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Neuroculture: The Construction of a Media-Obsessed Reality in Dystopian Fiction

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neuroculture, dystopian fiction, dopamine, escapism, digital addiction, semiotics

ABSTRACT

This paper explores the emerging phenomenon of ***neuroculture*** and its reflection in contemporary dystopian fiction. It examines the intersection of neuroscience, psychology, and literature, focusing on how modern narratives portray society's increasing dependence on dopamine-driven stimuli such as social media, psychiatric medication, and consumerist distractions. Through analyzes of ***Brave New World*** by Aldous Huxley, ***Fahrenheit 451*** by Ray Bradbury, and ***My Year of Rest and Relaxation*** by Ottessa Moshfegh, the paper identifies patterns of escapism, passivity, and emotional withdrawal as central features of pleasure-oriented culture. The study adopts an interdisciplinary framework combining semiotics and neurobiology to interpret dystopian literature as both a mirror and a warning signal of collective detachment and mental health crises in the digital age.

Introduction

It seems that humanity has never been more interested in psychology and neuroscience than it is nowadays. The reason may be that Maslow's pyramid has proven its truthfulness: Steven Pinker (2018), a cognitive psychologist and popular science author, argues in his book Enlightenment Now that humanity is experiencing unprecedented progress in areas such as health, safety, and longevity. He suggests that we have more reasons than ever to be optimistic about the human condition (Pinker, 2018, p. 51). This aligns with Abraham Maslow's hierarchy of needs theory (1943), which proposes that once basic physiological and safety needs are met, individuals can focus on psychological and self-fulfillment needs. Supporting this idea, Pinker (2018) notes that for most of human history, the average lifespan was around 30 years, whereas today it is approximately 71 years (p. 52). Yet, despite this progress, it is worth questioning whether such advancements truly translate into improved well-being. Even recent years marked by war and the COVID-19 pandemic appear comparatively mild when viewed through the lens of historical mortality. Although COVID-19 has had a profound global impact, with approximately 7 million deaths reported worldwide (World Health Organization, 2024), it pales in comparison to earlier pandemics. The bubonic plague of the fourteenth century is estimated to have claimed around 50 million lives across Europe (Benedictow, 2004), while the Spanish flu resulted in between 25 million and 50 million deaths globally. As Pinker (2018) emphasizes, such historical and statistical context illustrates the steady progress of humanity. This progress has allowed people to devote more attention to introspection and psychological well-being.

Yet, this raises an important question: Does this advancement in living conditions necessarily translate to improvements in mental health? The evidence suggests otherwise. Recent data indicate a significant increase in the number of scholarly publications on psychology and well-being, reflecting a growing academic interest in these topics. This trend appears to correlate with findings from the National Institute of Mental Health (2024), which report that one in five adults in the United States lives with a mental illness. Given the increasing global standardization of living conditions, it is reasonable to question whether similar mental health patterns are emerging across Europe and other parts of the world. In recent years, Poland, too, has witnessed an outbreak of a real epidemic of mental disorders. Between 1990 and 2009, the prevalence of mental disorders in the outpatient care system increased dramatically, by as much as 123% (from 1,629 to 3,638 per 100,000 population), and in inpatient care, by 51% (from 362 to 548 per 100,000 population) (Statistical Yearbook of the Institute of Psychiatry and Neurology, 2024). This rise is followed by an unprecedented number of all sorts of psychiatric drugs. Nowadays, more than 25% of American adults take a psychiatric drug on a daily basis. Prescriptions of numbing sedative medications like benzodiazepines, highly addictive, are also on the rise. Between 1996 and 2013 in the United States, the number of adults who received this form of medication rose by 67% percent, from 8.1 million to 13.5 million

(Lembke, 2021, pp. 38-39).

As we gain a deeper understanding of human biology, the natural course would be to ensure that people lead happier lives. Human happiness (however associated with economic prosperity) is one of the greatest aims the globalized world has decided to accomplish. As Harari puts it:

> If science is right and our happiness is determined by our biochemical system, then the only way to ensure lasting contentment is by rigging this system. Forget economic growth, social reforms and political revolutions: in order to raise global happiness levels we need to manipulate human biochemistry. (Harari, 2017, p. 45)

Theoretical Framework: From Neuroscience to Semiotics

It seems natural that people turn to literature which describes their problems and dilemmas. Both fiction and non-fiction, there is an undisputed rise in what we may call neuroliterature or a psycholiterary approach in literature. Their scope is broad, as psychology and neuroscience are paired with literature itself. Most academics are familiar with the concept of neurolinguistics. Neuroliterature may, however, not only examine the relationship between brain mechanisms and language but also provide us with a set of warnings which are easier to identify and acknowledge. Literature has never been created for the sake of literature because, according to Foucault, literature opens itself on the outside: whether it is philosophy, history, sociology, science in general or the future. In his short book entitled "The Thought From Outside," Foucault declares:

> It is a widely held belief that modern literature is characterized by a doubling back that enables it to designate itself. [...] In fact, the event that gave rise to what we called 'literature' is [...] a passage to the 'outside': language escapes the mode of being of discourse—in other words the dynasty of representation—and literary speech develops from itself, forming a network in which each point is distinct, distant from even its closest neighbors, and has a position in relation to every other point in a space that simultaneously holds and separates them all. [...] Thought about thought, an entire tradition of wider than philosophy, has taught us that thought leads us to [...] the outside in which the speaking subject disappears. (Foucault, 1987, p. 12-13)

This is the place where, according to Seweryna Wysłouch, a literary scholar may need semiotics in order to „see literature as a system in the context of other systems". Hence, semiotics enables us to learn about cultural mechanisms and provides an opportunity to integrate other fields of the humanities. Semiotics, by its nature, is an interdisciplinary field of research, allowing a researcher to cross the boundaries of literature, broaden interpretative contexts, and read any work of literature anew (Wysłouch, 2001, p. 10).

Theories of literary studies do not seem to have addressed anything like the intersection of neuroscience and literature until now. The closest to this issue may be psychoanalysis, which, as Zofia Mitosek puts it, "at its starting point dealt with the structure of the human personality and its emotional stimuli" (Mitosek, 1998, p. 157). Scholars who turned to psychiatry and psychoanalysis tried to bring to light the covert hidden in the overt. It opened new interpretation possibilities; no wonder the method found numerous new enthusiasts. The method, however, posed a risk of narrowing discussions and attempting to reduce all plot situations to a few Freudian motives, such as the Oedipus complex and the fear of castration, whereas the sense of many works does not limit itself to the psychological dimension (Wysłouch, 2001, p. 15).

However, Freudian-inspired literary studies have primarily focused on uncovering the hidden and subconscious aspects of literature, rather than openly discussing the neurological aspects of the human psyche, largely because neurobiology is still a relatively new and developing field of study. On the other hand, there have been more than a hundred years of Freud's fundamental works, such as "Traumdeutung" (1899), "Metapsychologie" (1915) or "Das Ich und das Es" (1923) and the world, both academic and not, is somehow aware of many forces that drive us. Neuroliterature aims to explore the neurological mechanisms underlying human cognition and behavior. If a man is driven by primary instincts and fears, what is their source, and what are their implications? Neuroliterature is yet to be crystallized in the context of semiotics. This paper aims at identifying some of the relationships between human neuromechanisms and literary fiction, simultaneously grasping some of the Huxleyesque nature of the current

state of being, in a dopamine-driven world, attempting to characterize what we may call neuroculture and neuroliterature.

Dopamine, Escapism, and the New Dystopia

The adjective *Huxleyesque* inadvertently renders *Brave New World* (1932), a novel portraying a dystopian society under control, held mentally hostage not by terror, but by providing happiness and bliss. With „everybody's happy now" and other various mantras repeatedly pumped into young minds during their sleep, people in Aldous Huxley's world choose to be docile by taking soma, a drug that takes away all worries, stress and anger, providing nothing but thoughtless pleasure. A happy society is obedient, willing to choose contentment over a bad mood. However, a lingering feeling warns readers that this utopia is indeed a dystopia. Soma, however fictional, may bear some resemblance to serious and dangerous drugs that pose real threats to people, like cocaine, codeine, MDMA and others. To quote:

> Swallowing half an hour before closing time, that second dose of soma had raised a quite impenetrable wall between the actual universe and their minds.

Or:

> Lenina felt herself entitled, after this day of queerness and horror, to a complete and absolute holiday. As soon as they got back to the rest-house, she swallowed six half-gramme tablets of soma, lay down on her bed, and within ten minutes had embarked for lunar eternity. It would be eighteen hours at the least before she was in time again. (Huxley, 2004, p. 140)

In the novel, the drug was taken on a daily basis, it was used recreationally and in order not to provoke hallucinations but rather to escape from any negative feelings reality may provoke in the human mind. It was extremely addictive, yet widely acceptable, being a constant companion and a form of medication taken more often than vitamins. The purpose was to create a world of widespread contentment:

> Our world is not the same as Othello's world. You can't make flivvers without steel-and you can't make tragedies without social instability. The world's stable now. People are happy; they get what they want, and they never want what they can't get... And if anything should go wrong, there is soma. (Huxley, 2004, p. 220)

There is something alarming in how dystopian literature has foreshadowed the current state of mental being, approach, and lifestyle. Ray Bradbury's *Fahrenheit 451* (2011) may be over 70 years old, but the way it portrays society is also oddly familiar to what we are experiencing nowadays. Bradbury presents a society that has replaced books and deeper thinking with easy, hollow entertainment. The author himself stated that by writing his novel, he intended to warn people against the useless information that television provided without sufficient context (Marshal, 2017). It is an important book that highlights the fact that not only totalitarian regimes pose a threat, but also the human tendency to seek a life as easy and pleasant as possible, while simultaneously avoiding responsibility. In *Fahrenheit 451*, the society's search for dopamine is the source of censorship and lack of freedom, because emotionally uncomfortable information is the source of distress, which people in the novel want to avoid at all costs, valuing numbness over the full spectrum of emotions. Children are treated as an unnecessary burden. The anti-intellectual majority is in control of the entire society. Mildred Montag, one of the protagonists of the novel, devoted her life to actually avoiding it, entertaining herself with a TV show ironically called *Family* and numbing herself, believing that lack of negativity would result in contentment. This numbness, however, is her motivation to sedate herself with sleeping pills (Bradbury, 2011).

Is escapism a new feature of neuroculture? This may indeed be the case, as suggested by Ottessa Moshfegh's novel *My Year of Rest and Relaxation* (2018), written before the COVID-19 pandemic. The narrator, a psychologically complex young woman, consciously chooses to detach herself from feelings, emotions, and the demands of everyday life. Although she is young, she lacks the will to engage with her reality and instead devises a plan to spend an entire year asleep, aided by a variety of medications. As she reflects on her state of disconnection, she notes:

> Every time I lay down... I went straight into black emptiness, an infinite space of nothingness. I was neither scared nor elated in that space. I had no visions. I had no ideas... It was peaceful... There was no work to do, nothing I had to counteract or compensate for because there

> was nothing at all, period... I felt good. Almost happy. (Moshfegh, 2018, p. 38)

Both *Brave New World* and *My Year of Rest and Relaxation* value inaction over action. The characters, like Moshfegh's unnamed narrator and Huxley's Lenina, choose to distance themselves from the immediate context of reality. As the narrator admits: "Oh, sleep, nothing else could ever bring me such pleasure, such freedom, the power to feel and move and think and imagine, safe from the miseries of my waking consciousness." (Moshfegh, 2018, p. 46). The act of withdrawing from reality into a state of emotional and cognitive void is portrayed as a safer alternative to confronting the complexities of consciousness. The protagonist firmly believes that emotional detachment and prolonged sleep offer greater security than experiencing the full spectrum of feelings that reality entails. This raises a critical question: What are the broader societal implications of such individual behaviors? Specifically, what kind of society emerges when individuals, like the narrator, collectively choose emotional disengagement as a coping mechanism?

Neuroculture and the Digital Condition

There is a drug, ostensibly somatically harmless. Like soma, it is something people get drugged by while escaping reality, believing this drug makes their lives more full of life at the same time. It is highly addictive, as it is based on dopamine release, with dopamine being responsible for human reward circuitry. This drug has a name: social media, with its endless possibilities of provoking dopamine highs and lows. While *Brave New World* is a novel, and soma is not a real drug, Huxley's dystopian society has never been closer. According to Anna Lembke, mobile devices with accompanying apps use the very same neural circuitry used by cocaine or slot machines in casinos. Unlike them, they are used by children as young as two. Unlike them, they are legal and accessible, handed down by parents.

This may sound like a shortcut to attention deficit disorder (ADD), another plague of the twenty-first century. It is now a widely discussed condition, frequently mentioned in the media and observed in schools and numerous other environments. Another cautionary narrative sheds light on the contemporary state of mental health: Bronwen Huska's *Accelerated* (2024), which, as the title suggests, moves at an extremely rapid pace. Fiction is followed by non-fiction with the recently published book *The Anxious Generation* (Haidt, 2024), which documents the consequences of shifting childhood into the virtual world—resulting in social anxiety, sleep deprivation, attention deficit disorder, and various forms of addiction. The book raises an alarming question: what kind of adults will emerge from such children?

One of the biggest risk factors for developing addiction to any substance is easy access to it. When a drug is easier to obtain, we are more likely to try it, and in trying it, we are more likely to become addicted. As Anna Lembke (2021, p. 18) notes, "One of the biggest risk factors for getting addicted to any drug is easy access to that drug." This observation may evoke associations with the Internet and the limitless possibilities it creates—and, unfortunately, with the compulsive consumption it promotes. Easy access to digital stimuli mirrors the mechanisms of addiction, from the increased availability of drugs to the normalization of risky online behaviors, including viral "challenges." Here, the semantics are more than apt: these behaviors are literally contagious, as humans—being social animals—tend to normalize certain patterns of behavior simply because others exhibit them (Lembke, 2021, p. 27). This dynamic is also reflected in the literary examples discussed above, such as the popularity of soma in *Brave New World* and the collective rush to annihilate intellectualism in *Fahrenheit 451*.

Before elaborating on the relationship between mobile devices, the Internet, and social media, it is essential to understand the mechanism of dopamine. At this point, literary scholars need to step beyond literature and engage with clinical psychiatry—demonstrating that, to analyze literature in a manner consistent with the pace of scientific development, they must continually acknowledge the interdisciplinary character of the human sciences, as provided by semiotics. At a certain level, there is no clear division between the humanities and the sciences. Dopamine is a neurotransmitter—a chemical messenger between neurons—first identified in 1957 by two scientists working independently: Arvid Carlsson from Sweden and Kathleen Montagu from Great Britain. It is involved in reward processing and motivation. Dopamine drives most behaviors essential for human survival, such as obtaining food, and it is also used to measure the addictive potential of substances or activities. The more dopamine a substance or situation

releases into the brain—and the faster it does so—the greater its addictive potential.

Moreover, the term *drug* may refer not only to medication but also to substances (such as sugar), activities, or habits. The adjective *high-dopamine* does not mean "containing high doses of dopamine" but rather "rapidly triggering high levels of dopamine" (Lembke, 2021, pp. 47–50). Another important aspect of the relationship between the human brain and dopamine is that any dopamine influx is followed by pain—a state that Lembke describes as "the pain of being," encompassing various negative feelings ranging from irritation to depression. Repeated exposure to pleasurable stimuli results in neuroadaptation—tolerance—which means that people require more of their drug of choice to achieve the same effect. Lembke (2021) also gives an example of one of her patients who was constantly immersed in a rain of distractions: music, YouTube, and Instagram. These were her so-called drugs of choice, leading to anxiety because her dopamine levels were continually being raised in the short term. Children are far more susceptible to such stimuli due to their limited experience and inability to self-regulate. Their understanding of delayed gratification is yet to develop. Mobile devices and five-second TikTok videos stand in complete opposition to self-awareness—a quality associated with a balanced and mindful state of mind.

One of the major *drugs of choice* nowadays is undoubtedly the use of mobile phones. These devices, designed to make life easier through intuitive interfaces, notifications, and applications, also have the ability to stimulate dopamine production. When we hear a ding or a short tone alerting us to a new text, email, or social media post, cells in our brains release dopamine—one of the neurotransmitters in the brain's reward circuitry. That dopamine makes us feel pleasure. The ping signals that a reward is waiting for us (Greenfield, 2015). Cognitive neuroscientists have demonstrated that rewarding social stimuli—smiling faces, messages from people we know or admire, gestures—activate dopaminergic reward pathways. Smartphones, which now number over two billion users worldwide, have an almost unlimited potential for dopamine stimulation. With every "like" on Instagram or Facebook notification, there is the potential for a positive social stimulus and a dopamine influx (Krach, Paulus, Bodden, & Kircher, 2010).

The average adult checks their phone between 50 and 300 times per day, and as shocking as it may sound, this mirrors the way citizens in *Brave New World* overdosed on soma. One cannot function in Huxleyesque society without soma—a society without negativity has no understanding of those who refuse to take the drug. Analogously, the absence from social media or lack of a mobile device may lead to digital and social exclusion. Soma is a potent drug that offers an ever-present escape from negativity. Whether it generates that negativity remains in the sphere of literary speculation. Similarly, Ottessa Moshfegh's narrator seeks numbness through pills, and Mildred from *Fahrenheit 451* overdoses on sedatives. Yet it does not take tragic plots to illustrate the effects that dopamine cravings have on society

Following the identification of the key characteristics of a neuro-centred and dopamine-driven dystopian society, a critical question arises concerning its broader implications. These features include a pervasive avoidance of reality, the pursuit of instant gratification through effortless entertainment, increasing passivity, a diminishing willingness to engage in creative activities, widespread social and emotional withdrawal, and a growing reliance on pharmacological interventions. Together, these tendencies suggest a societal shift toward numbing rather than confronting discomfort, raising concerns about the long-term consequences of such behavioral patterns.

Conclusion

All this can lead people to overlook the fact that such a state makes them easier to control. Moreover, external control imposes itself—a passive and indifferent society expects to be guided and patronized, as this also means that responsibility can be relocated onto someone else, whether the government or global corporations. Being in charge of one's own life implies freedom, but freedom requires responsibility, and responsibility requires effort. The question is: are these features not easily identifiable in today's society? As Aldous Huxley observed in *Brave New World Revisited*:

The development of a vast mass communications industry, concerned in the main neither with the true nor the false, but with the unreal, the more or less totally irrelevant, failed to take into account man's almost infinite appetite for distractions. (Huxley, 2004, p. 45)

Literature has once again proven capable of foreseeing the contemporary condition. Some may fail or refuse to acknowledge this because the most popular dystopia of all time, Orwell's *1984*, did not literally come true. Neil Postman (1986) noted that people lost their vigilance after Orwell's prophecy failed to materialize:

When the year came and the prophecy didn't, thoughtful Americans sang softly in praise of themselves. The roots of liberal democracy had held. Wherever else the terror had happened, we, at least, had not been visited by Orwellian nightmares. (p. 155)

People have imposed on themselves an obligation to be constantly entertained and— as both literature and neuroscience suggest—this, paradoxically, is a shortcut to misery. Despite the growing awareness of the detrimental effects of social media and mobile phones on collective mental health, the Internet continues to evolve, making information increasingly accessible, scattered, and fragmented, while also reducing the demands on engagement. In other words, short video forms are now the most popular means of communication, and this trend is likely to persist in the near future. The Amplify Platform reports that reels were the best-reaching format and the most popular type of online content in 2023 (Gwóźdź, 2023).

References

Benedictow, O. J. (2004). *The Black Death, 1346–1353: The complete history.* Boydell Press.

Bradbury, R. (2011). *Fahrenheit 451.* Simon & Schuster.

Foucault, M. (1987). *Maurice Blanchot: The thought from outside.* Zone Books.

Greenfield, D. N. (2015). *Virtual addiction: Sometimes new technology can create new problems.* CreateSpace Independent Publishing Platform.

Gwóźdź, M. (2023). *Rolki podbiły social media w 2023.* https://marekgwozdz.pl/rolki-podbily-social-media-w-2023-roku/

Haidt, J. (2024). *The anxious generation: How the great rewiring of childhood is causing an epidemic of mental illness.* Allen Lane.

Harari, Y. N. (2017). *Homo deus: A brief history of tomorrow.* Vintage.

Huska, B. (2024). *Accelerated.* HarperCollins.

Huxley, A. (1932). *Brave new world.* Chatto & Windus.

Huxley, A. (2004). *Brave new world revisited.* HarperCollins.

Krach, S., Paulus, F., Bodden, M., & Kircher, T. (2010). The rewarding nature of social interactions. *Frontiers in Behavioral Neuroscience, 4*(22). https://doi.org/10.3389/fnbeh.2010.00022

Lembke, A. (2021). *Dopamine nation: Finding balance in the age of indulgence.* Dutton.

Marshal, C. (2017, August). Ray Bradbury reveals the true meaning of *Fahrenheit 451*: It's not about censorship, but people "being turned into morons by TV." *Open Culture.* https://www.openculture.com/2017/08/ray-bradbury-reveals-the-true-meaning-of-fahrenheit-451.html

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370–396. https://doi.org/10.1037/h0054346

Mitosek, Z. (1998). *Teorie badań literackich.* Wydawnictwo Naukowe PWN.

Moshfegh, O. (2018). *My year of rest and relaxation.* Vintage.

National Institute of Mental Health. (2024). *Mental illness statistics.* https://www.nimh.nih.gov/health/statistics/mental-illness

Pinker, S. (2018). *Enlightenment now: The case for reason, science, humanism, and progress.* Viking.

Postman, N. (1986). *Amusing ourselves to death: Public discourse in the age of show business.* Viking Penguin.

Statistical Yearbook of the Institute of Psychiatry and Neurology. (2024). *Zdrowie psychiczne Polaków w roli głównej – mózg.* Ministry of Health Archives. https://archiwum.mz.gov.pl/zdrowie-i-profilaktyka/promocja-zdrowia/jakdzialazdrowyczlowiek/zdrowie-psychiczne-polakow-w-roli-glownej-mozg/

World Health Organization. (2024). *COVID-19 deaths dashboard.* https://data.who.int/dashboards/covid19/deaths

Wysłouch, S. (2001). *Literatura i semiotyka.* Wydawnictwo Naukowe PWN.