



## RESEARCH ARTICLE

### THE AMBIVALENT PERCEPTION OF SCIENCE IN POLITICS: A NEW HISTORICIST APPROACH TO NINETEEN EIGHTY-FOUR

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#### ABSTRACT

In George Orwell's *Nineteen Eighty-Four*, the portrayal of science is highly ambivalent. Science, in this created totalitarian regime, is depicted as a powerful tool that can be manipulated by a political party for propaganda and then, for total control. In the pursuit of absolute power, science is actively used to suppress and undermine social norms of good conduct while distorting simultaneously facts and historical records to suit the narrative of the Party in power. Essentially, science is used selectively and only when it serves the Party's agenda, leading to a distrust and devaluation of its true potential for critical thought and discovery. Through a New Historicist approach, this paper aims at discussing the ambivalent role played by science in the highly totalitarian setting of Oceania. The paper has revealed that science has really proved ambivalent in its role in *Nineteen Eighty-Four* serving as a catalyst for a few privileged party members and as a source of oppression for the rest of the Oceanians. It condemns the abusive and politically-oriented usage of science while proposing a regular ethical control to its users.

## INTRODUCTION

Most of the scientific discoveries and products which have resulted from the eighteenth-century Industrial Revolution, have mainly served as a political instrument for many governments of twentieth century. Science has contributed much to the conservation of power and, therefore, has helped establish dictatorial, authoritarian and even totalitarian regimes all over the world. Many scientific discoveries and inventions have played a considerable role in fostering political power of various regimes. This is of the case of Big Brother and his party in the fictitious Oceania. The party makes use of scientific devices to implant its ideologies through information distortion, a biased communicative propaganda and total control of the masses. Science is, therefore, represented with positive characteristics from the stand point of the leading Party but is rather negatively perceived as a source of oppression by common citizens in Oceania, whence its ambivalence. *Nineteen Eighty-Four* is a prophesy about the misuse of science in politics along with its possible repercussions on both humans and on nature. For A. Gauffenic, "As man has steadily increased his control over his own destiny, he has, consciously or unconsciously, reduced the areas of freedom available to him.

This inexorable dialectic process forms the background to Orwell's *Nineteen-Eighty-Four*" (Gauffenic, 1983: 134). As a result, *Nineteen Eighty-four* is no more a mere future, but "a future that is already with us" as well as "a symbol, denoting the future of our civilization" (Gauffenic, 1983: 134). In this politico-scientific setting, neither one's past nor their future events can be escaped due to the terrifying routines of the predominating machinery. For S. Spender (1949: viii), Orwell describes a society in which "the more closely we look at it, the more clearly, we see that a machinery of indoctrinated ideology, perpetual war, police terror and brain-washing has [sic] taken over". It can be understood from this assertion that, the society of *Nineteen Eighty-Four* is an ideologically-machine-oriented one. The ambivalence of science has to do with both its "good and bad" (Hornby, 2010: 43) aspects on humans. Science is differently perceived in *Nineteen Eighty-Four*, that is, politicians do not have the same conception of science as the average citizen. This difference in their perception is related to the role that science plays in the life of each group. Maybury recognises this duality in the nature of the machine when he argues: "The machine can, on the one hand, extend man's possibilities: power, speed, possession of goods. On the other, the machine threatens to diminish life's scope because of its tendency to dehumanize or alienate us" (Maybury, 1983: 130).

For S. Locke (2005: 26), ambivalence is a “long-standing contrast” as “science displaces magical belief in unknowable entities with belief in knowable forces and processes and reduces all things to a single technical measure”. Ambivalence also implies “conflicting norms” or “contradictory attitudes and behaviors” (Mitroff, 1974: 579). The purpose of this paper is to answer the following questions: What is science? What role has it played in politics? What are the representations of its ambivalence in the totalitarian setting of *Nineteen Eighty-Four*?

Defined as “a mode of critical interpretation which privileges power relations as the most important context for texts of all kinds” (Bertens, 2001: 179), the New Historicist approach is used in this paper to analyse the ambivalent role of science in political arena. As it declares, “all history is subjective, written by people whose personal biases affect their interpretation of the past” (Bressler, 1994: 128). Considering a literary work as “a product of the time, place, and circumstances of its composition rather than as an isolated creation” (Kaçmaz, 2011: 51) it will be helpful to implement the three important areas concerned about the New Historicist investigations, that is, “(1) the life of the author; (2) the social rules and dictates found within a text; and (3) the reflection of a work’s historical situation as evidenced in the text” (Bressler, 1994: 134). As a result, the literary text is “always part or parcel of a much wider cultural, political, social, and economic dispensation [and] is directly involved in history” (Bertens, 2001: 176-177). The paper is divided into two sections. The first section defines science while analysing the catalytic role it has played to strengthen the totalitarian ideology and consolidate Big Brother’s party. The second section discusses the various elements of the text which characterize the ambivalence of science in *Nineteen Eighty-Four* making it a source of oppression to the masses.

**Science as a Catalyst to Big Brother’s Party:** Science is defined as “knowledge about the structure and behaviour of the natural and physical world, based on facts that you can prove” (Hornby, 2010: 1320). A catalyst refers to “a substance that makes a chemical reaction happen faster without being changed itself” (Hornby, 2010: 220). Being defined so, it can be understood that science has catalyzed the dangers of political regimes in *Nineteen Eighty-Four*. As “A system always influences its surroundings as it draws energy, material and information from them and thereby alters their state” (Humo, 1983: 161), so does science. For D. Goulet, technology is “a powerful instrument of social control and a decisive tool for gaining political leverage” (Goulet, 1983: 181). In *Nineteen Eighty-Four* science has played an ambivalent role and, therefore, serves as a catalyst for politicians. With science, “mankind’s most vulnerable tools” and “the most intriguing products of modern technology” (Dixon, 1983: 140) ever produced, have been made possible. This section analyses this catalytic role of science, which is used by politicians to strengthen the totalitarian ideology and consolidate Big Brother’s party. As such, the interpretation focuses on how science is perceived or viewed by these politicians, offering thus, their opinion as well as the symbolic significance of science to the party in power in Oceania. The catalytic role of science in political arena is represented through the various strategies used by Big Brother’s party to dictate its will to citizens. These strategies include the manipulation of language and information, the use of technological devices for censorship and brainwashing and the

perpetual war which is created in Oceania to confuse and isolate thought criminals. Language constitutes one of Orwell’s most important messages in *Nineteen Eighty-Four*. It is an element of great importance as far as humans’ thought is concerned, for, it structures and limits the ideas that individuals are capable of formulating and expressing. If the control of language is centralized in a political agency, such an agency could possibly alter the very structure of language to make it impossible to conceive even disobedient or rebellious thoughts. This idea manifests itself in the language of Newspeak, which the Party has introduced to replace English. The Party is constantly refining and perfecting Newspeak, with the ultimate goal that no one is capable of conceptualizing anything that might question the Party’s absolute power. The loss of one’s language entails the loss of their culture and historical connections.

The manipulation of language and information comes as the first action perpetrated by the authorities of Oceania to maintain their power. The constructed language, Newspeak, allows the Party to control how its citizens think and talk. This ideologically-oriented language limits citizens’ ability to express complex scientific concepts. As a result, it indirectly suppresses their critical thinking as well as scientific inquiry rendering the task of control easy for the Party. Newspeak in Oceania stands as the Party’s way of controlling its citizens by limiting the words and ideas they can express. Winston Smith and his peers belong to an era when the main way of communicating “Oldspeak” becomes obsolete. However, by the time Newspeak is the national language, “thoughtcrime” becomes impossible because of the lack of words to express it. If words like “Down with Big Brother” (Orwell, 1949: 22) disappear in the vocabulary of Newspeak, chances are that people cannot find any to feel or express their disloyalty to the Party. With its technique of “Doublethink” (Orwell, 1949: 220), labelled as an “essential psychological factor” (Khan, 1983: 151) the residents of Oceania are forced to communicate in Newspeak – the government’s invented language. Newspeak has played a significant role in the Party’s control over the masses, for, the Party knows that if their thought corrupts language, the same language can be manipulated and used as a tool to corrupt citizens’ thought.

In Big Brother’s Party, freedom of opinion is banished. There is, and must be only one political party conferring to it its uniformity. Conceptual values like diversity and solidarity are to be replaced by solitude to facilitate the control. Doublethink, which consists of holding two contradictory opinions or ideas in one mind and simultaneously, has replaced the normal and critical thinking. This means people are forced to live under unorthodox social norms imposed on them by the government. O’Brien’s political orthodoxy is bad that it rejects all the principles and conventions of democracy. The Party’s doctrines are cruel and inhumane. Individuals who express themselves in contraction to the ideology of the party are brainwashed. It has proscribed freedom of speech and press, freedom of assembly and freedom of thought. Emmanuel Goldstein, the enemy of the Party, is the embodiment and promoter of democratic values. It can be said that the implementation of indecent dictatorial policies in *Nineteen Eighty-Four* has been made possible thanks to science and technology. The second strategy which helps maintain the Party’s power in *Nineteen Eighty-Four* is the use of technological devices for censorship and brainwashing. The Party uses scientific advancements, particularly in surveillance technology, to monitor and control the

population, highlighting thus, how scientific progress can be weaponized for oppressive purposes. In fact, the telescreens allow the Party to maintain surveillance on its citizens at all times, forcing citizens to censor their words and even facial expressions. Telescreens serve as ever-watchful eyes which symbolise the omnipresence of the Party. They broadcast a jocund-like human figure with staring eyes that have the impression of watching carefully citizens at any direction whatsoever. In addition to this large head picture of Big Brother, one can see run pass the famous inscription "BIG BROTHER IS WATCHING YOU" (Orwell, 1949: 3) on the telescreens which are fixed everywhere in towns and in people's cabins. Big Brother comes at the top of the ladder. He is unchallengeable and has an absolute power. Every success, every achievement, every victory, every scientific discovery, all knowledge, wisdom, happiness and virtue, are the exploits of his leadership and inspiration. Nobody has ever seen Big Brother physically, yet, his face frequently appears on and his voice regularly thunders from the telescreen. For the Party, the staring eyes of Big Brother are meant to follow citizens in their movements and actions. This is to avoid any possible conspiracy and rebellion against the party. Big Brother symbolizes the Party and is known as the Head of the state of Oceania.

Besides, the electronic wizardry offers a significant opportunity to the Party to actively rewrite history to fit their narrative. Thanks to scientific advancements, the Party has effectively erased any scientific evidence that contradicts their ideology. This falsification of truth demonstrates a blatant disregard for the objective nature of science. It has also shown that, what is a lie today can become the truth tomorrow just like the truth of today can change into a lie the following day, accordingly with the Party's desire. As it is put: "Everything faded into mist. The past was erased, the erasure was forgotten, the lie became truth" (Orwell, 1949: 78). Like beauty which lies in the eyes of the beholder, truth or lie, in Oceania, lies in the Party's ideology or will. Another scientific element which plays the role of a catalyst that helps maintain the Party's power is the never-ending-war of Oceania against either Eurasia or Eastasia. This embarrassing situation has kept almost every citizen, except the ones behind the ideology, in a constant state of fear, ensuring that they stay loyal to Oceania. The permanent war as supported by the authorities is the consequences of scientific revolution. The fabrication of war materials such as bombs, guns, radars and missiles has given more power to some Nations to dominate and conquer the less powerful ones. The Party also uses people's worst fears against them in the Ministry of Love. By suppressing intimate relationships, labelled as "promiscuity" (Orwell, 1949: 69), between citizens, the Party prevents men and women from forming loyalties which it might not be able to control.

One can understand that the technological world is bound to totalitarian mismanagement of power. So, it can be said that the degradation of labour, education, and the environment is rooted in technology as well as in the anti-democratic values that govern scientific and improvement. There would not be any serious progress in a world government that continues sacrificing millions of individuals for its own profits. *Nineteen Eighty-Four* is also a call for any society to break the barriers of freedom and enable individuals to actively participate in the handling of public affairs. Presently, it is very lamentable to see that choices made for public life are increasingly modified

by technical inventions. Both the present and the future of humanity are determined by the decisions and actions of political governments. Nevertheless, science in *Nineteen Eighty-Four* is coupled with authoritarian political decisions to worsen the situation for the masses. Humans are forced to be "ant-like" (Bondi & Bates, 1983: 190) but characters like Winston and Julia among others, have given us hope that this planned "ant-like future" where every individual is totally controlled, can be avoided. Indeed, science has been ambivalently represented depending on the user and the goal they want to achieve.

**Science as a Source of Oppression to the Masses:** *Nineteen Eighty-Four* portrays a society where scientific research is tightly controlled and only allowed to pursue projects that directly benefit the Party, stifling the pursuit of knowledge for its own sake. This description of "the relationship between authoritarianism and war and its consequences for individual freedom and welfare" (Khan, 1983: 150). It also "probes the consequences of that big-power posture for world peace, individual freedom and the welfare of the common man" (Khan, 1983: 150). Orwell uses the dystopian setting to warn against the dangers of allowing science to be manipulated by political powers for their own agenda, highlighting the potential for abuse when scientific knowledge is not accompanied by ethical considerations. This double role that science plays, can be used to underscore its ambivalence. The depiction of the suppression of scientific inquiry through this novel, criticizes the nature of totalitarian regimes that aim to control not only actions but also thoughts and interpretations of reality.

This section discusses the various elements of the text which characterize the ambivalence of science in *Nineteen Eighty-Four* making it a source of oppression to the masses. As D. Leroux (1983: 166) observes: "since time immemorial it seems that man has been eager to improve his achievements, for both good and evil". It can be understood that, long ago, science was predicted to be having an ambivalent role in humans' life. It is in this perspective that man:

... has invented an amazing collection of tools for doing what he cannot do with his nails and teeth. He has geared his actions to obtain more power with lifting devices; he has harnessed the energy of water and wind, fire and electricity to operate machines of all kinds, which can build or destroy faster than he can; to help, even to force, his neighbour to think as he does, and to think ahead imaginatively and in greater detail, he invented writing and drawing [...] which culminated with the computer (Leroux, 1983: 166).

It can be inferred from the above quotation that, the double role that science can play has been predicted since the first inventions. Man was aware that the power that scientific inventions have to help him would certainly be the same as their destructive and harmful power on him. *Nineteen Eighty-Four* can be understood as a political novel written with the purpose of warning readers of the dangers of totalitarian government. Being deeply disturbed by the widespread cruelties and oppressions observed in communist countries, Orwell points out the role of technology which enables oppressive governments to monitor and control their citizens. The novel is a portrayal of a totalitarian society or a modern-day-government with absolute power. Scientific methods have enabled the government of Oceania to monitor and control

every aspect of human life to the extent that even having a disloyal thought is against the law. As the novel progresses, the timidly rebellious Winston Smith and Julia set out to challenge the limits of the Party's power only to discover that its ability to control and enslave its subjects is beyond their mere and biased understanding of the whole system. As the reader comes to understand through Winston and Julia's torture and brainwashing, the Party uses a number of techniques to control its citizens. The use of scientific methods in politics has provoked various oppressions of the masses. In fact, the manipulation of technological devices has made of science a source of oppression. These inhumane manipulations include the psychological as well as the physical, the control of information, history and even the mind.

Concerning the psychological oppression, the Party has regularly manipulated information and language to confuse the mind of its subjects, depriving them of the capacity for independent thought. The giant telescreen in every citizen's room blasts a constant stream of propaganda designed to make the failures and shortcomings of the Party appear to be triumphant successes. The telescreens also monitor citizens' behaviour everywhere they go. The Party undermines family structure by inducting children into an organization called the Junior Spies, which brainwashes and encourages them to spy on their parents and report any instance of disloyalty to the Party. The Party also forces individuals to suppress their sexual desires, treating sex as merely a procreative duty whose end is the creation of new Party members. The Party also fuels people's frustration and emotion into intense displays of hatred against the Party's political enemies. Many of these enemies have been invented by the Party expressly for this purpose.

In addition to manipulating their minds, the Party also controls the bodies of its subjects, which is known here as a physical oppression. The Party constantly watches for any sign of disloyalty, to the point that even a tiny facial twitch leads to an arrest. A person's own nervous system becomes his greatest enemy. The Party forces its members to undergo mass morning exercises called the Physical Jerks, and then to work all day long at government agencies, keeping people in a general state of exhaustion. Anyone who happens to defy the Party is punished through a systematic and brutal torture. After being subjected to weeks of this intense treatment, Winston himself comes to the conclusion that nothing is more powerful than physical pain, no emotional loyalty or moral conviction can overcome it. By conditioning the minds of their victims with physical torture, the Party is able to control reality, convincing its subjects that  $2 + 2 = 5$ .

The Party controls every source of information, managing and rewriting the content of all newspapers and histories for its own ends. The Party does not allow individuals to keep records of their past, such as photographs or documents. As a result, memories become unreliable, and citizens are eager to believe whatever the Party tells them. By controlling the present, the Party is able to manipulate the past. And in controlling the past, the Party can justify all of its actions in the present. By means of telescreens and hidden microphones across the city, the Party is able to monitor its members almost all of the time. Additionally, the Party employs complicated mechanisms to exert large-scale control on economic production and sources of information, and fearsome machinery to inflict torture upon those it deems enemies. *Nineteen Eighty-Four* reveals that technology, which

is generally perceived as working toward moral good, can also facilitate the most diabolical evil.

In *Nineteen Eighty-Four*, the Party also seeks to ensure that the only kind of loyalty possible is loyalty to the Party. The reader sees examples of virtually every kind of loyalty, from the most fundamental to the most trivial, being destroyed by the Party. Neighbours and co-workers betray one another, and Mr. Parson's own child reports him to the Thought Police. Winston's half-remembered marriage to his wife fell apart with no sense of loyalty. Even the relationship between customer and merchant is perverted as Winston learns that the man who has sold him the very tools of his resistance and independence is a member of the Thought Police. Winston's relationship with Julia is the ultimate loyalty that is tested by the events of the novel. In the end, the Party does make Winston stop loving Julia and love Big Brother instead, the only form of loyalty allowed.

In *Nineteen Eighty-Four*, Winston explores increasingly risky and significant acts of resistance against the Party. Winston builds up minor rebellions by committing personal acts of disobedience such as keeping a journal and buying a decorative paperweight. Eventually he escalates his rebellion through his sexual relationship with Julia. The relationship is a double rebellion, as it includes the thoughtcrime of desire. Winston doesn't believe his actions or the actions of others can lead to the destruction of the Party within his lifetime, but before he is caught by the Thought Police he holds out hope that in the future someone will be able to look back at Winston's time from a world that is free. Winston's most concrete hope for actual revolution against the Party lies with the proles. He observes that the proles already have far greater numbers than the Party and that the proles have the strength to carry out a revolution if they can ever organize themselves. The problem is that the proles have been subject to such serious poverty for so long that they are unable to see past the goal of survival. The very notion of trying to build a better world is too much for them to contemplate. All of these observations are set against the backdrop of the Party's own identity as the product of revolution.

While the Party's primary tool for manipulating the populace is the control of history, they also control independence and identity. For example, the basic traits of establishing one's identity are unavailable to Winston and the other citizens of Oceania. Winston does not know how old he is. He does not know whether he is married or not. He does not know whether his mother is alive or dead. None of his childhood memories are reliable, because he has no photos or documents to help him sort real memories from imagined ones. Instead of being unique individuals with specific, identifying details, every member of the Outer Party is identical. All Party members wear the same clothing, smoke the same brand of cigarettes, drink the same brand of gin, and so forth. As such, forming a sense of individual identity is not only psychologically challenging, but logistically difficult.

Most of Winston's significant decisions can be interpreted as attempts to build a sense of identity. His decision to purchase a diary and begin recording his thoughts is an attempt to create memory and history. His decision to purchase the paperweight is driven by a desire to have something of his own that represents a time before the Party. Winston's sexual relationship with Julia and their decision to rent an apartment

where they can spend time together represent dangerous crimes in Oceania. When he decides to pursue a relationship with Julia, Winston asserts his independence and further establishes his identity as an individual who resists the Party's control. Ultimately, though, Winston's attempts to maintain his independence and create a unique identity are no match for the Party. Winston's experiences in the Ministry of Love represent the complete disassembly and destruction of all aspects of his individuality. When he returns to society, he has lost all independence and uniqueness, and has become part of the Party's faceless collective. In *Nineteen Eighty-Four*, science has been used in politics to completely dehumanize

## CONCLUSION

The analysis has shown that science is used selectively in *Nineteen Eighty-Four* and only when it serves the Party's agenda. It has, therefore, played a significant role in the consolidation of Big Brother's party. Thanks to it, O'Brien, the double representation of Big Brother and the Party, has been able to establish an unerring surveillance and total control in Oceania. This shows that, science has really proved ambivalent as to its role in *Nineteen Eighty-Four* is concerned depending on which side one belongs and for which purpose it is oriented. For the few privileged members of the Inner Party, science has been a powerful weapon used to manipulate information and make propaganda to attain absolute power. Through machines, science has also been used to distort facts and historical records to suit the ideology of the Party in power. This active suppression of the right information has undermined social norms of good conduct leading to a distrust and devaluation of the true potentials of science, that is, critical thought and discovery.

For the masses, science in this totalitarian regime epitomizes hell, devoid of privacy and dignity, in short, it represents a hopeless future, if not, a nightmare in which a boot is "stamped forever into a human face" (Spender, 1949: ix). The average citizen also views science as a source of destruction, oppression and enslavement. As long as the telescreens are on for surveillance and the electric current is used for brainwashing, there will neither be peace nor freedom for anyone of them in Oceania unless they adopt a "Luddite-strategy" by protesting "the dehumanization of life by instruments of technology" (Goulet, 1983: 180). In sum, without scientific facilities, Big Brother's party could not have been able to impose its ideology; neither could it have been capable of establishing total control over its citizens. Thus, the paper condemns the abusive and political-oriented usage of science and proposes a "man-machine system" for interaction and interadaptation, for, only through this and a regular ethical control of its users "can both man and machine realize their respective potentials to the fullest" (Haibo, 1983: 172).

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