRNICEK, NICK, WILLIAMS, ALEX, *Inventing the Future: Postcapitalism and a World Without Work*. Verso Books, London, Brooklyn NY, 2015.

SUVIN, DARKO, *Defined by a Hollow: Essays on Utopia, Science Fiction and Political Epistemology*, Peter Lang, Oxford, 2010.

SUVIN, DARKO, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, Yale University Press, New Haven NJ, 1979.

SUVIN, DARKO, *The State of the Art in Science Fiction Theory: Determining and Delimiting the Genre*, in *Science Fiction Studies*, Vol. 6, No. 17., March 1979. Found at < https://www.depauw.edu/sfs/backissues/17/suvin17.htm > 27/06/2024.

SYMONS, JULIAN, *Bloody Murder - From the Detective Story to the Crime Novel: A History*, Penguin, Harmondsworth, 1974.

TANI, STEFANO, SANI, STEFANO, "The Dismemberment of the Detective". In *Diogenes*, Vol. 30, No. 120, Sage, New York, 1982, pp. 22-41.

TANI, STEFANO, *The Doomed Detective: The Contribution of the Detective Novel to Postmodern American and Italian Fiction*, Southern Illinois University Press, Carbondale, 1984.

TANNER, TONY, *City of Words: American Fiction 950-1970*, Harper & Row, New York, NY, 1971.

TANNER, TONY, *Thomas Pynchon*, Methuen, London, New York, NY, 1982.

The Baker Streets Irregulars Trust, Asimov, Query, <http://www.bsitrust.org/search?q=Asimov> 24/09/2024.

TIQQUN, *The Cybernetic Hypothesis*, Robert Hurley (Ed.), semiotext(e) intervention series, No. 28, [2001] 2020.

TOMASEVSKIJ, BORIS, *Thematique*, in *Théorie de la littérature : textes des formalistes russes*, Todorov, Tzvetan (Ed.) Éditions du Seuil, Paris, 1965. pp. 263-308.

TRUZZI, MARCELLO, *Sherlock Holmes: Applied Social Psychologist*, in *The Sign of Three: Dupin, Holmes, Peirce*, Eco, Umberto, Sebeok Thomas (Ed.), Indiana University Press, Bloomington, 1980.

TURNER, FRED, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*, University of Chicago Press, Chicago, 2006.
TV TROPES, *Literature: The Crying of Lot 49* found at <https://tvtropes.org/pmwiki/pmwiki.php/Literature/TheCryingOfLot49> 08/07/2024.

TYLEE, CLAIRE M., "Spot this Mumbo Jumbo": Thomas Pynchon's Emblems for American Culture in "Mortality and Mercy in Vienna" in *Pynchon Notes*, No. 17, 1985. pp. 52-73.

TYNYANOV, JURIJ N., *De l'Evolution Littéraire*, in *Théorie de la littérature littérature : textes des formalistes russes*, Todorov, Tzvetan (Ed.) Éditions du Seuil, Paris, 1965. pp. 120-136.

VAN DINE, S.S., Unpublished Letter to Norbert Wiener January 2, 1929. Correspondence, 1929, Norbert Wiener Papers, File — Box: 2, Folder: 31. Identifier: 1, Part of the Massachusetts Institute of Technology. Libraries. Department of Distinctive Collections Repository.

VANDERBEKE, DIRK, "*N* Tropes for Entropy in Pynchon's Early Works", in *Pynchon Notes*, 2001, pp. 35-59.

WALPOLE, HORACE, Letter to H. Mann of 28 January 1754, cited in MESSAC, RÉGIS, *Le «Detective Novel» et l'Influence de la Pensée Scientifique,* Slaktine Reprints, Geneva, [1929] 1975. p. 160.

WALTON, KENDALL, *Mimesis as Make-Believe: On the Foundations of the Representational Arts*, Harvard University Press, Cambridge, MA, 1990.

WARE, TIM, Hyperarts, < https://web.archive.org/web/19961106050633/http://www.hyperarts.com/ > 17/07/2024.

WARK, MCKENZIE, *The beach beneath the street: the everyday life and glorious times of the Situationist International*, London, Verso 2011.

WARRICK, PATRICIA, "Asimov and the Morality of Artificial Intelligence", in J. G. Cunningham (ed.), *Science fiction* San Diego, CA, Greenhaven Press, 2002. pp. 169-177.

WARRICK, PATRICIA, "The Contrapuntal Design of Artificial Evolution in Asimov's "The Bicentennial Man"", in *Extrapolation*, Vol. 22, No. 3, Kent OH, Kent State University Press, 1981. pp. 231-241.

WARRICK, PATRICIA, *The Cybernetic Imagination in Science Fiction*, MIT Press, Cambridge, MA, 1980.

WIENER, NORBERT, "Murder and Mathematics", in *MIT Technology Review*, March 1929. pp. 271-272.

WIENER, NORBERT, *Cybernetics: Control and Communication in the Animal and the Machine*, MIT Press, Cambridge, MA, [1948] 1961.

WIENER, NORBERT, *God & Golem, Inc.: A Comment on Certain Points Where Cybernetics Impinges on Religion*, MIT Press, Cambridge, MA, 1964.

WIENER, NORBERT, *God and Golem, Inc.: A Comment on Certain Points where Cybernetics Impinges on Religion*, MIT Press, Cambridge Ma, 1964.

WIENER, NORBERT, *Introduction*, in *Cybernetics, or Control and Communication in the Animal and the Machine*, MIT Press, Cambridge, MA, [1948] 1985.

WIENER, NORBERT, *The Human Use of Human Beings: Cybernetics and Society*, Doubleday, Garden City, NY, [1950] 1954.

WRIGHT, ELIZABETH, *Psychoanalytic Criticism: Theory in practice*, Routledge, New York, NY, 2003.

ZAVARZADEH, MAS'UD, "The Apocalyptic Fact and the Eclipse of Fiction in Recent American Prose Narratives", in *Journal of American Studies*, Vol. 9, No. 1, April 1975, pp. 69-83.

ŽIŽEK, SLAVOJ, *The fragile absolute, or, Why is the Christian legacy worth fighting for?*, London, Verso, 2008.