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Table of Contents

iv

What's the "New" in "New Extractivism"? Tracing Postdigital Aesthetics in Vladan Joler's Assemblage

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ABSTRACT. This study critically examines Vladan Joler's work *New Extractivism: An Assemblage of Concepts and Allegories* (2021) with a specific emphasis on its aesthetic dimensions. The investigation seeks to address the following questions: How does the term "new" in *New Extractivism* manifest previously unexplored ideas? To what extent can the characteristics of postdigital aesthetics be discerned in this artistic work? Traditionally, the term "extractivism" has been associated primarily with the exploitation of the earth's resources and its biosphere. However, Joler's work emphasizes that today it has assumed an additional layer of significance and refers to the exploitation of individuals as reservoirs of data because of the traceability of their online activities. While the concept of extractivism acquires a novel connotation within the postdigital context of our era, I contend that there is nothing particularly unprecedented about it in terms of aesthetics. Instead, its roots can be traced to Jack Burnham's *Systems Esthetics* of the 1960s. At that time, a profound enthusiasm for technology and a firm conviction in the value of its swift advancement were prevalent in the art world, which sought to establish an interdisciplinary foundation that encompassed art, science, and technology. This paper further explores Joler's allegories of the digital space, a compilation comprising thirty-three concepts and ideas aimed at elucidating the significance and interrelationships of the graphics employed in his assemblage. It concludes with an analysis of a selection of these ideas from two distinct perspectives: first, from the theoretical framework of Jack Burnham's *Systems Esthetics*, and second, from the contemporary theory of James Bridle's *New Aesthetic*.

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1. Introduction

I encountered the work *New Extractivism* by Vladan Joler during a visit to the Biennale Warszawa in June 2022 for my PhD research on socially engaged art and its relationship with digital networks within the postcommunist context. The piece struck me as a compelling illustration of the art world's transition from its initial enthusiasm for the internet as a groundbreaking artistic medium to its current skepticism and focus on the challenges it presents.

Notably, the accessibility of the World Wide Web in the 1990s has assumed particular significance in former Communist countries. The collapse of the Soviet Union engendered a disconcerting situation, as Boris Buden elucidates in his book, *Zone of Transition*. Individuals found themselves suspended amid the ruins of an old society, with the foundations of a new societal order yet to be firmly established. This liminal space represents a moment of profound political significance, subjectively experienced as a loss of societal cohesion. It manifested as an unsettling state of existence. The emerging generation of young artists faced a void devoid of substance (Buden, 2009, p. 84). Additionally, the former Communist countries encountered economic challenges when they were integrated into the democratic and neoliberal system. Within this context, the digital world appeared as an easy, accessible, and promising arena, offering opportunities to explore the concept of freedom, foster cross-global connectivity, cultivate new forms of collaboration, and immerse oneself in a vibrant, posthuman era.

Two decades ago, Vladan Joler played an active role in the Serbian hacker scene and served as the inaugural artistic director of the Exit festival. The vision of the internet during that period starkly differed from its present state. Joler elucidates that, at the time, it was conceptually idealized as an open and decentralized system that facilitated communication without intermediary centers of power. However, as the new millennium dawned, significant capital inflows transformed and commodified the internet. Currently, internet users find themselves ensnared within a system dominated by large centralized platforms, such as Facebook or Instagram, that act as intermediaries. The hopes and expectations pinned on social media platforms as organizational tools capable of inciting revolutions against authoritarian regimes have remained largely unfulfilled. Joler, disenchanted, comments "Perhaps the Internet could not have developed differently in the context of neoliberal capitalism." This realization prompted Joler to adopt a different approach, aiming to expose the hidden economic

power structures within the internet (Fakin Jansa, 2023, pp. 35–37).

In collaboration with media technology theorist Kate Crawford, Joler coauthored the book *Anatomy of an AI System*. This publication challenges the prevailing notion that the internet is an immaterial entity, emphasizing instead the exploitative mechanisms involving human labor, personal data, and the earth's resources. The work under examination, *New Extractivism*, draws not only from the aforementioned publication but also from collaborative endeavors, notably Crawford's *Atlas of AI* (Crawford, 2021), Nooscope with Matteo Pasquinelli, "My Little Big Data" with Eva and Franco Mattes, and investigations conducted within Joler's research platform, SHARE Lab. Additionally, Joler incorporated input and recommendations from Olivia Solis, Vuk Cosic, Daphne Dragona, Vladimir Todorovic, and Randall A. Major (Joler, 2021).

This study endeavors to investigate two key questions around Joler's assemblage: First, in what manner does the term "new" in *New Extractivism* introduce previously unexplored ideas? Second, to what extent can the characteristics of postdigital aesthetics be analyzed within this body of work?

Figure 1. Vladan Joler, *New Extractivism: An Assemblage of Concepts and Allegories*, 2021. Manual, map, video, 17'33", available online at: https://extractivism.online. fot. Bartosz Górka / Biennale Warszawa

2. Analysis

2.1. "New"

Within the postcommunist context, the use of terms such as "new," "revolutionary," or "change" carries a sense of bitterness due to the historical trauma associated with the Soviet era. Consequently, I am intrigued by how Vladan Joler navigates the concept of "new" in his artistic endeavors.

Historically, the notion of "new media" art gained prominence toward the end of the twentieth century. The term new was employed to characterize any emerging form of art at any given time. Its usage invariably suggests the obsolescence and outdatedness of preceding artistic expressions, making way for novel art forms. In contemporary times, digital technologies have pervaded all realms of artistic production, thereby ushering in the era of postdigital and post-internet art. This indicates that every mode of artistic expression, at its core, is already influenced by digital technologies and networks (Paul, 2016, pp. 1–2). In this context, I refer to the concept and term "New Aesthetic," coined by James Bridle, which delineates the altered visual processes engendered by the advent of digital devices (Bridle, 2011a).

Arriving at a comprehensive definition for the New Aesthetic proves somewhat challenging. It is characterized as "a vibe, an attitude, a feeling, a sensibility" (Berry et al., 2012, p. 12). Bridle introduced the term on May 6th, 2011, through a Tumblr blog:

> For a while now, I've been collecting images and things that seem to approach a New Aesthetic of the future, which sounds more portentous than I mean. What I mean is that we've got frustrated with the NASA extropianism space-future, the failure of jetpacks, and we need to see the technologies we actually have with a new wonder. Consider this a mood-board for unknown products. (Bridle, 2011b)

In a broader sense, the term New Aesthetic addresses the intersection between the digital and the physical. Bridle's approach can be perceived as curatorial, aimed at amassing imagery that is evidently influenced by the digital realm (Sterling, 2012). His collection encompassed visuals such as satellite views, Google maps, surveillance imagery, pixelation, and digital logos

on textiles. Moreover, the choice of the Tumblr platform itself reflects a contemplation of network culture. Bridle coined the term the New Aesthetic to designate the characteristics of the elements shared on Tumblr, further expounding upon his reflections on his publishing website Booktwo.org. However, a significant turning point occurred during a panel discussion at the SXSW Conference in March 2012, which catalyzed a discourse on new media and art communities. This discussion revolved around the implications of perceiving reality through digital devices and its impact on our epistemological understanding within a convergent technological culture, as well as its influence on art's interpretive capacity (Bridle, 2011a). Bruce Sterling played a noteworthy role in popularizing the concept of the New Aesthetic, describing it as a "native product of modern network culture," which signaled an attempt to impose a new mode of perceiving reality upon the public. Sterling's elaboration provided metaphysical insights into the status of machines, drawing parallels with historical art movements like futurism, cubism, and surrealism while evoking André Breton's and Walter Benjamin's ideas on "digital accumulation" (Sterling, 2012).

According to Rahel Aima's definition, the New Aesthetic primarily pertains to surveillance technology:

> The *New Aesthetic* is about being looked at by humans and by machines - by drones, surveillance cameras, people tagging you on Facebook - about being the object of the gaze. It's about looking through the eyes of a machine and seeing the machine turn its beady LEDs on you. It's about the dissolution of privacy and reproductive rights, and the monitoring, mapping and surveillance of the (re)gendered (re)racialised body, and building our own super-pervasive panopticon. (Aima, 2012)

However, in terms of aesthetics, Joler's assemblage can be connected to the conceptual art movement of the 1960s when the notion of art was discussed in terms of a systematic approach to artistic creation. Jack Burnham's ideas are considered quite influential for artists such as Hans Haacke, among the first conceptual artists to explore the interrelation between biology, ecology, and cybernetics.

Systems Esthetics (Burnham, 1968) aimed to formulate a concept that explored the relationship between art, technology, and social systems. His theory delved into concepts of systems theory, mathematics, and logic, in an attempt to redefine the role of art within society. Burnham highlighted the systems viewpoint as crucial and defined it as the following:

A systems viewpoint is focused on the creation of stable, on-going relationships between organic and non-organic systems, be these neighborhoods, industrial complexes, farms, transportation systems, information centers, recreation centers, or any of the other matrixes of human activity. (Burnham, 1968)

Burnham argues that system analysts are not merely "cold-blooded logicians" but individuals with a distinctly humane and subjective perspective, influenced by the specific circumstances of a given time and place. In this regard, he aligns himself with the perspective of intuitionism, which views mathematics as a product of human creation and mental activity (Burnham, 1968). This perspective describes mathematics as a way of understanding subjective reality and rejects the notion that mathematical laws exist independently of human conceptualization (Bridges and Palmgren, 2018).

Burnham's comments also touch upon the relational aspects of art, which are not strictly determined by physical boundaries, but rather by the interactions between people and the artwork itself. However, he distinguishes the systems approach from other artistic forms like happenings or theater productions. These artistic forms are confined within certain parameters, such as the stage or the script, whereas the systems approach exists independently of such constraints. The approach can move both within and beyond the framework of art, allowing for any aspect to be visualized and analyzed as a system. In the evaluative systems approach, the artist takes on the role of a "perspectivist" who has specific objectives in mind, including the structure, input and output, and internal and external movements of the systems. Emphasis is placed on precise information rather than on the material nature of the artwork (Burnham, 1968, p. 32).

In *Systems Esthetics*, Burnham elaborates that the considered problems cannot be solved through a singular technical solution but require a multileveled and interdisciplinary approach. The individual components of the systems do not hold inherent value; their value derives from their contextual relationships. Burnham acknowledges that this post-formalist aesthetic is not a universal philosophy, but rather a reflection of the present context.

The emergence of a "post-formalist esthetic" may seem to some to embody a kind of absolute philosophy, something which, through the nature of its concerns cannot be transcended. Yet it is more likely that a "system esthetic" will become the dominant approach

to a maze of social-technical conditions rooted only in the present. New circumstances will with the time generate other major paradigms for the arts. (Burnham, 1968)

Burnham provides insight into the evolution of the cultural producer, who, propelled by the Industrial Revolution, transitioned from being merely *homo faber*, the maker of tools and images, to assuming the role of *homo arbiter formae*, whose main purpose is to make aesthetic decisions. He anticipated that these aesthetic choices would have a profound impact on the "quality of all future life on the Earth" (Burnham, 1968).

This notion finds resonance in James Bridle's work, particularly his exploration of the New Aesthetics which is addressed in *New Aesthetic, New Anxieties*. The chapter "New Anxieties" explores the question: "What is it about the New Aesthetic that makes you so damn uneasy?" (Berry et al., 2012, p. 18). The question is a response to the perspectives of commentators from diverse fields like philosophy, new media, curating, design, and digital humanities—all of which contribute to the discourse on the New Aesthetics. Despite the diversity of viewpoints, this discourse appears to be ubiquitous, captivating the attention of individuals across disciplines.

However, the type of disconcerting sentiment that spurred this discourse can also be seen as advantageous, as it confirmed that the term New Aesthetics indeed unsettled network culture. Drawing from Donna Haraway's concept of the "new nature," such discomfort might refer to the act of occupying common space and examining the term in relation to the collective. Haraway asserts: "We turn to this topic to order our discourse (...) to reinhabit, precisely, common places - locations that are widely shared, inescapably local, worldly, enspirited, that is, topical. In this sense, nature is the place in which to rebuild public culture" (Haraway, 2004, p. 65).

Within this shared space, it is the disconcerting and disruptive elements that command attention in discussions about network culture. These disruptions not only impact the discourse on an intellectual level but also penetrate deeper levels. According to Matthew Fuller and Andrew Goffey, who wrote *On the Usefulness of Anxiety*, these "cracks, faults, and disturbances" influence our mental state (Fuller and Goffey, 2010, p. 157).

In his commentary, Sterling emphasizes that the New Aesthetic movement should not be misconstrued as a static concept, despite having progressed beyond its "original discovery phase" to being prepared for public exposure. Because the concept originated as a work in

progress, it embodies a particular mood, atmosphere, and provisional findings. It primarily addresses the human aspect, the nature of human perception, and less technical aspects:

> I hasten to assure you that I'm not making lame vitalist claims that our human reactions are mystical, divine, immaterial, timeless or absolute in truth. I am merely stating, as a stark and demonstrable fact, that our – machines have no such reactions. To rely on them to do that for us is fraudulent. (Sterling, 2012)

In response to Sterling's essay, Marius Watz argues that most of the qualities attributed to the New Aesthetics are not genuinely novel. The only aspect that can be considered new is the integration of these technologies into human behavior, even extending to our bedrooms. Our behavior is disrupted by technology, as evident when we walk down the street at night and find ourselves fixated on our phones (Watz, 2012).

Robert Jackson accuses Bridle of trivializing the discourse and criticizes the distinction between "high" and "low" media art. According to Jackson, using Tumblr as an official platform risks succumbing to instant gratification and adopting a format reminiscent of memes, whereas art demands depth (Jackson, 2012).

Similarly, the New Aesthetics has been accused by Ian Bogost of exhibiting an object-oriented ontology and neglecting the relationships within an expansive more-than-human ontology. Bogost, in his book *Alien Phenomenology*, elucidates the theory's rather exclusive nature, which is primarily concerned with correlations between digital and network technologies (Bogost, 2012). Lastly, the discussion surrounding the New Aesthetics acknowledges its initial male-dominated nature, with female voices taking some time to emerge (Aima, 2012).

2.2. Extractivism

Extractivism is primarily associated with the exploitation of Earth's resources and its biosphere. Vladan Joler's work highlights that today extractivism has acquired an additional layer of meaning: it denotes the exploitation of humans as data pools due to the traceability of their internet activities.

Naomi Klein, in her book *This Changes Everything*, provides the following definition of

historical extractivism:

> Extractivism is a nonreciprocal, dominance-based relationship with the earth, one purely of taking. It is the opposite of stewardship, which involves taking but also taking care that regeneration and future life continue. (Klein, 2014, p. 226)

The author asserts that intricate living systems are often reduced to mere "objects" and "resources," stripped of any intrinsic value beyond their utility. These systems are categorized solely based on their economic worth, while disregarding any other significance they may possess. Consequently, obstacles like trees that obstruct economic pursuits are destroyed and disregarded, giving way to bulldozers. This mindset not only applies to natural resources but also extends to human beings. The value of individuals is determined solely by their capacity to contribute as laborers in the industry. Those who do not fit this mold are marginalized and, in extreme cases, confined to reservations or prisons. The extractivist mindset completely ignores the complex interconnections between various components of the system, leading to devastating ecological and social consequences (Klein, 2014, p. 226).

According to Klein, the practice of extractivism is closely linked to the notion of "sacrifice zones." These zones refer to regions that are exploited for their resources and subsequently left in ruins and neglect, without any consideration for their future. Depending on their prior use, the soil in these zones becomes contaminated, depleted, or otherwise damaged, all in the pursuit of perceived economic prosperity and progress. Klein draws parallels to imperialist ideologies, in which peripheries are exploited in order to serve the needs of the center, driven by a belief in the imperial state's own superiority. According to Klein, imperial states "need to have people and cultures who count so little that they are considered deserving of sacrifice" (Klein, 2014, p. 226).

Extractivism is a prevalent practice of colonialism, through which lens the world is viewed as an object to be conquered rather than a place to coexist. This mindset has led to irresponsible behaviors. The concept persists where it is believed that when one political entity can no longer provide the resources it requires, the resources of another can be exploited instead. This mindset has its roots in the historical era that first witnessed the widespread use of fossil fuels, which powered the ships and factories driving global conquests. Klein

emphasizes that we must not overlook this historical aspect, as it represents a continuation of our civilization's narratives of perpetual growth and progress (Klein, 2014, p. 227).

Klein attributes this mode of thinking to Francis Bacon, the English philosopher, scientist, and statesman. Bacon advocated for a departure from what he considered the outdated pagan view of the earth as a nurturing mother deserving of reverence and gratitude. Instead, he promoted a worldview in which nature was to be ruthlessly probed and exploited to uncover what he called "truth." (Bacon, 1870, p. 296) Behind a veneer of eloquence, Bacon's intentions were primarily focused on material advantages for the dominant societies, with resources being sent back to their respective ruling powers. This perspective engendered a sense of "human invincibility," as Klein aptly described, characterized by the belief in humanity's ability to fully understand and control the earth (Klein, 2014, pp. 227–28).

Kate Crawford, in her book *Atlas of AI*, posits that the contemporary definition of "extractivism" is intricately intertwined with its historical meaning: "Global computation and commerce rely on batteries. The term artificial intelligence may invoke ideas of algorithms, data, and cloud architectures, but none of that can function without the minerals and resources that build computing core components" (Crawford, 2021, p. 30).

Numerous aspects of everyday life, encompassing personal, medical, leisure, pleasure, and political interests have transitioned to the cloud. However, little consideration has been given to the tangible material capacities and resources underlying this development. Crawford contends that the term extractivism can be interpreted both metaphorically and literally, encapsulating the new extractive nature of data mining alongside traditional extractivism. Artificial intelligence not only relies on servers, hardware, and networks, but also has profound implications for the capital, labor, and resources of the planet. The immense requirements of AI infrastructure extend beyond the visible cloud infrastructure, constituting a vast and concealed substructure (Crawford, 2021, p. 30).

Crawford further expounds on the idea that computer media impact geological and climatic conditions. By perceiving media and technologies as integral to geological processes, one becomes aware of the nonrenewable resources essential for their use. Each component of digital infrastructure—such as raw materials for batteries—takes billions of years to form within the earth's core. However, these technologies often have short lifespans. Consequently, their disposable nature results in unnecessary and increased consumption. Once these devices

reach the end of their use, they undergo an extensive process of degradation, which involves disassembly, processing, mixing, smelting, and transportation—ultimately terminating in e-waste dumping grounds of the Global South. This wasteful process illustrates the exploitation involved in the life cycle of AI instruments on multiple levels. It not only encumbers natural resources and human labor but it also leads to the monopolization of corporate and geopolitical power. It is crucial to acknowledge the substantial energy resources required for this process (Crawford, 2021, pp. 31–32).

On a content level *New Extractivism* is rooted in the principles of data colonialism, initially introduced under this terminology by Nick Couldry and Ulises A. Mejias.
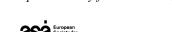
> In describing the transformations underway today as data colonialism, we use the term colonialism
> not because we're looking for a metaphor but because it captures major structural phases within
> human history and specifically within capitalism. (Couldry and Mejias, 2019, p. 4)

Couldry and Mejias argue that the key attributes of historical colonialism are applicable to data extraction. These attributes include the appropriation of resources, the presence of social and economic inequality, an uneven distribution of profits, and the accompanying ideology that rationalizes these disparities. This ideology often perpetuates the notion of the "civilizing" mission, in which the appropriation of resources from supposedly inferior populations is regarded as a measure of progress (Couldry and Mejias, 2019, p. 4).

While traditional colonialism revolves around the exploitation of raw materials and the conquest of new geographical territories, data colonialism engages a distinct level of exploitation that encroaches upon the very fabric of human life. In this context, human life is continuously subjected to a form of colonization, which is perpetually driven by the pursuit of profit. It is essential to acknowledge that the acquisition of personal data occurs without the consent of the individuals concerned, which more easily enables the conversion of data into monetary gains, as Couldry and Mejias contend:

> This progressive opening up of human life to externally driven data extraction is what we mean by
> the capitalization of human life without limit. (Couldry and Mejias, 2019, p. 5)

Technological networks, particularly social media platforms, provide the infrastructure for

subtle data extraction. This kind of extraction distinguishes data colonialism from historical colonialism, which relied on more overt forms of violence. And yet data colonialism also employs diverse forms of violence through intricate and interconnected systems of extraction. These systems are often bewildering, abundant, and intertwined to such an extent that they exercise a profound level of control over individuals, akin to the dominance historically exerted by colonial powers (Couldry and Mejias, 2019, p. 6). Capitalism functions as a systematic apparatus driven solely by the goal of maximizing value production through data extraction, irrespective of the sources and applications of that data (Couldry and Mejias, 2019, p. 7).

2.3. Allegories of the Digital Space: A Selection

> In the information age, everything becomes a potential frontier for expansion and extraction - from the depths of the DNA code to the vast frontiers of human emotions, behavior and social relationships, and nature as a whole. (Fakin Jansa, 2023, p. 9)

The work *New Extractivism* consists of so-called allegories of the digital space—a total of thirty-three concepts and ideas that serve the purpose of elucidating the meaning and interconnections portrayed in the graphics. In the following, a selection of five concepts will be discussed and further analyzed through two distinct perspectives: first, through the lens of Jack Burnham's *Systems Esthetics* theory, and second, through the contemporary theory of James Bridle's *New Aesthetic*.

The first image (*Gravity*) emanates from the concept explored by French artist Louise Drulhe (Druhle, 2015), who contemplates the influence of gravity within the topography of the internet. It alludes to Einstein's theory of relativity, exploring how objects in the space-time continuum curve relative to their mass, in this case, in the virtual realm. Dominant entities such as Google and Facebook possess immense gravitational pull, attracting users and their content through their monopolistic power (Joler, 2021).

The second diagram (*Forces*) depicts the social factors implicated in the gravitational mechanism of the internet. Joler introduces various facets, including the apprehension of social isolation and the fear of missing out, economic and professional insecurities, and the influence of addictions, depression, and anxiety. These represent only a subset of the factors that bind

individuals to virtual platforms. An escape from this entanglement appears impossible. Consequently, the notion of escape becomes more akin to a fantastical construct rather than a tangible reality (Brunton and Nissenbaum, 2016).

The third concept (*Black Hole*) depicts the protagonist's endeavor to swim against the tide, counteracting the gravitational forces exerted by these virtual epicenters. Joler explains that the current is progressively intensifying. Although the presence of a black hole remains at this stage unnoticed, the protagonist crosses a point of no return. At this stage, the social and economic costs associated with leaving become overwhelmingly burdensome. Regardless of one's swimming ability, the pull of the black hole remains inescapable. The protagonist descends into the next allegory, which is the metaphorical cave.

The subsequent visualization (*Allegory of the Cave*) unveils the abyssal depths of the black hole, transforming the allegory into a rendition of Plato's cave. Plato's allegory of the cave illustrates how individuals spend their lives enclosed within cave walls. In Joler's adaptation, the resultant shadowy objects are forged by algorithmic machines that regulate, filter, censor, and moderate the projected content upon the cave walls. The genuine reality existing beyond the cave encompasses an incessant stream of information comprising images, sounds, emotions, and creations that were once tangibly experienced, but have been distorted into abstract representations within the shadow world.

The fifth representation (*Platopticon*) depicts the composite nature of the shadow performance, constituted not by a solitary entity, but by the concentration of numerous spectacles. The gravitational force of technological monopolies retains billions of users, workers, and products. Each user is confined to a distinct cave tailored explicitly to their preferences, brimming with images and meanings derived from affective and cognitive responses. Users exist in a circular fashion, engaging with themselves within this realm, subjected to an unceasing torrent of spectacles. Joler describes this domain as a form of imprisonment, however one characterized by pleasure. Yet, the imprisoned individual remains incapable of self-liberation. Within this collection of millions of caves or prison cells, the form of a Panopticon structure emerges. The central tower of this edifice assumes dual functions: it projects content onto the walls of the caves, and it surveils and captures the digital shadows of the prisoners.

From an aesthetic standpoint, the work *New Extractivism* follows a systems theory

approach, such as that described in Burnham's *Systems Esthetics.* The diversity in the work's visual presentation suggests that the primary emphasis was placed on the content. The initial development of the graphics involved collective collaboration, as mentioned by Kate Crawford in her publication. The artist's primary focus was to highlight the profound penetration of digital technologies into contemporary human life. In doing so, he transcends physical boundaries and expresses the subject matter through philosophical and physical metaphors, blurring the distinctions between reality and imagination. This method can be extrapolated to the fluid boundaries between the virtual and real worlds. Burnham's remarks also serve as a guiding principle, considering art as a means by which to find interdisciplinary solutions for societal challenges. Whereas Burnham's elaborations were undeniably influenced by the exuberance of the 1960s, *New Extractivism* does not align with this perspective. Initially, the artwork may appear as a map that offers potential escape routes from the virtual, enigmatic black hole. However, this notion is futile, as the composition itself illustrates the profound entanglement that engulfs the users, leaving no viable means of escape. Nevertheless, Burnham seems to have astutely addressed an important point in a visionary manner. His observation highlights how artists, who no longer adhere to the notion of *homo faber* (tool creators), have evolved to become *homo arbiter formae*—individuals who represent ideas purely through aesthetic choices. However, this aesthetic has far-reaching consequences on the "quality of all future life on Earth" (Burnham, 1968).

This is where the concept of *New Aesthetics* comes into play. From an aesthetic perspective, Joler's assemblage diverges from established tradition. Joler does not employ elements from the digital world directly and unfiltered in his work. Instead, his approach is more abstract and monochromatic (black and white), incorporating principles from physics, mathematics, and logic. The only aspect of his work that aligns with the digital tradition is the accessibility of his work online, which is standard in the postdigital age. However, in terms of content, parallels can certainly be drawn, particularly regarding the notion of new anxieties, which refer to a sense of unease without a clear understanding of its cause or remedy. *New Extractivism* addresses this unease on multiple levels. Just as technology acts as a "disruptive" force in human behavior and impacts individuals' mental well-being, Sterling's performances reference the bedroom, while *New Extractivism* draws upon Plato's cave allegory. The content of this allegory encompasses several aspects of the *New Aesthetics* concept, specifically how

human perception of the world has been altered through the use of digital technologies. The view through the machine, which observes and connects individuals, also restricts their ability to escape their caves, which were algorithmically tailored to their preferences. While the critique of a purely object-based ontology can be partially applied here, Joler incorporates into his work illusory and existential elements that somewhat diminish such criticism. Furthermore, the artwork's creation was not limited to a singular male perspective, as it emerged through collective work and drew inspiration from Kate Crawford's publications.

In summary, one can say that Joler's multimedia assemblage succeeds in depicting the connection between artificial intelligence and everyday life with surprising clarity. This was precisely my experience when I visited the Biennale: the very complex graphic representation initially seems overwhelming. However, his online material, which is presented with detailed texts and an explanatory video, made it easily comprehensible upon closer examination.

Delving deeper, I was surprised by the simplicity and clarity with which Joler visually represents highly complex relationships. The curators of the Biennale Warszawa chose to showcase the work in multiple forms (map, manual, video), allowing the visitors to explore the graphics at their own preferences. Furthermore, it was placed to another collaborative work by Joler, which provided an additional perspective on the topic called *The Nooscope Manifested - AI as Instrument of Knowledge Extractivism* (Joler and Pasquinelli, 2020). Cocurator Anna Galas-Kosil reports that, according to the guided-tour participants' reactions, the work series seemed to generate great interest, as the pamphlets of *The Nooscope Manifested* were taken away in large numbers (Galas-Kosil, 2023). Even before the curators became aware of the artist, a Polish collective Grupa Robocza (Working Group) had already recognized the importance of Vladan Joler's work and translated the *The Nooscope Manifested*. The collective was invited by the curators to give tours specifically about Joler's contributions, which illustrates how the artist's work has unquestionably established a prominent presence within the discourse of reception history. His work has also been recognized and presented by internationally influential art platforms such as MoMA and transmediale.

3. Conclusion

Finally, I would like to address the questions raised at the beginning: What is the "new" in *New Extractivism*? The novelty of *New Extractivism* lies in its content, specifically its association

with the postdigital manifestation of extractivism, which disregards the personal boundaries of internet users as it appropriates their data. However, considering the geopolitical context, this discourse is not entirely unprecedented, as it aligns with neo-Marxist and post-Marxist theories and the critique of commodification. Though the analytical and systematic approach as an artistic method is not new, it can be connected to the early Soviet avant-garde. This connection was temporarily interrupted during the Stalinist era when the intellectual discourse on cybernetics was perceived as a threat to the Soviet system. Nonetheless, it resurfaced in the 1960s following Stalin's death, and international collectives like New Tendencies emerged, effectively bridging the Cold War divide by fostering mutual interest in the intersection of art, society, and technology. Art centers in Eastern Europe, such as Zagreb, served as pivotal hubs for networking artistic communities within both Soviet and capitalist geographies.

My second research question—to what extent can the characteristics of postdigital aesthetics be discerned in *New Extractivism*—can be answered by pointing to its methods of dissemination. The work is readily accessible through online channels, possesses a collective nature, and is presented as an ongoing endeavor because it is consistently accompanied by further research and collaborations in various contexts such as books, exhibitions, and conferences. However, it should be noted that *New Extractivism* primarily suggests a metaperspective with a critical distance to postdigital aesthetics. In this capacity, it formulates a parallel theory that bears resemblance to the concepts put forth by James Bridle's *New Aesthetic*, particularly concerning the notion of new anxieties, which regards technology as a disruptive force in human behavior.

Ultimately, the work leaves the viewer with a question that is far from novel and has been contemplated by artists since the early twentieth century: Can we envision a future divergent from a capitalist trajectory?

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